

.st0{fill:#FFFFFF;} .st1{fill:#256EFD;} .st2{fill:#808082;}

NEWSLETTERS

PAPERS

WEBINARS

SEARCH



DATA CENTER. (SHUTTERSTOCK)

THE FUTURE OF WHAT'S NEXT

Coronavirus Has Potential to Reshape Government Technology

The coronavirus crisis has made it clear that technology is essential to continuity of government. CIOs may see more of their wish lists fulfilled, but investing in IT will be tough with budgets heading south.

ALAN GREENBLATT, SENIOR STAFF WRITER | APRIL 2, 2020 | ANALYSIS

Government computer systems are operating under a massive strain. Many state and local functions have suddenly gone all-digital while having to deal with the demands on services that come with a crisis. But so far, at least, it's gone

surprisingly well.

Information technology in government has long lagged notoriously behind the private sector. There have certainly been problems — most prominently, servers crashing in several states due to the record number of unemployment applications. But most governments, having gone virtual, have been able to function.


There's still a long way to go. Chief information officers are consciously optimistic that one silver lining from the current crisis is that it will force government leaders to make more, and smarter, investments. “Our inability to invest in our IT modernization is being exposed right now,” says Doug Robinson, executive director of the National Association of State Chief Information Officers (NASCIO). “Legislators still see it as a back office. Today, it’s a great example that it’s critical to continuity of government.”

Too many government agencies rely on old mainframes and proprietary software that can’t quickly scale to meet the demand. But there are some functions that had already moved to the cloud. “Moving email to the cloud — they’re all touting that and saying thank goodness we made that move,” Robinson says. “You can have 10,000 to 200,000 state employees all in the same state email system; it’s all scalable, they can all communicate and they’re not having any outages.”

RELATED

What Government Gets Wrong About Technology

ADVERTISEMENT



Other chokepoints remain. Unemployment offices were the first to be hit hard, but health agencies are also seeing online traffic spike. With the economy in freefall, there will be major increases in applications for assistance programs such as Medicaid and food stamps. Call centers in general are under heavy demand — lots of people are even calling 911 to have the latest shelter-in-place orders explained to them. Not enough agencies have voice over Internet protocol (VoIP) or other capabilities in place that would allow them to create virtual call centers.

There's been an unexpected and unprecedented migration of the workforce from city halls and state capitols to remote work. It's been working out OK, in most places. "They're successful in deploying technology and keeping government running, even to the smallest level," says Meghan Cook, program director at the Center for Technology in Government (CTG) at the University at Albany. "I've really been impressed."

Still, some jurisdictions are struggling to get their suddenly mobile workforce equipped with the basics, such as laptops and headsets. With people working from home, often on their own devices, security is a big concern, yet many

places lack enough virtual private network (VPN) licenses to go around. As the weeks of confinement potentially stretch into months, more strains will become evident.

There's a pronounced digital divide among cities and counties, says Alan Shark, executive director of the Public Technology Institute, a research and education group that works with localities. "The bigger cities and counties are doing quite well and the smaller counties are struggling," Shark says. "Jurisdictions with less than, say, 150,000 are absolutely struggling."

But at all levels of government, there's a realization that technology is not a nice option, it's absolutely essential. In the present situation, it's the only thing allowing many governments to function at all. Suddenly, the arguments CIOs have been making for years — that investments in networks pay off, that systems should have redundancies built into them — have the quality of demonstrated fact.

ADVERTISEMENT



Agencies long hampered by endless procurement processes have suddenly become nimble. Rules are being waived right and left to move swiftly and buy, for example, licenses for Zoom and other teleconferencing platforms. “We’re in crisis and bureaucracy is suspended,” Cook says. “They’re able to put in programs they’ve asked for in the past and not been able to get approved.”

Suspending rules during a crisis is one thing. Whether longstanding practices are changed over the long haul is a different question. The value of information technology is being amply demonstrated. Whether there will be any new money to invest — particularly at a time when income and sales tax collections are plummeting — is far from certain.

But a fast crisis can bring about rapid change. It’s likely that the shutdowns triggered by the novel coronavirus will mark a turning point in the way governments use technology.

“A lot of things have changed for good,” says James Collins, CIO for the state of Delaware. “It will change the way we plan and it will change the way we work going forward.”

Putting the Unemployment Backlog in Context

The frustrations of people applying for unemployment via overloaded servers were entirely unsurprising. Last week, initial jobless claims reached 3.3 million, which was not just a huge increase after a long period of low unemployment, but more than four times the record for applications in any single week, ever.

Some government systems are designed to handle tremendous increases in volumes, notably revenue departments, which would normally be busy in April.

(The federal government and most states have moved the income tax filing deadline back three months, to July 15.) But no one anticipates the type of enormous surge state workforce agencies are now experiencing. It's the equivalent of having enough plows to handle a snowstorm that dumps four times as much snow as the previous record. Or having a stormwater system capable of handling rain exceeding all previously known downpours.

If unemployment systems had been built to withstand tenfold spikes occurring in a single week, as some states have seen, citizens would have complained about the seemingly unnecessary expense, says Theresa Pardo, director of CTG at Albany. "The system is designed on projections and projected use," she says. "The fact that the states are not able to respond quickly from a technological perspective to an absolutely unprecedented level of demand doesn't mean they've failed in deploying online unemployment insurance services."

Some states are coming up with workarounds. In Illinois, for example, individuals whose last names start with the letters A-M are now asked to file unemployment claims on Sundays, Tuesdays and Thursdays. Those with initials N-Z will file on Mondays, Wednesdays and Fridays. Saturdays are fair game for everybody. That's not a technological fix. That's a change in business process that keeps a program functioning with the tools that are already at hand.

When IT Problems Are Management Problems

States, cities and counties are having to do a lot of that. Some problems can't be fixed overnight, such as lack of employee access to broadband at home, but others can. Some states absolutely prohibit their employees from using home computers and laptops, due to security concerns. Most are recognizing that relaxing such rules is now absolutely imperative. "One positive thing that's come out of it, you're going to see a lot of innovation and out of the box thinking about how states do things that they haven't been forced to do before,"

says Robinson.

The biggest shift may simply be in terms of mindset. Major technological breakthroughs can take a generation to realize their full potential in terms of productivity gains. It took about 30 years from the advent of electricity for factories to be reinvented, adapting equipment to the new power source and running shifts after sunset. “About 30 years, not coincidentally, is about the time it takes for a new generation of managers to retire or die,” David Rotman, the editor of *MIT Technology Review*, said at a conference at Columbia University last month.

The coronavirus crisis may speed up a lot of managerial changes in government, such as widescale remote working.

“There are certainly managers out there that still had that Industrial Age mindset that, ‘I need to see people and I need to see them working,’” says Collins, the Delaware CIO. “I think we’ll see a lot more openness, that as long as people are producing, we’re fine with that.”

Places That Can’t Shift Operations

Labor departments and other state workforce agencies that handle unemployment claims are relatively small. Even the largest government departments, however, such as [state Medicaid systems](#), have been slow to adapt to the technological age.

There’s still lots of government data that’s not easily accessible, but rather stuck on a spreadsheet on an individual employee’s hard drive. And there are still too many transactions that are processed on paper. “This should be a huge wakeup call to government,” says Daniel Castro, vice president of the Information Technology and Innovation Foundation. “If there’s any paper process, that’s a huge cost, usually on the government side.”

When agencies do switch to handling functions digitally, they are prone to creating their own systems, which often take years to develop and can't readily be adapted to changing circumstances, such as a sudden spike in volume. "Everybody wants to have proprietary systems customized to the needs of a particular agency," says Darrell West, founding director of the Brookings Institution Center for Technology Innovation. "One of the advantages of a crisis is that it will put pressure on agencies overnight, encouraging them to rely on off-the-shelf software. There aren't months and months of time to develop new proprietary software."

The question, Castro says, is whether the current necessity to move faster will lead to permanent change. Procurement rules are being waived, but they won't be tossed out altogether. Often, there are either formal or political requirements that make rapid adaptation difficult, such as the desire of local governments to use local vendors.

And then there's cost. Any change, however smart, will cost money. Mainframes require maintenance, but such expenses may be lower, in the short term, than raising capital to move to cloud-based platforms that lock in recurring — and rising — costs in terms of licenses.

"The way to save on budgets is to reduce personnel — moving to the cloud and getting rid of managed servers," Castro says. "But those costs have human impacts. There will be political resistance for a lot of that. You don't usually want to do that in a down economy."

Wish Lists May Turn Into Shopping Lists

States, cities and counties are now paying for their "technical debts." Nearly all agencies struggle in terms of modernizing their environment. Investing in upgrades for back-office functions is less glamorous than spending on some new smart city project.

The coronavirus has demonstrated that investing in technology is not an option. Looking ahead, states and localities need to think about how to make their systems resilient, so they're capable of providing continued government services in a variety of unexpected situations. "After the pandemic, governments are going to have to see this as part of emergency preparedness," Castro says.

Government budgets, however, are about to enter fiscal ICUs. Under the best of circumstances, when the choice comes down to spending a dollar on software or spending it on kids or seniors, technology always seems to be the runner-up.

Smaller governments that already lack the staff, expertise and resources to make the most of technology are going to be hard-pressed to do much better. CTG's Pardo predicts that more local governments will move to a shared services model, linking up their IT systems and building increasingly regional approaches to services.

Shark, of the Public Technology Institute, agrees that smaller local governments are going to struggle to upgrade effectively. But he says larger locales should see an improvement. "The big places are feeling great, confident they're going to get what they ask for, because all of a sudden senior management sees the value of investment," he says. "CIOs are going to get more of what they want than ever before."

Alan Greenblatt *Senior Staff Writer*
agreenblatt@governing.com | [@AlanGreenblatt](https://twitter.com/AlanGreenblatt)

MORE FROM THE FUTURE OF WHAT'S NEXT

Blockchain Could Help Hospitals Stay Stocked and Staffed

Blockchain technology, a form of distributed ledger, could be used to streamline work and organization, which could be especially helpful for health crises like COVID-19. But it has a long way to go before implementation.

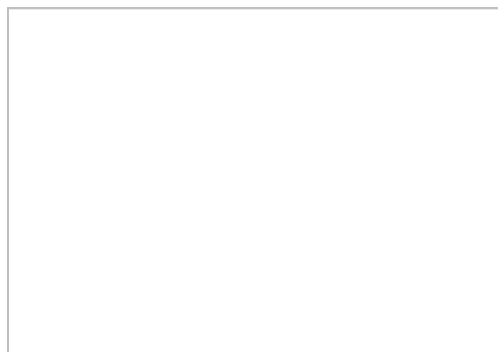
Pa. Joins 11 Other States and D.C., Moves Primary to June 2

Several primary elections have been postponed due to the coronavirus outbreak. The extra time will allow voters to register for mail-in ballots and allows polling stations to implement health precautions.

Municipalities Look Back to 9/11 in Shaping COVID-19 Response

Municipalities, like Framington, Mass., are having to plan for how the coronavirus pandemic might impact their finances, services and communities. Some are looking to historical events, like 9/11, to prepare.

SPECIAL PROJECTS



[Government 360](#)



[IBM Put Smart to Work](#)

[Eye On 65 Podcast](#)

[City Accelerator Program](#)

[Google Future Ready](#)

[Accele CloudScore](#)

[Verizon Better Citizen Experience](#)

.st0{fill:#FFFFFF;} .st1{fill:#256EFD;} .st2{fill:#808082;}

PAPERS

BOOKS

ABOUT

PRIVACY

CONTACT

ADVERTISE

SITEMAP

© 2020 All rights reserved. e.Republic

California Residents - Do Not Sell My Personal Information

[SIGN UP FOR NEWSLETTERS ON](#)

THE FUTURE OF:

WHAT'S HAPPENING NOW

[GOV Daily](#): News and analysis at the collision of tech and society and fallout consequences for policy, legislation and strategies to govern.

SECURITY

[Future of Security](#): From disinformation to deep fakes: protecting critical infrastructure and personal data in a rapidly changing threat environment.

FINANCE

[Future of Finance](#): From government funds to cryptocurrencies, muni bonds to opportunity zones, pay-as-you-go to long-term financing, direct taxation to P3s.

SUBSCRIBE