A ROADMAP TO THE FUTURE
TOWARD A MORE CONNECTED FEDERAL GOVERNMENT

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- Identifying and celebrating government’s successes so they can be replicated across government.
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EXECUTIVE SUMMARY

The federal landscape is expected to change dramatically in the next decade as the power and capacity of technology advance, more data becomes available and the demands on federal employees grow and shift. With the U.S. population projected to expand by more than 20 million people in the next 10 years, according to the U.S. Census Bureau, government must evolve to keep up.

To thrive in an ever-changing environment and excel at meeting the public’s needs, government must prepare now to overcome looming obstacles and seize new opportunities. The president’s management agenda, a long-term vision for modernizing government, calls for reform in three key areas: information technology, including how services are delivered in a digital age; the composition and management of the federal workforce, including how work gets done; and how the government uses data.

“This agenda offers a vision that will not only change the way government serves its people but will drive a deep-seated transformation that will last generations,” said Margaret Weichert, deputy director for management at the Office of Management and Budget.

This report explores what the future of government should look like in those three areas—and what it will take to get there. The findings emerged from a workshop and interviews with agency leaders, as well as specialists from outside government, conducted by the Partnership for Public Service and EY between May 2019 and September 2019.

We learned that for the government of the future to flourish, agencies must develop more robust and broad-based connections—doing a better job of working with one another, collaborating internally, engaging the public and establishing ties with stakeholders from outside government.

Success could lead to groundbreaking new insights from data while using cutting-edge techniques to protect privacy; creatively employing data and technology to revolutionize service delivery; proactively alerting people about benefits they may not be aware they are eligible for; enabling the public to fulfill many or even most of its needs via a single federal website; and working closely with individuals and organizations outside government—including in the private, nonprofit and academic sectors, and ordinary Americans—on tasks as simple as analyzing federal data or as complicated as resupplying the International Space Station.

Our report describes what a better connected, more collaborative federal government can accomplish in the years ahead and identifies barriers to success that government is likely to encounter along the way.


“We need a government that’s interconnected, that speaks the same language, shares the same data, and uses the same platforms.”

Al Eskalis, director of customer experience, U.S. Citizenship and Immigration Services
Technology is expected to transform how federal agencies accomplish their missions. The public, used to simple, efficient and on-demand service from the private sector both online and through apps, is increasingly demanding the same level of convenience and timely response from government. Agency leaders will be expected to make better use of data to evaluate their policies and programs, and government, confronted with a growing number of challenges yet limited by hiring constraints, will have to rethink how work gets done.

In May 2019, the Partnership for Public Service and EY convened agency leaders and subject-matter specialists to ask them to propose their best-case vision for the future of the federal government. Their assignment was to think ahead, five to 10 years from now, about changes needed in the areas of IT, the workforce and how it does its work, and data. Organizers sought ideas ranging from the commonplace to “moonshot”—those lofty goals that seem challenging to attain, even if they may be the ideal. Participants were encouraged to dream big and not to limit their suggestions due to cost, rules, regulations or concerns about whether they were even possible to implement any time soon.

The suggestions went in many directions, both in that May session and in subsequent interviews with other leaders and experts.

In the area of IT, some participants called for more intuitive information technology, single sign-on capability, IT systems that can communicate seamlessly across platforms, and a completely cloud-based government. Others called for more money to modernize technology, while some suggested government retire every antiquated technology system and start over with a clean slate. Still others proposed relying more heavily on shared services, rethinking the procurement process, educating federal employees about how technology can help them do their jobs, seeking users’ input before decisions are made about IT, and allowing employees to do more work on their own devices rather than the government’s.

For the workforce, agency leaders and subject-matter specialists described a government that invites employees to move in and out of its ranks throughout their careers. This future government would strategically outsource tasks to the public, drawing on crowdsourcing, public-private partnerships and collaboration with academia. Participants also hoped for a future corps of federal leaders willing to take more calculated risks, and who would urge their employees to do the same, reassuring them that failure is acceptable—and inevitable—when employees are attempting to innovate.

In the area of data, workshop and interview participants envisioned a future government that has an abundance of data scientists, a data-literate workforce and leaders who understand the value of data and use it to inform their decisions. They described a government that makes high-quality data readily available and easy to share, while also protecting people’s privacy. Some participants proposed a government in which all data is in machine-readable format, easy-to-use AI-based tools help federal employees make sense of data, and advances in data visualization help bring it to life.

Among the ideas shared at our forum and in interviews, some proposals will be easier to usher in than others. But most of the leaders and specialists expressed hope about the tremendous potential for government to up its game in the years ahead.

Our hope is that this report will inspire agencies to dream big about the future, assess where they are today and evaluate what it will take to get where they want to be. With those insights, they can work toward turning vision into reality. Widespread success would mean a more effective and efficient federal government that pushes the limits of the possible and exceeds, rather than simply meets, the expectations of the people it serves.
With federal leaders and subject-matter specialists proposing bold and unique ideas about the future of government in the areas of IT, workforce and data, a common theme emerged: Leading government into the future in these areas will require agencies to think differently about how they collaborate internally, work with one another, and interact with organizations and people outside of government, including the people they serve. In short, the government of the future will have to be more connected, and interactions within agencies and with other sectors must expand and deepen.

- Agencies collaborating internally
- Agencies working closely together
- Engaging the public
- Establishing connections with stakeholders from outside government
AGENCIES COLLABORATING INTERNALLY

For the federal government to thrive in the future, agencies will need to do a better job of collaborating internally, leaders and experts said.

Technology is becoming faster and smarter, boosting the potential for government to improve its internal operations and respond better to the needs of the public. In fact, Moore’s Law, discussed by participants at our May 2019 convening, holds that the overall processing power of computers is expected to double every two years. The proliferation of AI and automation alone is expected to help agencies operate more effectively and efficiently, making tax dollars go further by reducing waste, fraud and abuse and transforming customers’ call-center and application-processing experiences from sometimes painful to mostly pleasant and efficient.

One way for internal collaboration in government to bring the power of technology to bear on policy development, programs and service delivery is for agencies to ensure that program managers, data scientists and technologists all have a seat at the table when decisions are being made and have opportunities to share their perspectives.

Additionally, these stakeholders need to have a common understanding of the problems they seek to solve together. That would markedly increase the likelihood that program managers use the best available data and technology, and IT specialists create technology that best serves their colleagues and the public.

“I would have a U.S. Digital Service presence in every agency,” said Cecilia Muñoz, vice president for public interest technology and local initiatives at the think tank New America, referring to the tech startup that works across the federal government to help agencies deliver services better.

“It’s important to have in-house expertise that’s well-integrated into the team. But technologists can’t do it alone,” Muñoz added. “You also need the expertise of people who administer the programs. You can’t just dropkick a bunch of technologists into an agency and expect the magic to happen. It’s about getting to know the people who are administering a program and helping them make it better.”

The National Science Foundation uses technology that helps research scientists evaluate grant proposals, so it is important that the technologists work closely with these evaluators to make sure the technology is as helpful as possible for them as users. “Too often in government, technologists create technology without fully understanding how people are doing their work,” said Dorothy Aronson, the organization’s chief information officer. “I can only imagine what a research scientist thinks when they’re evaluating a proposal, and I can only help them with the things I know about.”

Agencies also need to do a better job of collaborating and communicating internally to help improve the quality of the data they use and ensure that people’s privacy is sufficiently protected.

Too often, data managers—the employees responsible for compiling agency datasets—fail to adequately document important information, including how variables in a dataset are defined and measured, or how data was collected, cleaned and checked for quality, according to Michael Hawes, senior advisor for data access and privacy at the U.S. Census Bureau. This can lead colleagues to misinterpret data or draw incorrect conclusions, he added.

Advances in technology can help protect privacy, but so can effective communication between data managers and an agency’s data users. Any time a dataset is released that contains information about people, there is a risk of those people being identified. The more data released, the easier it is to identify the people in a dataset. If data managers know how a dataset will be used, they can be more discriminating in what they release, reducing the risk that individuals will be identified.

“Privacy protection depends on extensive interaction with data users to understand what they need from the data and how they are using it,” Hawes said. “The more you can factor your data users’ needs into your calculation about what data to release, the more strategic you can be about making sure that you’re only releasing what needs to be released, without increasing privacy risks by publishing data that nobody’s using.”

Bureau offices that collect and release data regularly engage with census offices that use the data, including the Redistricting and Voting Rights Office, and the Population Division—which is responsible for estimating the demographic composition of the United States. The bureau also reaches out to other federal agencies that rely on its data, engages with myriad public data user groups and places notices in the Federal Register seeking feedback from the public data user community.
AGENCIES WORKING CLOSELY TOGETHER

Federal employees do not always seek opportunities to collaborate with other agencies, but doing so can improve how they deliver on their missions and serve the public.

Success increasingly depends on agencies working together, particularly where missions and constituencies overlap.

For example, data analysis is integral to understanding if an agency’s policies and programs are achieving their intended outcomes, and how they might be improved. However, an agency’s data does not always provide a complete picture. For example, to thoroughly understand the drivers behind unemployment, agencies may need to analyze data housed not only at the Department of Labor, but also at the departments of Education, Health and Human Services, Housing and Urban Development, and Transportation.

When agencies combine multiple datasets, new insights can emerge from the more comprehensive information, improving government’s understanding of big issues and enabling it to better serve the American public.

“I truly believe the future of government is being able to leverage value from our data to answer the big questions and address the issues facing our society,” said Margie Graves, former federal deputy chief information officer of the United States. “It’s incumbent on us to know our data, but also to know who has data that’s not in our purview that can be added to the equation to answer those big questions. That’s where we need to go.”

However, combining data from more than one agency is an underused practice in government, often due to the time involved.

“There are way too many barriers to sharing data,” said former Chief Statistician of the United States Nancy Potok. “On many occasions, it can be a minimum of one year to get an interagency agreement in place,” she said.

Privacy concerns and cultural obstacles are among the issues that can complicate data sharing. “These datasets reside in [various] federal agencies ... and sometimes they have trouble working together,” said Ron Haskins, senior fellow at the Brookings Institution and former co-chair of the Evidence-Based Policymaking Commission, which was tasked by Congress and the president with examining how government could make better use of data.

Just as collaboration among agencies can improve the quality of data used to make decisions, collaboration involving technology systems can also help government do a better job of serving constituents. For instance, it can help to streamline how customers interact with federal agencies, informing them of the many services available—whether those individuals interact with agencies in person, by phone or online.

“Someone who is eligible for health care assistance may also be eligible for food aid, housing and transportation benefits,” said Cara James, director of the Office of Minority Health at the Centers for Medicare and Medicaid Services. If government is to provide a simple and efficient experience, “there should be no wrong door,” she said.

“Rather than having to interact with multiple agencies ... whichever door they came through would meet all their needs,” James said. “[Agencies’] systems would be connected up in a way that lets one office determine all the benefits a person is eligible for, regardless of which office or website they visit.”

Along these lines, the Internal Revenue Service and the Social Security Administration implemented a pilot program that merged some staff from both agencies into one physical space to save taxpayer dollars. When consolidating offices, an additional benefit arose—convenience for government customers who can take care of several tasks in one place.

Finally, talent exchange programs can help bolster the federal workforce and fill critical skills gaps. At the Department of Defense, high-performing midcareer civilian employees may be temporarily detailed to private sector organizations, learning new skills and best practices they can bring back to their home offices. Similarly, employees from private sector companies may be temporarily placed at DOD.

While public-private talent exchanges could enhance the level of expertise in the federal workforce, so could intragovernmental rotations, which involve federal employees temporarily moving from one government office to another. In that spirit, President Trump signed an executive order in May 2019 aimed at boosting the number of cyber employees in government who work in offices other than their own.

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ENGAGING THE PUBLIC

If government is to excel in the next decade, it must work more effectively with the people it serves.

“The future of government must be ‘by the people, for the people,’ ” said Lee Becker, chief of staff in the Veterans Experience Office at the Department of Veterans Affairs. “And how do you orient the government to be ‘by the people, for the people’? You do it by listening.”

When U.S. Citizenship and Immigration Services developed myUSCIS, an online platform that provides resources for prospective citizens, it worked with its customers every step of the way. The agency wanted to build a product that people found intuitive and easy to use, so it conducted focus groups with users to understand how myUSCIS could be most helpful. With users’ permission, the agency even observed people interacting with the platform in their homes and coffee shops, using that information to build upon what worked well and discarding what did not.

In the government of the future, agencies would anticipate the public’s needs and proactively engage their customers.

An example of the VA using the power of technology to proactively serve the public is the VA REACH VET initiative. REACH VET uses artificial intelligence to identify veterans most at risk of suicide. A computer program scans the health records of millions of veterans, looking at prescribed medications, treatment plans and demographic information. Then an algorithm predicts which veterans are most at risk of suicide in the next 12 months. Once identified, a mental health professional reaches out to check on the veterans’ well-being and reviews their treatment plans.4

Opportunities to proactively engage customers abound in government. For example, using technology, including advances in AI, the Department of Veterans Affairs could identify veterans who have children approaching college age and get in touch with those veterans to encourage them to apply for GI education benefits. “We have the data,” said Jason Thomas, management analyst in the VA’s Veterans Experience Office. “It’s just a matter of leveraging it.”

While pockets of good work exist, government generally has struggled so far to anticipate customers’ needs and proactively serve them.

“Not enough of that is done right now,” said John Koskinen, former Internal Revenue Service commissioner. “We need to find more effective ways to help people figure out that it’s time to apply for Social Security, or that they might be eligible for the Earned Income Tax Credit. You can’t just wait for people to show up. You need to reach out.”

As government becomes ever more reliant on technology to reach the American people, agency employees must also remember that technology access varies, as does aptitude for and interest in using digital methods to interact with government.

With that in mind, USCIS provides digital literacy training to its current and potential customers by partnering with local libraries, community-based groups and other organizations that draw the people the agency wants to reach.

A targeted approach to technology can also work. For example, some demographic groups are more likely to have smartphones than computers, so agencies serving these populations could consider building out their mobile technology, according to several experts we interviewed.

Finally, a government of the future that plans to stay responsive to its customers’ preferences must accommodate even the most unsavvy or technology-averse members of the public, according to Koskinen. “A lot of times, the mistake we make when thinking about government initiatives is that it has to be all or nothing. Either everyone is in, or no one is in. Instead of; ‘Here’s an opportunity that could make your life easier, if you’d like it to be easier, but it’s not mandatory.’ ”

ESTABLISHING CONNECTIONS WITH
STAKEHOLDERS FROM OUTSIDE GOVERNMENT

A future federal government should draw more heavily on outside stakeholders to help get work done, according to many leaders and experts.

Government could have an ample supply of potential external partners as more professionals in all industries, enabled by advances in technology, are expected to become increasingly open to working remotely and on multiple short-term work projects (or “gigs”).

Stakeholders in the private sector, nonprofit arena and academia—as well as members of the general public through crowdsourcing initiatives—could provide additional capacity for government as the scope of its responsibilities outpaces the size of its workforce. They also could bring fresh perspectives and offer solutions government might not have considered.

“When the different approaches can be absolutely eye-opening,” said Robert Lightfoot, former acting administrator at NASA. “Everybody’s heads are down coloring so hard that we often don’t have time to look up and look around. Working with external partners provides a different viewpoint. For me, that was the biggest value.”

A good way for government to get outside assistance is to share more of its data, enabling researchers to produce valuable insights for improving government’s policies and programs. For example, a University of Texas economist who spends part of his time at the IRS in Washington, D.C., used IRS data for research that led to more tax returns being filed accurately.5

One initiative run by the U.S. Census Bureau, called The Opportunity Project, connects federal agencies with academics, community groups and other organizations that want to use government data to tackle social problems. In one instance, Mapbox, a provider of custom online maps, used U.S. Forest Service data to build an app that tells land managers, community groups and the public where environmental stewardship work is underway, and which areas still need attention. The tool helps groups deploy as efficiently as possible without inadvertently duplicating work.

Federal agencies and outside groups both stand to gain from working together, but they need to be thoughtful about entering partnerships.

“When I think about the best grantees, they’re communicative, collaborative, creative, have capacity to do the work, and we share a vision,” said Barbara Stewart, CEO of the Corporation for National and Community Service, the federal grantmaking agency that administers AmeriCorps and Senior Corps.

NASA’s Lightfoot said, “It’s very simple: trust and control. The government has to release control, and the partner has to be trustworthy to deliver. That’s easy to say, but very hard to do.”

NASA was cautious when it first partnered with two private sector companies to resupply the International Space Station. On the initial resupply missions, only low-risk items were transported so if the items were lost or damaged, the space station would not be put at risk. After those missions succeeded and trust grew, NASA’s partners were permitted to transport higher-risk items, such as spacesuits, which are more essential to the mission.

“Once that trust developed in our partners’ ability to perform, we were able to let go of control,” Lightfoot explained.

Ultimately, government will have to recruit high-quality external partners to work with, and appealing to its mission is an effective way to do so. Recently, 56% of millennials said they would never work for an organization whose values they don’t believe in.6 Whether targeting potential external partners eager to pitch in on short-term projects, or trying to attract full-time employees looking for long federal careers, government must do a better job of publicizing the wide range of important work it does and demonstrating how the public can contribute.

As government positions itself to flourish in the future, it must develop more robust and broad-based connections. Although resource constraints can complicate the transition to that better-connected future state, the biggest barriers are cultural. “There’s nothing holding the government back but the government itself,” said Potok, the country’s former chief statistician. Government can and should be working now on the shift to the future, the people we interviewed made clear.

**Breaking down silos**

Organizational units in government, both within and across agencies, often work in isolation from one another, and have for a long time. That must change for tomorrow’s government to function with greater success. Silos inhibit collaboration, preventing government from using data to its fullest and getting the most out of its technology and its workforce. These silos can stand in the way of a program manager discovering and using data housed at another agency, for example, or keep a team of IT specialists from building a tool that meets the needs of non-IT colleagues—if those colleagues are not involved in its development. The value of collaboration cannot be overstated, yet it is an area where government struggles.

Agency leaders must recognize that mission delivery will suffer as long as silos persist, and leaders must commit to chipping away at the problem, according to experts we spoke with. That includes promoting a culture of collaboration and making targeted financial investments—for example, to link IT systems across an agency.

Employees must also buy in. “Breaking down silos between different types of employees will depend on them wanting the silos broken down,” said the National Science Foundation’s Aronson. “For example, as an IT person, I have to be less proprietary about my knowledge. And the program officers must have a desire and make time to tell me what they’re working on, so I can help.”

The U.S. Census Bureau has found an effective method for breaking down silos among federal agencies that also extends to outside organizations. Its researchers develop cutting-edge techniques to protect privacy and share these tools with other agencies as well as private sector companies and even foreign governments. Census researchers also routinely present their work at academic and professional conferences. “Disseminating our expertise is very important to us,” said Hawes, the senior advisor for data access and privacy. “We believe that a rising tide lifts all boats.”

Recently, the bureau organized a workshop on differential privacy that drew participants from across government. Differential privacy is a new approach to protection that calculates the precise privacy risk of data products to be released, and how much statisticians need to modify the data to mitigate that risk.

Ultimately, changing a culture that has long lived with and accepted silos, within and among agencies, will need everyone to work on fixing the problem, from agency leaders to rank-and-file employees.

**Lowering the resistance to change**

For a future government to build more robust connections across the institution and with outside partners, agencies will have to try new ways of doing things. Yet resistance to change can stand in the way. “People, no matter how spirited they are, have a natural tendency to say, ‘We’ve been doing it this way for a long time, so why change?’” said former IRS commissioner Koskinen.

Lightfoot from NASA echoed his sentiment. “The answer you hear all the time is, ‘That’s not the way we do it.’ We must be open to new ideas while also remembering the important lessons from the past. Striking a balance between the two is key.”

Change is possible. Leaders need to envision a better way of doing things, commit to shaking up the status quo and demonstrate to employees the value of change, according to agency leaders and experts we interviewed. Sharing government success stories can help break down resistance and generate buy-in.
At the Department of Homeland Security, Chief Procurement Officer Soraya Correa and her team created the Procurement Innovation Lab, or PIL. The PIL is an initiative that aims to improve how procurement is done at DHS. Procurement is not a space where government employees have traditionally been encouraged to innovate, but Correa and her team are trying to change that. One component of the PIL is an online platform where contract specialists share new ideas, best practices and lessons learned with colleagues. PIL staff also act as consultants to the department’s contract specialists, helping them think through innovative strategies to improve procurement, including growing the pool of qualified vendors who submit proposals, more effectively evaluating those proposals and reducing the time it takes to make an award. “Our goal was to change the way we look at procurement, change the way we look at our jobs and what we do,” said Correa. “People are coming to the PIL to try new things. They believe that their leadership supports them and wants them to be creative.”

**Addressing aversion to risk and fear of failure**

It can be risky for employees or agencies to experiment or try something new, and success may only come after many rounds of trial and error. Yet government can be risk-averse and hostile to failure.

“Staff need an environment where they can learn, grow and take risks,” said Becker from the VA. “But failure is often used as a sword. So, you have employees who think, ‘Okay, I got burned trying to iterate once, so now I’m just going to do what I’m told and not put my neck out.’ You must have the right learning environment, with top cover from leadership, to usher in the future of government.”

In 2019, the Foundations for Evidence-Based Policymaking Act became law. It seeks to amplify the role data and evidence play in informing government’s policies and programs. When the Office of Management and Budget released guidance for agencies on how to implement the law, Potok was struck by the type of questions organizations asked OMB. They were all about how to follow the rules.

“All of the questions focused on how to comply with our guidance,” she said. “No one asked us how to change the culture in their agency to get the most out of the law and make the best use of data. That tells me that people in government are trained to comply. You stay out of trouble if you comply. But that’s not going to get us where we need to go. The number one thing government needs to do to get the most out of data in the next decade is change its culture.”

Advancing government requires taking risks and sometimes failing. Many government leaders have accepted the trade-off and also let their staffs know they have done so—an important part of the equation.

“What drives us isn’t the fear of failure. It’s the fear of not innovating fast enough,” said Eskalis, referring to the leadership at the U.S. Citizenship and Immigration Services. “And then that trickles on down the organization.”

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CONCLUSION

It is an exciting time for the federal government, with tremendous opportunities in the decade ahead. The proliferation of Big Data and exponential advances in technology can revolutionize how work gets done. Meanwhile, an army of the best and brightest stand ready to help government carry out its mission, either as long-term federal employees, academics in research universities, private sector staff with unique expertise, or ordinary people who learn about a crowdsourcing opportunity and want to help.

If government seizes the moment, the American people will win. By rigorously seeking out and analyzing data to understand what does and does not work, agencies can improve policies and programs that touch the lives of millions. By capitalizing on technology, they can transform how services are delivered to the public, offering an experience unrivaled by even the most customer-friendly private sector companies. And by championing a workforce and encouraging creativity and innovation, government can amplify its manpower and broaden the perspectives brought to bear on how to solve tomorrow’s most pressing challenges.

Leaders can use the approaches highlighted in this report as guideposts for positioning their agencies to excel in the years ahead. Success will ultimately depend on agencies becoming more collaborative and better connected internally, with each other, and with stakeholders from outside government. The promise of a more effective and productive government depends on agency leaders who eagerly and creatively seek out these opportunities to connect, and are willing to roll up their sleeves and find ways around the obstacles to meet difficult challenges and better serve the American public.
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