Cloud-Powered Crisis Response

COVID-19 experience speeds up adoption, but it needs to be sustainable.

hen West Virginia ordered a mandatory shutdown of non-essential businesses in March to slow the spread of COVID-19, thousands of residents were suddenly out of work. Calls flooded into the state's unemployment insurance call center from citizens trying to apply for benefits. By the second week of April, call volumes were overwhelming the center's legacy technology platform.

"The phone systems in use were not built to handle the extreme call volume we were experiencing," says Joshua Spence, CTO and director of the West Virginia Office of Technology. "We knew some of our phone systems were running older equipment and would not be capable of managing the load." 1

Capacity was just one issue. The existing technology also couldn't support remote work for call center agents, nor could it provide prerecorded messages with commonly requested information to help callers avoid long wait times.

With growing numbers of citizens seeking an economic safety net, the state needed new technology fast.

"We didn't have months to find and implement a solution when things settled down," says Spence. "We needed an adaptive solution that worked in concert with our existing systems to get callers through quickly."

The answer was the cloud. The state softlaunched a new cloud-based contact center platform in about three days, and by late April the platform was handling an average of 40,000 to 45,000 calls daily. In addition, it provides interactive voice response (IVR) technology to answer common questions, which dramatically reduces the number of callers who need help from an agent.

"This put cloud technology and its transformational capabilities front and center for us," says Spence.

Seeking Sustainability

Similar scenarios played out across the nation as state and local governments scrambled to respond to new COVID-driven requirements. Cloud-based contact center platforms, chatbots and web portals helped multiple states and localities quickly scale capacity for unemployment insurance and social services programs. Cloud-hosted video collaboration platforms helped agencies shift employees to remote work on the fly and virtualize public meetings.

Microsoft, for instance, announced in March that use of its cloud-based messaging and collaboration tools had jumped 37 percent in one week, at one point logging 900 million meeting and call minutes a week.²

But in some ways, this also may be a make-or-break moment for jurisdictions newly converted to the cloud. IT leaders must now evaluate and rationalize the multiple cloud solutions they adopted so quickly.

"When you're in an emergency, you're kind of throwing things at the wall to see if they stick. The problem is multiple things might stick, and you're probably not going to be able to maintain all of them longer term," says Phil Bertolini, former CIO and deputy county executive for Oakland County, Mich., who is now co-executive director of the Center for Digital Government. "I always impressed upon my team that when we were out of crisis mode, we had to come up with a strategy to either adopt these solutions fully or move in a different direction."

One key issue will be accurately comparing the cost of cloud versus on-premises technology. It may take several years to fully realize savings from cloud deployments, Bertolini says. In addition, jurisdictions will need to manage the budgeting changes that come with cloud adoption.

"Traditional technology people struggle because the old way of doing things was to capitalize your technology purchases and depreciate them," he says. "Cloud is a consumption model where you pay by the drink. Technology becomes an operating expense, which can fluctuate. That needs to be dealt with."

Now also is the time to look at cost optimization for cloud solutions. IT leaders should reexamine hastily purchased solutions for excess capacity, unneeded features and other issues that can drive up expenses.

"I may have bought a Cadillac, but I only really need a Chevy," Bertolini says. "If the



long-term cost is going to go up exponentially because you bought big, robust enterprise technology that you didn't need, you may have to backtrack and get something that's more right-sized for your organization."

Accelerating the Trend

Ultimately the COVID response showcased real-world benefits of the cloud — and that experience is likely to accelerate a trend that was already underway as governments focus more attention on modernizing old systems and applications in the wake of the pandemic.

The newly released 2020 Digital States Survey shows that most state CIOs believe they ultimately can move more than half of their systems and applications to the cloud. The results are similar for local government CIOs participating in the latest Digital Cities and Digital Counties surveys.

But IT leaders still face choices on where cloud solutions will fit best within their technology environments. In many jurisdictions, the cloud-first strategies of a few years ago have evolved to more nuanced "cloud-smart" or "cloud-right" approaches that promote cloud growth

while acknowledging its limits. COVID hasn't changed that basic philosophy.

"We believe that not everything is a good fit — whether it is the visibility, the cost ... the security of the data," Arkansas CTO Yessica Jones recently told *Government Technology.*3 "There are many different things to be taken into consideration before moving an application or data to the cloud."

Indiana CIO Tracy Barnes described a similar approach unfolding in his state. Cloud may be a natural fit in some situations, he told the magazine, "but if the business ... doesn't understand the need and the opportunity with utilizing cloud tools and technologies — then we can't start pushing every technology and every solution down that path." ⁴

Still, the pandemic response proved that governments could innovate when the chips were down, and the cloud was a key enabler of that success. This experience likely was an eye-opener for cloud holdouts in the public sector.

"Now government jurisdictions are seeing the benefits of not having to maintain this stuff on premises," says Bertolini. "Even organizations that were hedging about going to the cloud have tipped in that direction."

Top Priorities for Cloud Deployment

State

- 1 / Health and human services
- 2 / Finance and administration
- 3 / Application development and testing
- 4 / Human resources
- 5 / Transportation

Source: 2020 Digital States Survey

City

- 1 / Geospatial services
- 2 / Application development and testing
- 3 / Finance and administration
- 4 / Public safety
- 5 / Transportation

Source: 2019 Digital Cities Survey

County

- 1 / Geospatial services
- 2 / Application development and testing
- 3 / Health and human services (tie)
- 3 / Finance and administration (tie)
- 4 / Public safety

Source: 2019 Digital Counties Survey

³ Ibid.

⁴ Ibid.

¹West Virginia Leverages the Cloud to Handle Flood of Unemployment Claims. Governing. https://www.governing.com/papers/West-Virginia-Leverages-the-Cloud-to-Handle-Flood-of-Unemployment-Claims-128392.html?promo_code=GOVTECH_web_library_list

²2020 Puts Cloud Computing in Government to the Test. Government Technology. https://www.govtech.com/computing/2020-Puts-Cloud-Computing-in-Government-to-the-Test.html