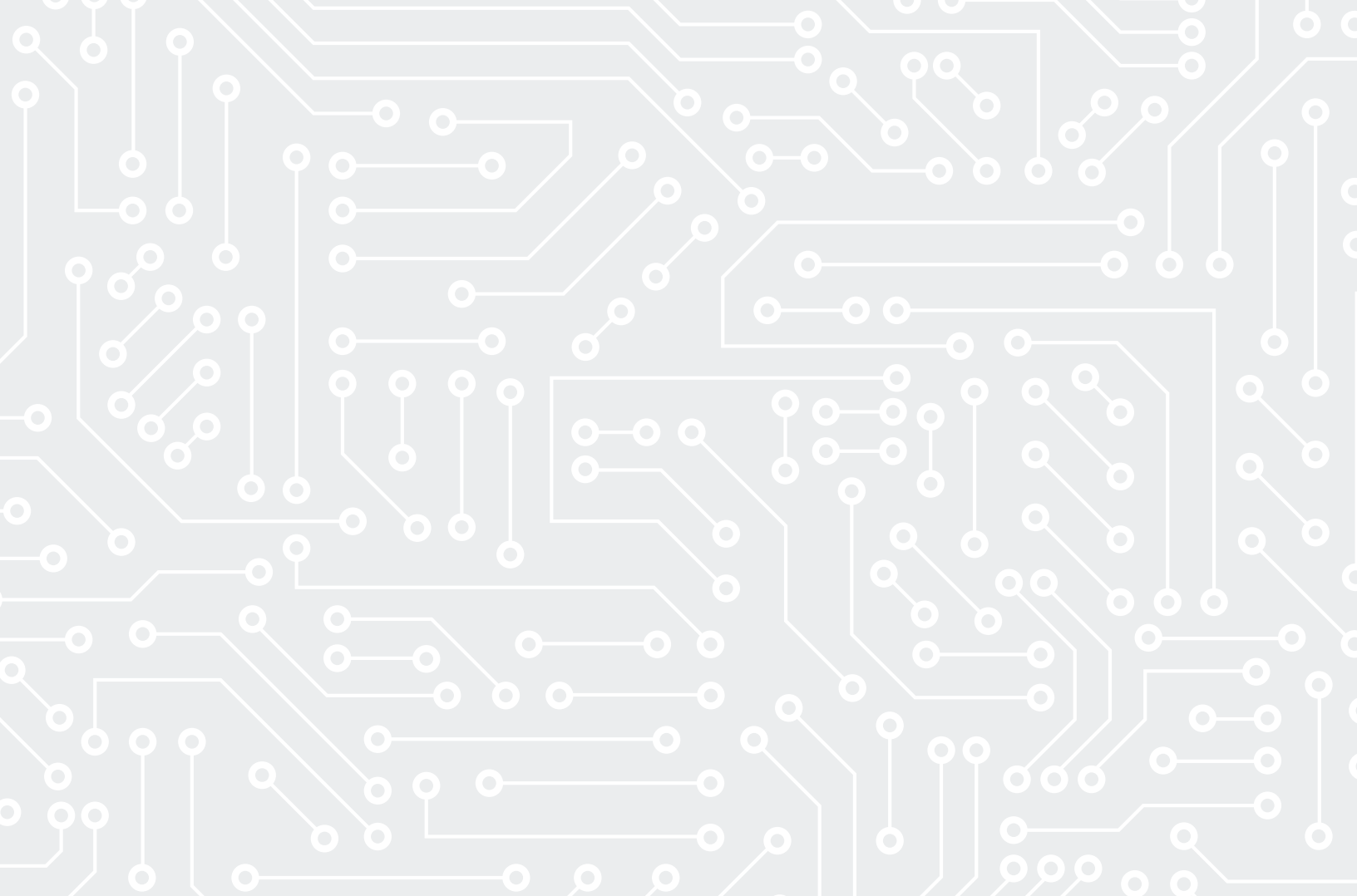# A BLUEPRINT FOR **LEADING LASTING TECHNOLOGY REFORMS IN GOVERNMENT**

NOVEMBER 2017

PARTNERSHIP FOR **PUBLIC SERVICE**

accenture

The Partnership for Public Service is a nonpartisan, nonprofit organization that works to revitalize the federal government by inspiring a new generation to serve and by transforming the way government works. The Partnership teams up with federal agencies and other stakeholders to make our government more effective and efficient. We pursue this goal by:

- Providing assistance to federal agencies to improve their management and operations, and to strengthen their leadership capacity
- Conducting outreach to college campuses and job seekers to promote public service
- Identifying and celebrating government's successes so they can be replicated across government
- Advocating for needed legislative and regulatory reforms to strengthen the civil service
- Generating research on, and effective responses to, the workforce challenges facing our federal government
- Enhancing public understanding of the valuable work civil servants perform

Accenture Federal Services, a wholly owned subsidiary of Accenture LLP, is a U.S. company with offices in Arlington, Virginia. Accenture's federal business has served every cabinet-level department and 30 of the largest federal organizations. Accenture Federal Services transforms bold ideas into breakthrough outcomes for clients at defense, intelligence, public safety, civilian and military health organizations.

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 425,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Learn more at www.accenturefederal.com.

INTRODUCTION

Dramatic and rapid changes in technology are impacting nearly every aspect of the federal government's operations. From missile defense systems to medical advancements for injured veterans to systems that collect and manage tax payments, nearly everything the government does has been, and will continue to be, transformed by technology.

While the transformative power of technology is widely recognized, leaders also acknowledge that shifts in technology require new approaches to leadership. If government leaders are to drive ambitious IT reforms and harness technology to accomplish their missions, they will need to rethink many of their leadership and management strategies. They must lead with a more strategic vision, embrace more open collaboration and faster decision-making, and drive creativity and accountability in their organizations.

Government leaders now have an opportunity to drive bold IT reforms in their agencies to keep pace with the evolution of technology and deliver capabilities to critical mission areas more quickly, efficiently and securely. In many places, these reforms are underway. "Government is on the verge of a paradigm shift in terms of how technology is being absorbed by organizations. It is becoming completely different than operating technology in past decades," said Dave McClure, former associate administrator at the Office of Citizen Services and Innovative Technology at the General Services Administration, now at Accenture.

For example, federal agencies are taking advantage of technologies such as cloud computing that provide a low-cost way to store and use massive amounts of data. They are shifting to more flexible models and approaches in order to deliver IT systems in months rather than years, and are sharing, adapting and reusing technologies rather than building from scratch.

These improvements can help government make a huge difference in the lives of citizens. One example is in the response to a series of devastating hurricanes that hit the U.S. and the Caribbean in the summer and fall of 2017. As the deadly storms struck, the National Oceanic and Atmospheric Administration used satellite technology to aggregate large amounts of weather data. The technology was critical for predicting the hurricanes' paths, and likely saved lives and property. With technology upgrades in the works, NOAA hopes to make quicker, more accurate predictions in the future.[1]

This report is the culmination of a three-part series that provides career and political leaders with tips for advancing ambitious IT reforms in government. Over the past six months, the Partnership for Public Service and Accenture Federal Services interviewed current and former IT experts throughout government about what it takes to lead IT reforms and transform how agencies use technology. Five strategies emerged as important for enabling leaders to drive IT improvements in government.

---

1   Frank Konkel, "How NOAA plans to improve tracking Harvey-like storms," Nextgov.com, Aug. 30, 2017. Retrieved from http://bit.ly/2y8XM7T

FIVE STRATEGIES
ENABLING LEADERS TO DRIVE TECHNOLOGY IMPROVEMENTS IN GOVERNMENT

The experts we interviewed:
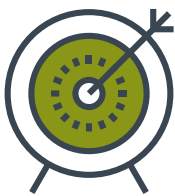
Linked technology initiatives directly to results, based on a deep understanding of the mission.

A keen focus on enhancing agencies' ability to achieve their missions meant these experts did not upgrade technology for its own sake. They sought allies among mission-focused staff to ensure IT reforms would streamline operations and improve customer service, and they avoided IT jargon, speaking instead in the "language of the mission." They were also able to assess how IT improvements could contribute to the agency's most important goals, and communicate to leaders and program staff how modernizing IT could help the agency achieve better results.

Sought to transform culture and how the organization does business.

The key accomplishments for our interviewees were not upgrading technologies or developing new systems. Instead, they emphasized efforts to change how their organizations work, how people communicate, how they plan and manage projects, and how they approach problems.

They shifted their agencies to modern IT practices, such as using approaches like agile software development, to build systems incrementally with continual feedback from end users. These practices allow government to reduce the risk of projects failing, move more quickly and nimbly to deal with increasingly complex missions, and meet citizens' rapidly changing expectations.

"It's not just about fixing things. It's about moving toward a new modern way of working," said Rob Cook, director of the Technology Transformation Service at the General Services Administration. "Otherwise, if you are trying to get government caught up to 2017, and it takes 10 years, then it's behind again." In other words, agencies need to go beyond remediating current weaknesses to create new operating models that will allow them to keep pace with accelerating change.

Focused on people and were responsive to and adept at managing many different stakeholders.

The experts recognized that technology transformations are far too complex for one person or team to do alone. They said the success of their reforms required establishing a clear vision for that reform, building support among myriad stakeholders, leading coordination and collaborating across organizations, and inspiring and empowering their employees to own IT improvements.

"IT efforts often fail because they don't focus on people," said David Bray, former chief information officer for the Federal Communications Commission. "The focus for someone in my role should be 80 percent people, 20 percent IT."
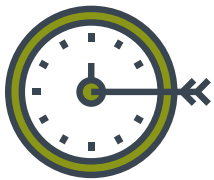
Encouraged their organizations to act more quickly and take risks.

Recognizing that technology users expect to have their needs fulfilled on demand, the leaders we interviewed pushed their organizations to adopt a fast, agile approach by responding quickly to users' needs and incorporating their feedback. They held their staff to high standards and accelerated project timelines, removed roadblocks and unnecessary layers of approval, and shouldered responsibility when a new idea or calculated risk did not work as planned.
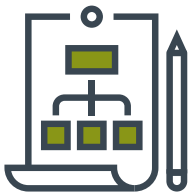
Managed rather than reacted to the dramatic changes brought about by technology.

The leaders we interviewed acknowledged that technology transformations bring dramatic change, which is sometimes met with pushback and legitimate concerns. So they established and communicated a clear vision for what the goals were and how they would deal with problems that might arise. They focused on actively addressing concerns, and putting their organizations in control of the change, rather than framing it as something that would happen *to* them by external forces or requirements.

This report shares tips and insights we captured from interviews with experts who have led technology transformations in government. It explains what leaders need to know before they embark on IT reforms, where to start, which stakeholders need to be involved, and how to maintain momentum and achieve lasting benefits.

THE FEDERAL TECHNOLOGY LANDSCAPE BY THE NUMBERS

These statistics illustrate some of the challenges and opportunities the federal government faces when funding, acquiring and managing technology.

IT spending is massive and highly decentralized, and much of the work is contracted to the private sector.

$84.7 BILLION

was budgeted for IT across the federal government in fiscal 2017.

Source: IT Dashboard, Information Technology Agency Summary. Retrieved from: http://bit.ly/2ykN6VV

146,795

The number of contract actions, including new or modified contracts, related to IT and telecommunications across the federal government in fiscal 2016, up from 128,226 in 2007.

Source: Federal Procurement Data System. Retrieved from: http://bit.ly/1LOtQND

The federal government struggles to identify how many data centers it has; GAO estimates that at one point the federal government operated nearly **10,000 data centers** of various sizes, in service for differing lengths of time.

Source: GAO, Data Center Optimization: Agencies Need to Complete Plans to Address Inconsistencies in Reported Savings, GAO-17-388 (Washington, D.C.: May 2017). Retrieved from: http://bit.ly/2qWEKQz

Much of the technology the federal government relies upon is outdated.

77%

What the federal government planned to spend of its IT funds on operations and maintenance of old systems in fiscal 2017, leaving very little for modernizing or building new systems.

Source: GAO, Information Technology: Federal Agencies Need to Address Aging Legacy Systems, GAO-16-468 (Washington, D.C.: May 2016). Retrieved from: http://bit.ly/1OWtyex

Many agencies use outdated IT systems, with some components that are at least

50 YEARS OLD

Source: GAO, Information Technology: Federal Agencies Need to Address Aging Legacy Systems, GAO-16-468 (Washington, D.C.: May 2016). Retrieved from: http://bit.ly/1OWtyex

Not enough federal IT projects use modern development practices.

½

GAO reviewed seven departments' software projects, and found only **about half** of these projects had added new functionality every six months, as is required by OMB guidance on modernizing IT.

Source: GAO, Information Technology Reform: Agencies Need to Increase Their Use of Incremental Development Practices, GAO-16-469 (Washington, D.C.: Aug. 16, 2016). Retrieved from: http://bit.ly/2xCiSPk

Many federal agencies lack long-term IT leadership.

7 of 15

The number of Cabinet agencies with CIOs that are acting in their roles, as of October 2017.

Source: CIO Council. Retrieved from: http://bit.ly/2g6wJCi

Government has an aging IT workforce with below-average morale.

3%

The percentage of the federal IT workforce under age 30 in fiscal 2016, with more than 51 percent age 50 or older.

Source: FedScope. Retrieved from: http://bit.ly/2gAv0Wj

53%

As of fiscal 2016, the percentage of the IT workforce that had worked for the federal government for more than 10 years.

Source: FedScope. Retrieved from: http://bit.ly/2gAv0Wj

IT specialists had an average score of 56.8 in the Best Places to Work in the Federal Government® 2016 rankings, nearly 3 points below the average for all government employees and well below private sector benchmarks. IT specialists also showed lower engagement in the 2015 rankings.

Source: Partnership for Public Service, Best Places to Work in the Federal Government® Rankings. Retrieved from: http://bit.ly/2xCsJje

The government's IT systems are under attack.

77,183

The number of cyber incidents reported by federal agencies in fiscal 2015.

Source: GAO, Federal Information Security: Actions Needed to Address Challenges, GAO-16-885T (Washington, D.C.: Sep. 19, 2016). Retrieved from: http://bit.ly/2i7JBfH

What Leaders Need to Know Before Launching IT Reforms

Leaders who are looking to drive bold technology reforms, especially leaders who are new to government, can educate themselves to avoid being surprised by how the federal government funds, acquires, builds and manages technology.

The experts we interviewed stressed that understanding the constraints, identifying agency assets and empowering staff to work creatively makes technology improvements possible. New leaders should know the extent to which:

Government is hungry for change, innovation and new approaches to managing technology.
In his opening remarks at the June 2017 meeting of the American Technology Council, Senior Advisor to the President Jared Kushner said, "Before I came to Washington, many warned me that the bureaucracy would resist any change we tried to implement. So far I have found exactly the opposite."

Terence Milholland, former chief information officer and chief technology officer at the Internal Revenue Service, agreed. "Most of the workforce works their tails off," he said. "People care and want to do the right thing for their agency's mission, despite all the constraints."

Agency IT systems have been pieced together over decades, making them extremely complicated.
Many agencies are running huge IT systems that have been repeatedly altered and supplemented over decades as the laws and regulations guiding agencies'

work have changed. Due to this complexity, new leaders need to invest time in understanding the history and structure of their agencies' IT systems before advancing bold reforms.

Decisions on spending agencies' IT funds are not always in leaders' hands.
New leaders should understand the restrictions on how they use their IT funds, according to Milholland. For example, Congress may provide money for building a new system, but not authorize funds to make critical improvements to that system in the future.

Additionally, federal acquisition rules prevent leaders from simply selecting and purchasing technology they feel best meets their needs. "You have to have fair and open competition in government," said John Morenz, chief technology officer at the Social Security Administration. "You don't always get the best technology. You get the system that meets the requirements at the least cost, or that is technically acceptable."

New leaders need to invest time in understanding the federal budget and acquisition processes, and forging relationships with agency and congressional staff and OMB budget officials.

New leaders should also find out if their agency has working capital funds that can help support long-term IT investments, and learn how those funds are established and operated. They should also follow action on the proposed Modernizing Government Technology Act, a proposed law which could provide an additional source of longer-term funding to update systems.

Protracted federal acquisition and budgeting processes compel leaders to plan for technologies that do not yet exist.
Due to the complex and lengthy federal budgeting and acquisition processes, it takes years from when agencies begin planning for new IT systems to when those technologies are built or acquired. With the speed of technological change, today's proposed state-of-the-art systems may be out of date by the time they are implemented, so IT contracts need an element of flexibility and adaptability, which can be a difficult proposition in government.

Federal IT work is often carried out by contractors, adding to management challenges.
New leaders should understand that much of the IT workforce in their agencies is made up of contractors. This dynamic can present management challenges for leaders overseeing IT reforms. Agency staff working with industry not only have to be savvy enough with technology to understand what companies propose, but also must be experts at managing and overseeing a complex federal contracting process, while maintaining a collaborative and problem-solving atmosphere. And they must ensure that contracts provide companies with financial and risk-sharing incentives that compel them to modernize IT rather than simply maintain costly legacy systems.

"People care and want to do the right thing for their agency's mission, despite all the constraints."

TERENCE MILHOLLAND
FORMER CHIEF INFORMATION OFFICER AND CHIEF TECHNOLOGY OFFICER AT THE INTERNAL REVENUE SERVICE

A Strong Start

TIPS FOR INCREASING YOUR ODDS OF SUCCESS FROM THE OUTSET

Given the complexity of the federal IT landscape, agency leaders who seek to transform their organization with technology may question where to begin. The experts we interviewed offered tips for a successful start.

Come in with an agenda and commit to change.
Commit to overarching technology goals from the beginning. "You can't just pronounce innovation in government," McClure said. "It requires the equivalent of a campaign: preaching, speaking and doing." Driving toward a clear, desired end can stave off the fear of the unknown that may cause staff to resist major transformations. "It's a 24-hour change management exercise that doesn't occur easily," McClure added. "You are busting cultures."

Go on a listening tour.
For most IT transformation efforts "there is a long history and subtext" that new leaders must understand, said Renee Wynn, the CIO at NASA. Roger Baker, the former CIO at the Department of Veterans Affairs, added, "If you have no understanding of that history, you will fail." Going into listening mode is a great way for new leaders to get the context they need to be successful and to gain the support of partners who can help them accomplish their goals. Even those with significant experience in their agencies can benefit from taking a new look at their existing assumptions.

A listening tour also helps new leaders avoid their predecessors' mistakes and come up with new solutions to tricky problems. "I've seen so many new political appointees come in and retry things that already have been tried and failed," Baker said. "The career staff have already banged their heads against that brick wall, and it hurt."

Plan or strengthen your governance model.

Leaders need to develop an effective governance model for bringing in stakeholders and making informed decisions about IT, both at the organization level for formalized requirements set by OMB and Congress, and for large IT investments requiring ongoing project governance.

Interviewees offered tips on coming up with an effective model. It is essential to have the right people at the table, including program and business staff along with IT experts. "If there are a bunch of IT people making IT decisions, you need to fix your governance," said Robert Brese, former CIO at the Energy Department. "It's about mission people making decisions with the support of IT."

Interviewees also recommended that governance structures be adaptable, rather than set in stone, and reevaluated frequently. "We ask our members how well the governance process is working and get anonymous feedback in order to improve it," said NASA's Wynn.

Find the "doers" who can move IT projects along.

Before bringing in new staff, leaders should position existing talent better. It is important for leaders to understand early on their employees' challenges, skills and weaknesses, and then work to fill in the gaps. Political appointees should identify career staff who can help them advance reforms and navigate the bureaucracy.

Leaders should also seek allies in a program or business office who can serve as champions on IT reforms and articulate why those reforms are critical to the mission. Having these key champions outside of the CIO's office—to help advocate and maintain support for reforms—will be critical to long-term success, according to Brese.

Understand what you can change and aim for quick wins.

New government leaders should examine which technology policies they have the power to influence or change, and garner some quick wins, according to interviewees. Sometimes this means making sure technology changes called for in policy make sense for the agency. "Leaders need to be aware that many of these laws and policies aren't handcuffs, they are guard rails," said Brese. "They are designed to keep you out of jail, not to keep you from making intelligent business decisions."

The experts we interviewed cautioned that while achieving some quick wins is important, they must also be sustainable, advance the mission and fit into an overall strategy. "Quick wins without a strategy can very easily become a distraction," said Bray.

Get smart about cybersecurity.

President Donald Trump's May 2017 executive order on cybersecurity makes it clear the administration intends to hold top agency leadership accountable for cybersecurity, and new leaders will be keen on helping their agencies avoid network intrusions.

The first step is to understand the agency's risks and assets, according to Sarah Bloom Raskin, former deputy secretary at the Department of the Treasury. It is also useful to categorize data and assets by how critical they are to the agency's functioning, with the goal of identifying and creating strong defenses for the most important data, according to Ron Ross, a fellow at the National Institute of Standards and Technology. To fend off and protect against the potential for highly damaging attacks, Ross led the development of the Federal Risk Management framework at NIST. The president's executive order on cybersecurity required agencies to develop plans to use this framework to decide how critical a data set is and protect it accordingly.

Leaders also can benefit from scrutinizing and minimizing the number of "privileged users," that is, those who are allowed access to critical data. Limiting the number of staff with access to sensitive data can help reduce vulnerabilities.

"It's a 24-hour change management exercise that doesn't occur easily."

DAVE MCCLURE
FORMER ASSOCIATE ADMINISTRATOR AT THE OFFICE OF CITIZEN SERVICES AND INNOVATIVE TECHNOLOGY AT THE GENERAL SERVICES ADMINISTRATION

Case Study

LAUNCHING A TECHNOLOGY TRANSFORMATION AT THE FEDERAL COMMUNICATIONS COMMISSION

By empowering his staff to solve problems and building on early successes, former senior executive and Chief Information Officer David Bray led technology transformation efforts at the Federal Communication Commission that resulted in improved technology at lower cost.

When Bray joined the agency in 2013 as the 10th CIO in eight years, the FCC was facing formidable technology challenges. The agency was spending about 85 percent of its IT budget on the operations and maintenance of more than 200 legacy IT systems. It lacked an effective telework solution, and was not using modern IT practices, such as agile development, which involves developing systems incrementally with continual feedback from end users.

In his first months, Bray determined that improving IT systems to support telework could be a quick success that would meet a pressing agency demand and set the stage for other advancements. With a timeframe for rolling out a solution originally estimated at 12 months, Bray challenged his team to get it done faster. He supported his team in thinking creatively, and taking an agile approach by quickly deploying new features and continuously incorporating improvements. Bray and his team implemented a virtual desktop solution in four months. "It was faster than they were used to operating," he said. But the outcome demonstrated that this collaborative kind of problem-solving could yield fast, cost-saving results.

In 2015, the FCC worked on a project to create the Consumer Help Center, a website for the public to submit comments, solicit help with pending requests, and look at agency data and information. Bray's team originally estimated the project would cost $3.2 million and take 18 months to build and launch a new system supporting the help center. He sought a better option. "It was actually a new employee that suggested the idea of using software as a service," Bray said. The agency purchased and customized an existing system, rather than build a completely new one, and was able to launch it in just six months.

These choices drove the FCC to rethink how it solved technology problems, and paved the way for a larger technology transformation, an initiative Bray called "Operation Server Lift." This project involved transferring the servers from FCC's headquarters to a data center managed by a commercial service provider who could run the servers at a significantly reduced cost. The changes reduced IT operations and maintenance spending by 35 percent, freeing funds for other projects.

According to Bray, his focus on talent was the biggest key to success. He recommends leaders come into a new environment with the intention of first understanding the challenges that face agency staff and the contractor workforce. Leaders should work to remove these barriers, while also empowering employees to offer solutions, collaborate more and take risks, he said.

How to Maintain Momentum and Achieve Lasting Benefits
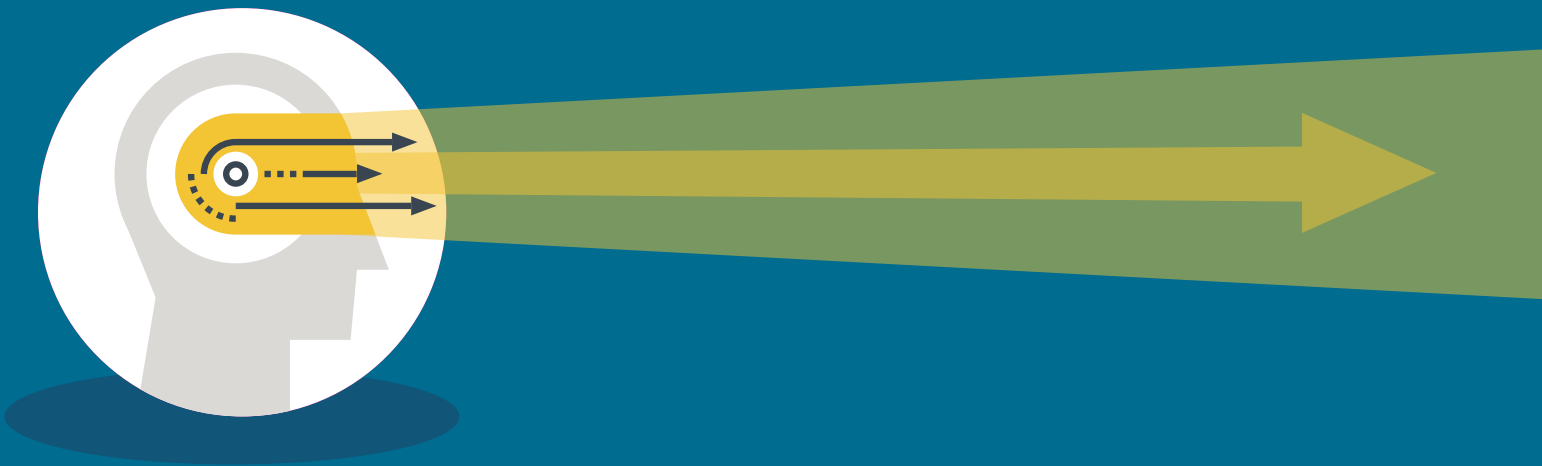
Both for managing specific, high-profile IT initiatives and for transforming an agency's approach to IT overall, the experts we interviewed provided tips for maintaining momentum and ensuring technology efforts stay on track through inevitable challenges.

Take the big-picture view.
Large federal departments that plan to make lasting improvements in technology need agency leaders who look beyond their own organizations and develop solutions that work for the entire department. "A lot of government technology investments get into 'What's in it for me?' arguments," said Lee Holcomb, formerly CIO at NASA and CTO at the Department of Homeland Security. "Someone who can step away from that and see the bigger picture can be very effective."

This strategy is particularly relevant for agencies and divisions that have traditionally developed their own customized technology solutions rather than adopting or developing shared solutions. Leaders who can guide their agencies toward adopting common solutions and shared services may be able to generate substantial savings and deliver on the mission more effectively.

Develop the business case for IT transformation.
Leaders should formulate a clear plan for IT transformation, including the costs and benefits for the agency's mission. "Start by building a solid business case," said Andrew Jackson, former assistant secretary for management at the Department of Education. "If it's just a cool idea with no plan and no fundamental impact, the chances of it lasting are slim."

A good starting point is assessing current alignment between IT and mission priorities, readiness to move systems to the cloud, and current security vulnerabilities. Leaders also should benchmark the performance of their current operating model to identify gaps where automation, standardization and centralization can streamline operations.

A solid business plan will be critical to help secure funding from OMB and Congress, according to John Morenz, the chief technology officer at the Social Security Administration. A credible plan should detail the people and processes an agency will use to modernize its technology, how long it will take, and how much it will cost and why, according to Morenz.

Anticipate criticism.

Leading technology transformations in the federal government can be difficult and time-consuming, and some reforms will be met with resistance. "The most certain way to get criticized in Washington is to actually make a decision," said Roger Baker, former CIO at the VA. "But if you are going to get anything done, you have to make some hard decisions—and you will inevitably have critics."

Be prepared for leadership changes.

Many IT reforms in government suffer from what McClure called a "stickiness challenge," noting they lose momentum or interest when leaders come and go.

Developing a broad base of support for the project or reform is the most important step in ensuring it can outlast changes in leadership, according to the experts we interviewed. "We were successful because everyone became a creative problem solver," said Bray, speaking of the reforms he led as CIO of the FCC. "If it was just me or the core team I just brought in, it wouldn't be long-lasting."

It is also critical to address the concerns of opponents of any projects or reforms. "When there's a change of leadership, even within an administration, there's a tendency for detractors of your progress to run to the new leader and make the case to stop something," Jackson said. "If you've done your homework to get buy-in ahead of time, there's less likelihood a change of leadership will change projects in a radically different direction."

Be on the lookout for early signs of trouble and have courage to take action.

Some projects are continued long after it becomes clear that they are unlikely to succeed, according to the experts we interviewed. IT leaders must take the difficult step of stopping projects they identify as not working.

Leaders should be on the lookout for early signs of project failure, which include being behind schedule and over budget. "If a project is more than 10 to 15 percent above the original budget, and if it isn't because of a new functionality or a clear reason, that is a major red flag that it is going off the rails," Jackson said.

Leaders often need to ask hard questions and do some digging to get that information, according to Jackson, noting that some IT projects are repeatedly "re-baselined" and thus appear on track despite significant delays.

It can be difficult to end an IT project to cut an agency's losses, even if a project is struggling. It helps for leaders to have allies when making that call. Oversight organizations such as OMB, GAO or IG offices can be powerful partners to help justify and explain these decisions, according to Alan Balutis, the former Commerce CIO.

Stay focused on the end user.

Efforts to build or modify individual IT systems will not be successful unless those technologies are designed with the needs of the end users in mind. Eric Novotny, senior advisor for Digital Media and Cybersecurity at the State Department, said he has seen what happens when agencies "migrate to a new version of what they had before, without sufficient user input. Then, new systems are actually worse than the old one."

Rob Cook, director of the Technology Transformation Service at the General Services Administration, said, "You have to be guided by the feedback of people who will use the system. You have to put the customer at the center and switch gears quickly to respond to feedback."
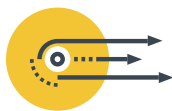
"The most certain way to get criticized in Washington is to actually make a decision."

ROGER BAKER
FORMER CHIEF INFORMATION OFFICER AT
THE DEPARTMENT OF VETERANS AFFAIRS

HELPING VICTIMS OF IDENTITY THEFT WITH A USER-FRIENDLY ONLINE SYSTEM

One of the biggest frustrations citizens have with government is that each agency seems to function in isolation, with little or no discernible coordination. Citizens may have to engage with several agencies to complete a task or receive a service.

In contrast, IdentityTheft.gov is a one-stop online resource for anyone who has been a victim of identity theft. The site—designed by a team led by Nat Wood, associate director of the Division of Consumer and Business Education in the Federal Trade Commission's Bureau of Consumer Protection—consolidates tools and information in a way that is easy for users to understand. It even generates individualized plans that lay out the steps victims should take to resolve their identity theft cases.

Wood's leadership ability was critical for creating IdentityTheft.gov. He "let the people on his team who are talented and hard-working get out there, roll up their sleeves and do something great," said Monica Vaca, the acting associate director of the Division of Consumer Response & Operations.

Wood and his team did not operate in a bubble, instead working collaboratively with other departments and agencies. Team members came from two FTC divisions—the consumer and business education division and the consumer response division. Federal law enforcement organizations, the IRS and other federal partners were included in the design and implementation to make sure the new system would work for them as well.

Wood used the information FTC already had, but he looked at it from the consumer's viewpoint. To gather customer perspectives, he and his team interviewed more than 70 stakeholders and identity theft victims from around the country to ensure they would be able to use the site for their purposes.

And Wood made sure the new website was written in plain English—and Spanish. These strategies were the foundation of IdentityTheft.gov's success. Additionally, Wood and his team consulted with attorneys about how they could counsel people to seek legal redress.

To gain support for the project, Wood also needed to articulate to stakeholders how IdentityTheft.gov contributes to FTC's mission. Users needed a place to turn after they were victimized, and the site provided a service that was missing. "We know that identity theft is really damaging to people, both financially and emotionally," Wood said. "Anything we can do to improve that, to reassure people it's going to be okay and they've got some control, makes a big difference."

Since it began operating in 2016, IdentityTheft.gov has received more than 500,000 identity theft reports. That number is likely to grow, given the estimated 15 million U.S. residents who have their identities used fraudulently each year. Financial losses from identity theft total upward of $50 billion. Wood's skill as the leader of the initiative led to the site's success. With his team's support, Wood used technology to connect people to a much-needed service, improving how the FTC fulfilled its mission.

CONCLUSION

Critical government IT reforms that include modernizing decades-old systems are challenging tasks. But potentially more daunting than improving IT systems is transforming the culture, management practices and business processes that ultimately drive how government builds and uses technology.

Nonetheless, these challenges must be met to ensure government uses a 21st-century approach to keep pace in a complex and fast-changing world.

When it comes to IT transformation, career and political leaders must take a long-term view. To do so, they should lead with a vision that stretches far beyond their tenures, with a plan to address the inevitable roadblocks and challenges that will arise.

"Know that you may not see the final results of a project or reform you are starting," McClure said. "Launch an arrow to the target. You may not see it hit, but put it on the right trajectory."

FOR THOSE NEW TO GOVERNMENT
THE KEY PLAYERS IN TECHNOLOGY REFORMS

Success with IT reforms depends on leaders throughout government working together to implement changes effectively. Many of the experts we interviewed described the importance of establishing a shared vision and plan for how technology will support agency missions.

"Irrespective of what position you sit in, getting anything done in IT has to be highly collaborative," said Richard Spires, a former chief information officer at the Department of Homeland Security. "Moreso than in the private sector, you have to understand who the stakeholders are. You have to do stakeholder engagement and get them on board. You can ignore them, but you do so at your own peril."

While some of these partners can help drive IT reforms forward, others primarily provide oversight. "When you take on a massive IT project, you have a host of people looking over your shoulder," said Alan Balutis, former CIO at the Department of Commerce. "There are often more people watching you than there are people working with you to implement the project. A significant amount of time and energy is chewed up by communicating with these people," he said, noting it is critical to get early agreement among stakeholders on a project's timeline, goals and deliverables, and to have a plan to manage inevitable challenges.

The leaders we interviewed cited several important players who need to be engaged if technology reforms are to be successful, and provided tips for how to involve them.

As the top IT official, the **chief information officer** is responsible for the agency's technology infrastructure and investments, but should also participate in high-level strategic decisions about how to improve mission performance, according to interviewees. "There is sometimes a misunderstanding for new leaders that the CIO is responsible only for making sure the laptops and phones work," Spires said. "The CIO should help agency leadership figure out the best use of technology to accomplish the mission."

The agency's **chief acquisition officer** oversees the acquisition of new technologies, ensuring the process complies with federal law and regulations. The big challenge for government is the complex, lengthy procurement process that results in agencies buying out-of-date technology, systems or products that do not fully meet the original need. To mitigate this, procurement officials need to be involved in initial conversations about the need for new technologies and how they will ultimately be used, interviewees said.

The **chief financial officer** must be aligned with other agency leaders on technology priorities and where investments should be made, according to interviewees. CFOs can help new leaders navigate the complex budgeting and appropriations processes to get the funding for new technologies.

The **chief human capital officer** can work with new leaders to ensure the agency has a workforce that can make the best use of technology. Federal agencies often struggle to attract and retain top IT talent, and human capital officials are critical partners in helping to solve this problem.

Key **business or program officials** in each agency use technology to accomplish aspects of the mission. It is critical to involve these stakeholders in the design and maintenance of the systems that will support their work.

The experts we interviewed also identified partners outside their agencies that will be critical for advancing technology reforms. Several of these partners oversee IT projects.

Congress provides funding for IT investments and maintains high-level oversight, making relationships with members and staff essential.

Staff at the Office of Management and Budget, as well as presidential advisors, establish government-wide policies, standards and memoranda on IT issues. These leaders can serve as champions to help agencies overcome legislative and policy roadblocks.

The White House also contains **the U.S. Digital Service**, which employs leading technologists who provide assistance to agencies in improving digital services.

The General Services Administration provides support and services to help agencies improve their technology, through offices such as the Technology Transformation Service, which helps agencies build, buy and share technology to serve the public better.

The Government Accountability Office and **inspectors general** provide oversight on agency IT investments and can help identify management weaknesses and recommend improvements. The GAO publishes a high-risk list every two years on agency vulnerabilities, including management of IT acquisitions and IT operations.

Government contracts with **industry** to perform much of government's IT work. Federal leaders should ensure industry partners understand their agency's goals and can help them reach those goals. They should also learn from industry peers about new innovations.

Industry associations share leading IT management practices and provide ideas and suggestions for approaching the complex IT needs of the government.

PARTNERSHIP FOR PUBLIC SERVICE

Eric Keller, Senior Research Manager

Lexi Quinn, Research Associate

Mallory Barg Bulman, Vice President of Research and Evaluation

Ariel Leuthard, Research Intern

Ellen Perlman, Writer/Editor

Chantelle Renn, Manager, Policy

Aisha Shafi, Research Intern

ACCENTURE FEDERAL SERVICES

Ira S. Entis, Managing Director, Strategic Solutions and Emerging Technology

Pamela Merritt, Managing Director, Federal Marketing and Communications

John Conley, Senior Manager, Strategic Solutions and Emerging Technology