



Gaining ground on

DIGITAL GOVERNMENT

The pandemic has underscored the importance of a modern IT infrastructure that is resilient, flexible and secure

THE NEED FOR IT modernization has never been more apparent. Several months after the coronavirus pandemic sent workers from office buildings to home offices, IT managers continue to ensure that those employees can connect to the systems, applications and data they need to do their jobs and provide the services on which the public relies.

Some agencies were better positioned to adapt quickly to the new demands. They could deploy chatbots to help process unemployment benefits, create cloud-based applications for contact tracing and offer employees secure, seamless access to colleagues and resources from mobile devices.

Those changes are here to stay. “Agencies have reached a point of no return when it comes to digitizing government operations,” according to a recent Granicus survey of government officials and citizens. In fact, 61% of the officials said they believe COVID-19 has accelerated their agencies’ digital transformation. In addition, 54% of citizens said they expect services to be offered online, and 30% expect those online processes to be easier than non-digital services.

Implications for every aspect of government

Modernization affects every aspect of an agency’s IT operations and involves transforming data centers, eliminating

operational silos and creating robust multi-cloud environments that improve the agility, speed and scalability of IT resources. It also requires rethinking how agencies provide services to the public and how they build and support the teams that manage those IT resources.

By transforming their IT operations, agencies can make better data-driven decisions related to spending, security and services. As a result, they can boost the public’s satisfaction with government and increase employee engagement while making more effective use of taxpayer dollars.

Recognition of the importance of modernization can be found at every level of government. The Modernizing Government Technology Act established the Technology Modernization Fund to help federal agencies get the money they need for such ambitious projects. The fund received \$100 million in fiscal 2018 and another \$25 million in fiscal 2019, while the president’s fiscal 2020 proposed budget includes an additional \$150 million.

As of July 28, the fund had supported 10 projects, including accelerating the Department of Housing and Urban Development’s migration of five critical business systems from an on-premises mainframe to the cloud. HUD officials estimate that the project will save \$8 million annually, and they plan to use those savings to

transform other aging systems.

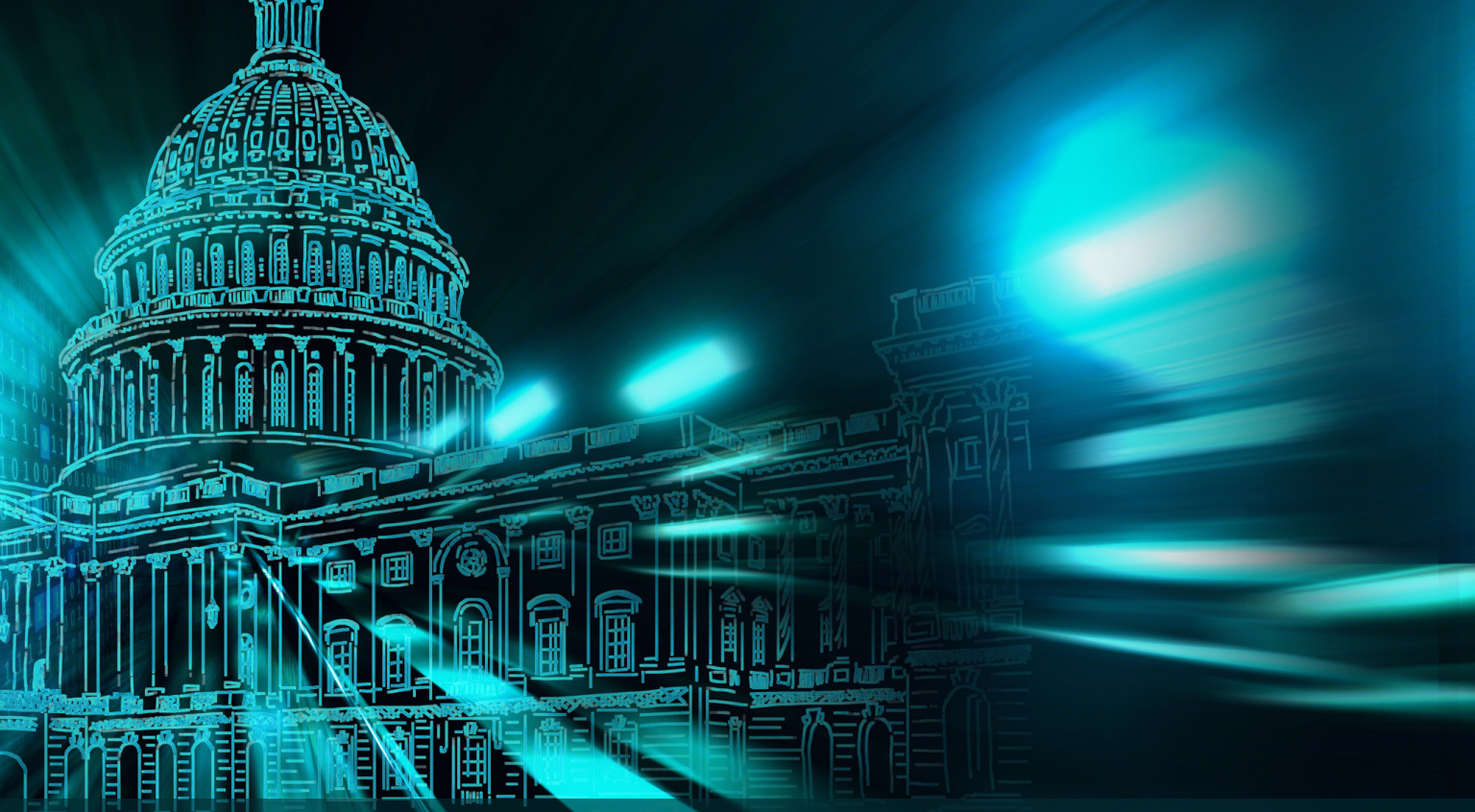
During the pandemic, Americans have relied heavily on state and local agencies for vital information and services. In some cases, that demand strained systems that had been in need of upgrading before the current crisis. Like their federal counterparts, state and local leaders have often been stymied by budget constraints, mission-critical legacy systems and internal resistance to change. But COVID-19 presented an opportunity to find ways around those hurdles.

Many states and cities took advantage of that opportunity. For example, Seattle’s IT team fast-tracked modernization efforts by creating a chatbot to handle the sudden influx of IT support requests from remote workers and by helping the Department of Neighborhoods and Office of Economic Development connect with residents through webinars.

How modernization improves security

Nevertheless, some agencies continue to rely on decades-old technologies. In a 2019 study, the Government Accountability Office found that the Department of Health and Human Services and the Treasury Department use systems that are about 50 years old. In addition, HHS had no documented modernization plan.

“The consequences of not updating legacy systems has contributed to, among other



things, security risks, unmet mission needs, staffing issues and increased costs,” the report states.

In particular, the security risks associated with outdated strategies have been clearly demonstrated. The breach of 22 million personal records at the Office of Personnel Management in 2015 could have been avoided in part by fully functioning multifactor authentication. Cost estimates related to that incident range from \$133 million to \$1 billion.

Furthermore, security strategies need to be fluid enough to respond to new threats while not overlooking basic cyber hygiene. The National Institute of Standards and Technology and the Cybersecurity and Infrastructure Security Agency have issued

alerts about cyberattackers increasing their malware-related phishing attempts during the pandemic and have encouraged agencies to minimize the risks from known vulnerabilities.

In response to such concerns, one of the Trump administration’s cross-agency priority goals seeks to “mitigate the impact of risks to federal agencies’ data, systems and networks by implementing cutting-edge cybersecurity capabilities.” A July update on progress in that area states that 18 of the 23 civilian agencies covered by the CFO Act have automated access management, and 22 have instituted mobile device management, including the ability to remotely wipe a device if it is lost or compromised.

In a recent survey of FCW readers, 84%

of respondents said IT modernization is having a positive impact on cybersecurity at their agencies. Furthermore, 68% rated their agencies’ progress on their IT modernization plans as a 3 or higher on a scale of 1 to 5. However, 12% said their agencies had not even begun, which is a reminder that much work remains to be done.

The coronavirus pandemic has underscored the need for government agencies to move swiftly on modernization and highlighted where agencies should focus their attention and resources. The challenges are not new, but the level of urgency is, which is why agencies need to capitalize on the gains they have made and continue pushing forward on modernization. ■



IT modernization **BY THE NUMBERS**

53%

Increase in the use of virtual private networks in the U.S. in the first half of March

64%

Local government CIOs who said they received strong management support in tackling pandemic-related technology challenges

\$28.9B

Projected value of the government cloud market by 2022

48%

FCW survey respondents who said workforce challenges are one of the biggest obstacles to modernization