ECENT YEARS HAVE SEEN progress in modernization, innovation, cybersecurity and cloud migration. But a complete overhaul of IT requires time, planning and more than a little patience because, despite the lightning-quick speed of change in technology, transformation is not a race but a journey.

Although modernization is part of it, true IT transformation goes beyond simply upgrading existing technology and instead seeks to revolutionize the way agencies operate and deliver services.

Several factors are driving those efforts. One is money. About 70 percent of the \$95.7 billion federal IT budget in fiscal 2018 goes to operating and maintaining existing IT investments. In fiscal 2019, the government is expected to spend \$22.2 billion on major investments and \$61.2 billion on non-major ones, according to the federal IT Dashboard. Furthermore, the Government Accountability Office found that spending on development, modernization and enhancement declined by \$7.3 billion from fiscal 2010 to 2017.

That trend has led to another motivator for IT transformation: federal regulations. The Trump administration has made IT

transformation a priority and vowed to not just modernize outdated IT systems, but take a "holistic approach to federal IT that fundamentally transforms how agencies accomplish their missions," according to the administration's fiscal 2018 budget document. "This approach entails reengineering underlying business processes and leveraging modern IT solutions, such as cloud and shared services, that drive efficiency and scale."

In that same vein, Congress passed the Modernizing Government Technology Act in December 2017. It authorizes up to \$250 million for a Technology Modernization Fund from which agencies could draw to help pay for IT updates. In March, Congress earmarked \$100 million for the fund as part of an omnibus spending bill.

Finding help along the way

A third driver is rooted in the government's ability to deliver services and engage with citizens in a meaningful way. People experience a high level of fast, seamless service from the private sector every day as they bank, shop, seek information and keep up with friends online. And they expect the government's digital services to match or exceed the quality of what commercial entities

offer. Indeed, 85 percent of the 3,000 respondents to a 2016 Accenture survey expressed those expectations, and that's up from 73 percent in 2014.

But as with any change, challenges punctuate the progress. Transformation is not an overnight event. It takes time, and each step comes with new stumbles. Although the obstacles can be technological in nature, they can also come in the form of problematic acquisition processes or the need to transform workplace culture.

The only certainty in IT transformation is that government agencies can't go it alone. Fortunately, they don't have to. The number of government resources dedicated to transforming IT is growing. In 2016, the General Services Administration established the Technology Transformation Service to apply "modern methodologies and technologies to improve the public's experience with government by helping agencies make their services more accessible, efficient and effective," according to GSA's website.

More recently, the 2018 President's Management Agenda specified 14 cross-agency priority areas for transformation.

In addition, the technology industry has been making rapid advances in converged infrastructure, data storage and protection, networking, security, and IT strategies and architectures. They are partnering with agencies to help them achieve IT optimization and turn the corner on transformation.

Avoiding bumps in the road

Before they can start on their IT transformation journey, however, agencies must have a roadmap. In its 2016 report, "Digital by Default: A Guide to Transforming Government," the McKinsey Center for Government recommends starting small "by rebuilding a few fundamental capabilities around advanced technologies." Quick wins will garner support from employees at all levels. From there, agencies can make more sweeping changes.

That support will go a long way toward overcoming another common challenge with transformation: driving and sustaining cultural change. Across the public and private sectors, about half of frontline employees are "visibly engaged in transformation," compared to 84 percent of chief executives, according to a 2017 McKinsey Global Survey on organizational transformations.

To increase support for such efforts, agency leaders need to make employees part of the process. For instance, they could host focus groups to discuss the challenges employees face and solicit their ideas for how technology can help address them.

Security is another – and perhaps the largest – challenge. When hackers breached Office of Personnel Management systems and accessed the personal data of 21.5 million people in 2015, the agency blamed aging systems. But "new" doesn't necessarily mean "secure." In fact, changes can introduce new vulnerabilities. That's why the Continuous Diagnostics and Mitigation program and others are supporting agencies' efforts to transform the cybersecurity of new and existing infrastructures.

Despite the bumps in the road, agencies must keep driving toward IT transformation. If they don't, they risk alienating citizens and employees, opening themselves to cybersecurity vulnerabilities and spending money to prop up outdated systems rather than investing resources in modern, more efficient systems.

In the White House-commissioned "Report to the President on Federal IT Modernization," the American Technology Council wrote that "difficulties in agency prioritization of resources in support of IT modernization, ability to procure services quickly, and technical issues have resulted in an unwieldy and out-of-date federal IT infrastructure incapable of operating with the agility and security that is required of a multibillion-dollar federal IT enterprise."

Fortunately, with support from the top echelons of government, transformation-focused organizations and commercial partners, the stage is set for a new era of public-sector IT.

Transformation spending

About **71 percent** of the federal fiscal 2018
IT budget goes to operations and maintenance.
Despite the push for IT transformation,
the government is only expected to spend **\$22.2 billion** on major investments – those
considered highly significant and tied to the
mission – in fiscal 2019, compared to **\$61.2 billion** on non-major ones. Between fiscal years
2010 and 2017, spending on development,
modernization and enhancement fell by **\$7.3 billion**. Still, the President's Management
Agenda projects that IT transformation
efforts will result in **\$2 billion** in savings on
administrative services **over 10 years**.

Transformation in action



U.S. Digital Service's projects will **save \$617 million** and redirect 1,475 labor years over five years



292,634 veterans can apply for benefits on Vets.gov



1 hour is the time it takes for a small business to apply for government contracting programs at the Small Business Administration's website



There has been a **30 percent decrease** in case status processing time for hopeful workers using U.S. Citizenship and Immigration Services' myUSCIS portal