



Modern government:  
Connected.  
Powered.  
Trusted.

**Governments can meet the changing needs of the public by digitalizing interactions with constituents, taking steps to increase trust, and attracting the next-generation workforce**

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# About the authors



## Lorna Stark

Partner, National Leader, Government and Public Sector  
917-601-7336 [lstark@kpmg.com](mailto:lstark@kpmg.com)

As the KPMG national leader for Government, **Lorna Stark** is responsible for developing and executing a strategy to meet the changing needs of government clients. She has experience in providing both audit and advisory services to many of our most prominent government clients, including the City of New York, the State of New York, the District of Columbia, the State of New Jersey, the Commonwealth of Pennsylvania, and the State of Vermont. Lorna is also the lead account partner for the City of New York. During her 31-year career at KPMG, Lorna has been responsible for leading many large and complex projects in the education, human services, environmental protection, housing, transportation, school construction, sanitation, public works, and general government sectors. Lorna graduated from SUNY Albany with a BS degree in accounting and is a registered CPA in New York State. She serves on the SUNY School of Accounting and Law Advisory Board.



## Brenda Walker

Partner, Federal Advisory Leader  
703-286-8621 [bwalker@kpmg.com](mailto:bwalker@kpmg.com)

**Brenda Walker** is a CPA, the Advisory Federal Account industry lead, and the Defense and Intelligence Agencies sector lead. She has more than 30 years of experience in accounting, auditing and financial management, and system implementation, including 25 years of defense consulting for the military services and agencies. Her experience includes audit readiness activities, program management, business and digital transformation, and financial system development and integration for the federal government. Brenda graduated from Moorhead State University with a BS degree in accounting and is a registered CPA in the Commonwealth of Virginia and the State of Colorado.

## About the research

KPMG conducted two surveys during August and September 2020 to better understand the opinions of both U.S. government professionals and citizens. The survey conducted among government employees included 85 professionals from various areas of government: federal, Defense Department civilians, military, and state government agencies. These professionals are mainly

director level (GS-12) or above. The second survey was conducted among more than 1,000 U.S. citizens and included a representative mix of men and women, location (urban, suburban, and rural), household income, education, race, marital/parenting status, generation, and technology adoption. Some percentages do not sum to 100 percent due to rounding.

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For a government agency to be considered “modern,” it should be connected, powered, and trusted. Modernization should be top of mind for agency heads as well as chief technology officers and chief human resources officers at federal, state, and local government agencies. \_\_\_\_\_

## Two-way connectivity with constituents is key

Being connected means shifting points of interaction to reflect citizens’ needs and preferences and committing to internal and cross-agency collaboration to meet those needs. \_\_\_\_\_

## Trust is table stakes

It has never been more important to ensure that citizens can trust that personal data they share with the government is protected by the highest cyber security and privacy standards. \_\_\_\_\_

## A powered government is ready for the future

A powered government is enabled by the latest technologies and can attract a next-generation workforce that is able to advance the modernization agenda. \_\_\_\_\_

## Final thoughts

A technology-only focus on modernization will only take governments so far. Equal emphasis needs to be placed on ensuring that government workers have the skills and tools to provide the innovative services today’s constituents expect. \_\_\_\_\_

## How KPMG can help

Government agencies can get started on assessing where they stand on the path toward modernization by taking the KPMG modern government maturity assessment. \_\_\_\_\_

# Defining “modern”

**Meet Laura**—a 30-year-old graphic designer. Over the years, she has interacted with the government to pay her taxes, renew her driver’s license, and apply for health insurance through the exchanges. Some of these encounters were frustrating, others simply time consuming. And although the transactions were necessary, she always had a nagging worry about entering sensitive personal information through websites that hadn’t been updated for a decade or more.

Now, let’s **meet Larry**—a 46-year-old auditor working for a state tax and finance agency. Larry works in the real estate division reviewing claims for liens on commercial and residential properties. Much of his correspondence is done through email. But he still has to manage a lot of paperwork, and it can be a chore to confirm and share information with other state agencies. His friends working in the private sector talk about how their companies use emerging technology and automation to create speed, efficiency, and optimized outcomes. He often wonders if there’s a more effective way of auditing returns while providing a more seamless and user-friendly experience.

What would a modern government look like to Laura and Larry? A modern government would offer them the same seamless digital interactions that they have come to expect in all aspects of their lives. It would mean being able to pay their taxes or apply for benefits online, anytime, anywhere. They would have assurance that their personal information will only be shared safely across agencies and protected from prying eyes and identity theft. And, ultimately, it would mean they would

have a dynamic, interactive user experience through a single point of entry, with access to a comprehensive set of government services. These experiences would increase their trust in government agencies and encourage them to make greater use of the wealth of assistance, educational materials, and tools governments have to offer.

To be ready for the future, modernization should be top of mind for agency heads as well as

government chief technology officers and chief human resources officers on the federal, state, and local levels. These leaders must recognize that their constituents are demanding more effective collaboration and communication, internally and externally; guaranteed protection of the sensitive data they share with the government; and faster, easier access to services and information through online transactions that can only be facilitated by the latest technologies and skilled government personnel.



# A vision for modern government



## **Connected governments**

Offer their employees meaningful work and a flexible workplace

Enable resilient communities and provide their constituents with positive experiences

Collaborate internally and with other agencies to improve their operations

## **Powered governments**

A workforce who can harness the power of new technologies to accelerate transformation of public services

Enable scalability and responsiveness to accelerate modernization and achievement of agency mission

## **Trusted governments**

Place the highest priority on security and privacy

Understand the importance of guarding data from theft and unauthorized use

Value their employees, which inspires public confidence

# A modern government is connected, powered, and trusted.

Federal, state, and local government agencies have all taken steps to modernize, but clearly more work needs to be done, since progress isn't always apparent to the average citizen.

At one time, government was a leader in technology, with agencies among the first organizations to adopt new technologies for computing, calculating, and recordkeeping at the dawn of the computer age. In fact, the internet was created through the efforts of the U.S. Department of Defense's Advanced Research Projects Agency.<sup>1</sup>

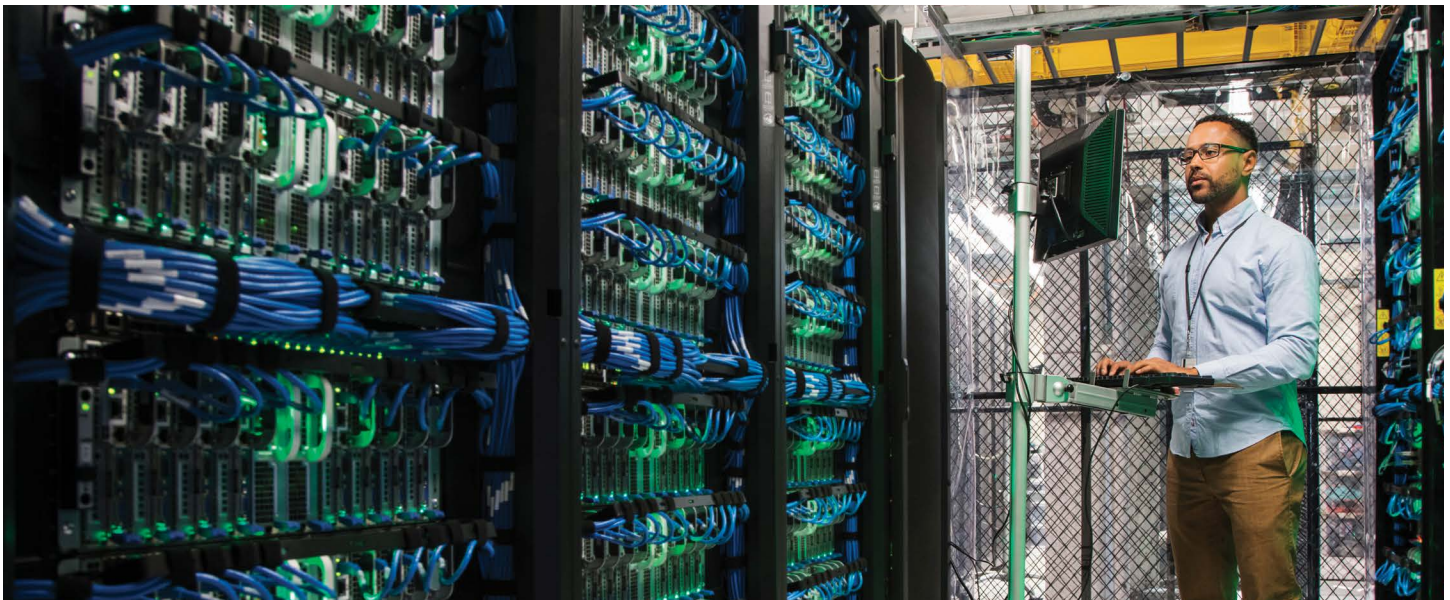
More recently, governments face obstacles around culture, demographics, budgets, and the continual change of administrations, which hamper their ability to implement the latest innovations.

Today, some agencies are relying on legacy systems running programs that are more than 25 years old and can no longer be supported or updated. By contrast, leading agencies will move into the future by aggressively pursuing newer technologies, such as cloud, artificial intelligence, blockchain, low-code platforms, advanced data analytics, and analytical engineering. Moreover, with digital transformation, savings for governments could exceed \$1 trillion over the course of 10 years.<sup>2</sup>

To be sure, elevating governments' ability to serve citizens, improve internal efficiencies, and enhance the employee work experience is dependent on digitalizing both public-facing and internal processes. Further, although digital transformation is critical, it is equally important to attract and retain highly skilled and creative

talent that can successfully meet 21st century demands. At present, governments' legacy technology creates a catch-22: outdated technology can't be replaced with new innovations without a workforce with the latest IT skills. At the same time, outdated technologies and amenities are disincentives for many younger professionals who might consider a career in the government sector.

The recent response to the COVID-19 outbreak demonstrated that governments can adapt and change with speed and agility when needed. From local municipalities to state governments to Washington, D.C., government agencies quickly set up remote workforces, pushed services online, and created mobile apps that allowed constituents to continue to access government



<sup>1</sup> Source: A Brief History of the Internet & Related Networks, Internet Society website, Undated. <https://www.internetsociety.org/internet/history-internet/brief-history-internet-related-networks>

<sup>2</sup> Source: Could Technology Save Government US\$1 Trillion?, GovTech website, October 21, 2010. <https://www.govtech.com/budget-finance/Technology-Could-Save-Government-1-Trillion.html>

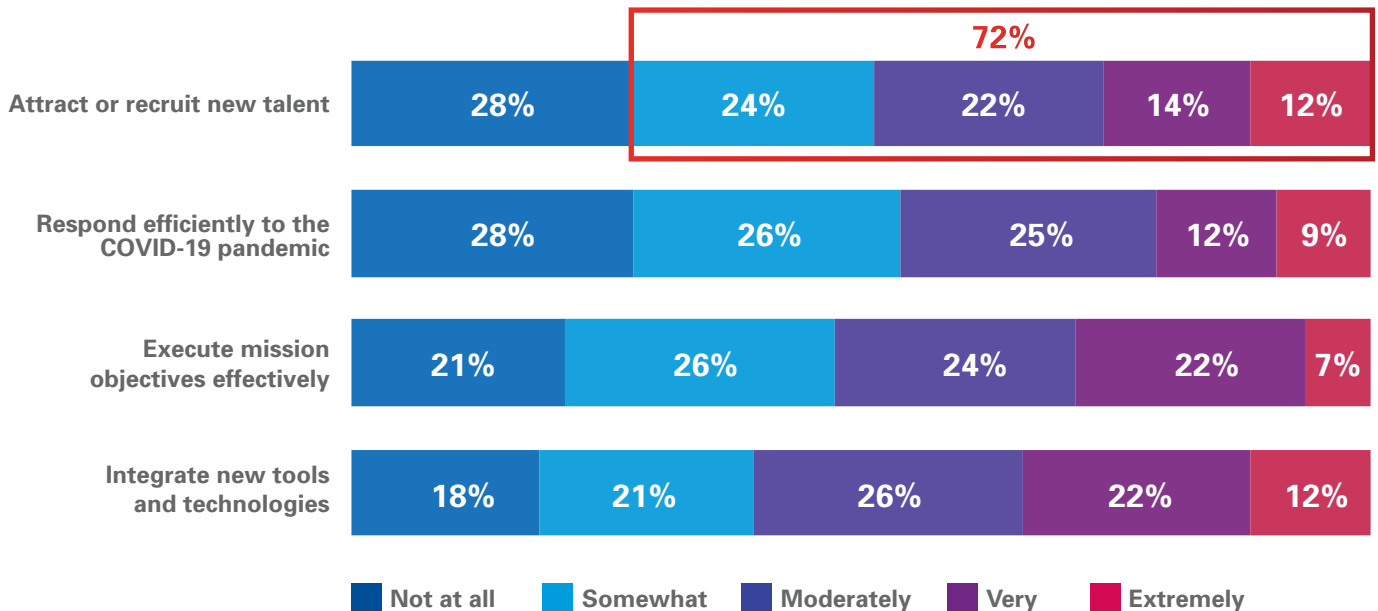
services safely during lockdowns. These recent actions are proof positive that government agencies can evolve to meet the needs of both citizens and potential employees as we move past the pandemic.

A failure to move forward with modernization efforts will only lead to a decline in government agencies' ability to deliver services and potentially reinforce the prevailing view of government as inefficient, out of touch, and ambivalent to the needs of its constituents.

In this paper, we look at some obstacles that governments face in their modernization efforts and offer guidance on how to create the services that citizens like Laura want to see and an environment in which public servants like Larry may want to work.

**Outdated IT systems are the number one barrier to attracting younger talent, according to 72 percent of survey respondents.**

To what extent has the state of your IT systems hurt your agency's ability to...



Source: KPMG survey among government executives; n=76

# Two-way connectivity with constituents is key

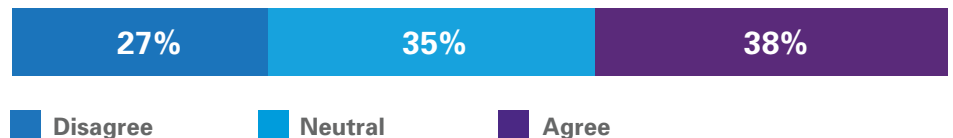
**Being connected means shifting points of interaction to reflect citizens' needs and preferences and committing to internal and cross-agency collaboration to meet those needs.**

Let's return to Laura, our average citizen, who is now married with one child and recently bought her first home. Her experiences with government have expanded to include applying for unemployment benefits due to the COVID-19 pandemic, enduring lengthy hold times to speak to a live operator on the phone, and visiting her town hall to obtain a building permit for home improvements. These interactions disrupt her increasingly busy life and could have been made simpler and more time-efficient through digitalization.

**Customer experience:** In recent years, private companies have increased their focus on the customer experience—connecting customers with personalized services via more agile and flexible operations enabled by technology. As citizens become increasingly accustomed to these digital innovations, they have begun to expect similar experiences when they interact with the government. KPMG surveyed more than 1,000 U.S. citizens about their experiences with government agencies and found that only 38 percent said they feel like a valued customer when they interact with the government.<sup>3</sup>

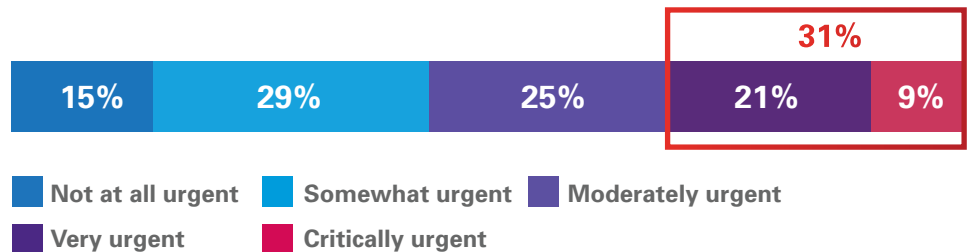
The good news is that government officials are aware of the need to accelerate their adoption of newer technologies. More than half of government officials surveyed recognize that the slow pace of IT modernization is at odds with the desire to keep pace with citizen expectations, while 31 percent said that they perceived the need to modernize their agency's policies, processes, and culture as very urgent or critically urgent.<sup>4</sup> Moreover, 66 percent of governments surveyed have accelerated their focus on modernization, while 57 percent said they increased their budgets as a result of COVID-19.<sup>5</sup>

## When I interact with government (whether online or in person), I feel like a valued customer



Source: KPMG survey among U.S. citizens; n=1,010

## Modernizing policies, processes, and culture is viewed as critical by nearly a third of agency leaders surveyed



Source: KPMG survey among government executives; n=79

<sup>3</sup>Source: KPMG survey among U.S. citizens

<sup>4</sup>Source: KPMG survey among government executives

<sup>5</sup>Source: Impact of COVID-19 on digital transformation strategies and the future of work, Forrester Report, July 2020.



**COVID-19 accelerates virtual service delivery:**

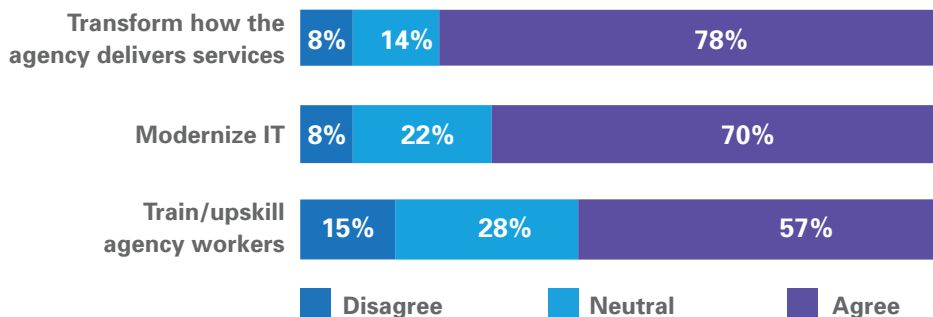
In dealing with COVID-19, federal, state, and local governments faced the same challenges as private companies when it came to accommodating employees who could no longer work from the office. Long-standing agency cultures changed quickly, and leaders adjusted to managing remotely to ensure the productivity of their teams. At the same time, many agencies ensured that assistance and critical services were delivered to the public without delay—by using a variety of virtual services.

On the state level, governments had to devise ways to process a large influx of unemployment claims remotely. Many moved to the cloud to rapidly scale up their file-sharing and remote-access capabilities.<sup>6</sup> In Washington, D.C., the National Institutes of Health (NIH) launched a website featuring

educational resources for workers at greater risk of exposure to COVID-19. And the Treasury Department has plans to develop a web-based portal for taxpayers to provide their banking information to the Internal Revenue Service online.<sup>7</sup>

In some cases, governments turned to the private sector for help in ramping up their digital offerings. For example, the Department of Veterans Affairs worked with Microsoft to develop a summary and tracking tool to help the Veterans Health Administration (VHA) gain better situational awareness of patients and resources during COVID-19. And professional services firms, technology companies, nonprofits, and community organizations formed a coalition that shared proprietary data and ideas to jumpstart the recovery of New York City.<sup>8</sup>

**COVID-19 has increased awareness among government leaders of the need to...**



Source: KPMG survey among government executives; n=74

<sup>6</sup>Source: Pandemic kindled 'newfound interest' in government's IT modernization project, Statescoop website, June 30, 2020. <https://statescoop.com/google-pandemic-newfound-interest-government-it-modernization/>

<sup>7</sup>Source: Internal Revenue website. <https://www.irs.gov/newsroom/economic-impact-payments-what-you-need-to-know>

<sup>8</sup>Source: Private NYC coalition to share data with city for pandemic recovery, Ryan Johnston, StateScoop website, August 10, 2020. <https://statescoop.com/private-nyc-coalition-share-data-city-recovery-efforts/>

## Digitalization of customer experiences in flight

The innovations that follow demonstrate that government agencies at all levels are increasingly focusing on deploying innovative customer service technologies.



— In **Ohio**, citizens currently need three different logins to pay their taxes, settle fines, and obtain a driver's license. The state's "Innovate Ohio" program is working to create a system where residents can interact seamlessly with the government for each of those services and others.<sup>9</sup>



— **Kansas** created an official 24/7 chatbot named "Agent Kay" that can answer hundreds of questions from residents about the state's full-service, online tax-filing portal, called Webfile.<sup>10</sup>



— **California** has started the Alpha project, an iterative state website that focuses on providing enhanced user experiences. The project takes into consideration citizen feedback on prior services as the basis of its design process.<sup>11</sup>



— On a national level, the **Internal Revenue Service** is planning an upgrade to its case management system so taxpayers can get access to information faster and easier. The effort is part of the "Taxpayer First Act" and focused on updating the agency's technology, which dates back to the Kennedy administration.<sup>12</sup> The IRS has also started to use artificial intelligence to target high-income households that haven't filed tax returns.<sup>13</sup>



— **Tennessee** has an online service and complementary mobile application, TennCare Connect, that enables the state's citizens to apply for and manage their enrollment in TennCare, the state's Medicaid program. The site and mobile application also empower citizens to securely send documents and apply for CoverKids and Medicare Savings Programs.<sup>14</sup>



— **New York City's** Department of Citywide Administrative Services has several mobile apps that city residents can use to apply for food assistance benefits, report a crime, donate goods, and pay their water bill.<sup>15</sup>



— **Washington, D.C.**, has launched "DC Access," a mobile app that allows residents to apply for public benefits available in the District.<sup>16</sup>

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**The takeaway:** In today's digital world, improving the citizen experience is foundational to the idea of a connected modern government. While listening and paying attention to feedback from constituents is critical, governments should also involve existing employees in designing and implementing internal changes.

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<sup>9</sup> Source: NASCIO Midyear 2019: How Ohio Government and State Schools Work Together on IT Initiatives, Mickey McCarter, StateTech website, May 9, 2018. <https://statetechmagazine.com/article/2019/05/nascio-midyear-2019-how-ohio-government-and-state-schools-work-together-it-initiatives>

<sup>10</sup> Source: Kansas Becomes First State to Add AI Tax Assistance Chatbot, Government Technology, January 29, 2019. <https://www.govtech.com/gov-experience/Kansas-Becomes-First-State-to-Add-AI-Tax-Assistance-Chatbot.html>

<sup>11</sup> Source: California's Alpha Team Uses Data, Input to Shape Its Work, Government Technology, January 28, 2020. <https://www.govtech.com/gov-experience/Californias-Alpha-Team-Uses-Data-Input-to-Shape-Its-Work.html>

<sup>12</sup> Source: IRS to begin rolling out new case management system, Accounting Today website, September 16, 2020.

<sup>13</sup> Source: AI as 'ultimate auditor?' Congress praises IRS' adoption of emerging tech, Jory Heckman, Federal News Network website, March 4, 2020.

<sup>14</sup> Source: TennCare connect website

<sup>15</sup> Source: NYC's Official Mobile Applications, The Official Website of the City of New York City. <https://www1.nyc.gov/connect/mobile-applications.page>

<sup>16</sup> Source: Department of Human Services website on DC.gov. <https://dhs.dc.gov/dcaccess>



# California's "Eureka" chatbot helps citizens say "I found it"

California's Secretary of State in 2018 introduced an online chatbot named "Eureka," after the state's motto meaning "I have found it". The chatbot is an animated grizzly bear, which is the official state animal.

Eureka helps citizens navigate the California Secretary of State's website to quickly find the information they need. The project is part of Secretary of State Alex Padilla's California Business Connect Initiative to digitalize the agency and make it easier to do business in California, improving the experience of businesses and individual users.

"Eureka makes it easier to navigate our website and provides another avenue of connecting with our Business Programs Division. We are looking forward to expanding both Eureka's knowledge and its interaction with customers. We designed our chatbot so that if Eureka cannot answer the customer's questions, the customer can connect directly to a business staff member that can help them over the phone. A future enhancement will allow the staff member to see the discussion that Eureka has had up to that point. In addition, Eureka is expected to be available in foreign languages in 2021."

—**Betsy Bogart**, Chief of the Business Programs Division and Counsel to California Secretary of State

# Trust is table stakes

**It has never been more important to ensure that citizens can trust that the personal data they share with the government is protected by the highest cyber security and privacy standards.**

Only 44 percent of respondents to our citizen survey said they trust government employees, and the same percentage said that they trust the government to do the right thing for its citizens and constituents.<sup>17</sup> Clearly, governments—on the federal, state, and local levels—have room for improvement when it comes to trust.

There is, however, some cause for optimism. Fifty percent of respondents agreed that they have been satisfied overall with their local government services despite the COVID-19 pandemic. More specific to the issue of trust, 52 percent agreed that they would be comfortable sharing their bank account information with the government for the convenience and speed of getting electronic tax refunds.

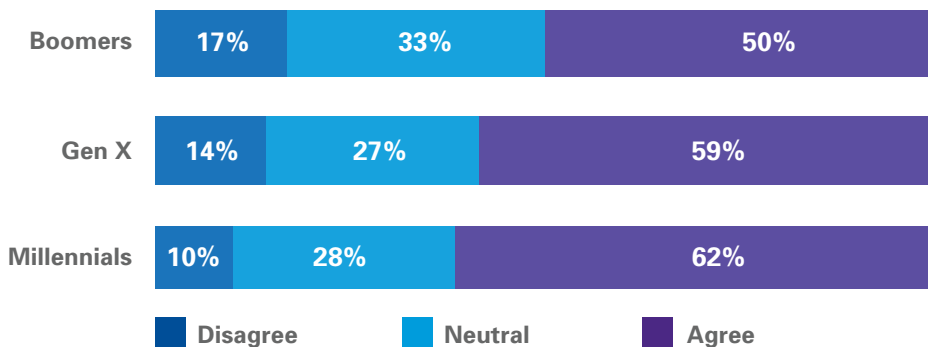
In addition, our survey found that 70 percent of respondents would like the government to offer mostly online transactions. Although the degree of comfort with this mode of interaction

varied by age level (see chart below), seniors are adopting online interactions at a remarkable pace (see sidebar on next page).

Individuals are naturally skeptical about turning over personal information to large, bureaucratic organizations like government agencies. Their experience with government employees may be less than ideal, creating additional apprehension around government transactions. Governments need data related to finances and health, for example, in order to deliver their services efficiently and effectively. To improve their own internal operations, governments need to encourage interagency sharing of information, which must be secure to external hacks and internal misuse. In order to share information across agencies (as mentioned earlier), stringent cyber security protocols must be in place to protect citizen data from external bad actors and/or internal error.

Trust also means ensuring that citizens can rely on governments to provide them with the services they need when they need them. One example of an agency that has been successful in building trust with the public is the Department of Veterans Affairs (DVA), which created a Veterans Experiences Office after veterans in Phoenix experienced month-long delays to schedule medical appointments. The office drew on commercial practices used by Amazon, Starbucks, Marriott, and the Mayo and Cleveland Clinics and employed human-centered design, user and digital experiences, and data science to improve and modernize the customer experience for the nation's veterans. The DVA transformed its website from a corporate-centric site to a user-friendly online destination for veterans to interact with the agency. The agency reviewed suggestions from more than 4,000 users to craft the redesign.<sup>18</sup>

## Openness to online transactions varies by demographics



Source: KPMG survey among U.S. citizens; n=1,010

**The takeaway:** To gain and retain their constituents' trust, governments will need to demonstrate a positive track record of ensuring citizens' privacy, which must include greater transparency into how information is protected. It also means making an even greater investment in the latest internal controls, technologies, and practices to safeguard data. In this case, government could even become a leader by deploying some of the latest innovations like blockchain.

<sup>17</sup> Source: KPMG survey among U.S. citizens

<sup>18</sup> Source: Veterans Experience Office, Service to the Citizen website.



# Seniors OK with online transactions

One concern over the transition to digital services is constituents who may not be comfortable with online transactions and prefer to conduct their business in person. However, fears about contracting COVID-19 have convinced many that taking care of their government business on the web is the way to go.

“For so long we were always worried about constituents that we might be leaving behind. For example, many residents have been going to get their DMV registration at the local county courthouse for the last 52 years, and for them, it’s a social event. Now, a lot of residents are saying, ‘I’m not getting out of this house. I don’t want to take that risk.’ They’re demanding a digital environment because they don’t want to have government force them into risky situations.”

—**John Hoffman**, Chief Technology Officer and Deputy State Chief Information Officer at the Texas Department of Information Resources

# A powered government is ready for the future

## A powered government is not only enabled by the latest technologies, but can attract a next-generation workforce that is able to advance the modernization agenda.

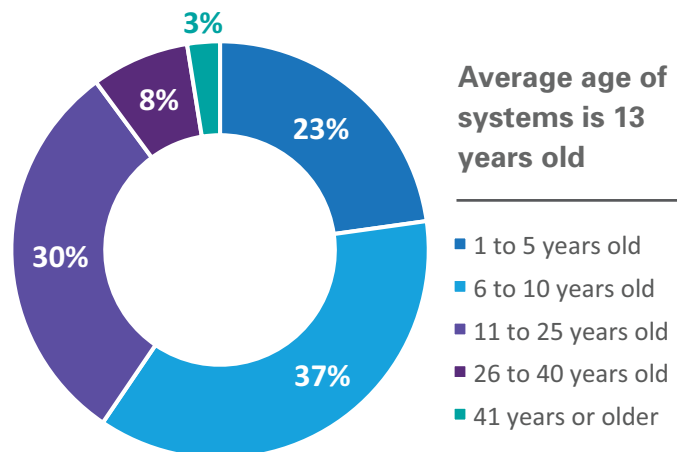
Governments have long faced challenges with upgrading technology systems. Those issues have been amplified by the pandemic, which uncovered innovation and staffing gaps that must be addressed going forward.

During the pandemic, outdated systems in federal government agencies stalled the distribution of funds from the Paycheck Protection Program and other stimulus programs. Such delays highlighted the need to redouble efforts to digitalize federal forms and reduce reliance on hand-processed paperwork for high-priority response and relief efforts.<sup>19</sup> Meanwhile, in New Jersey, at the height of the outbreak the governor put out a call for volunteers who could code using the decades-old Common Business Oriented Language (COBOL), as the state's 40-year-old mainframes couldn't keep up with the hundreds of thousands of residents filing for unemployment benefits.<sup>20</sup>

Our survey of government officials showed that antiquated technologies are a major barrier to modernization on all levels of government. Government leaders are also mindful of the disadvantages aging systems present, with the majority of survey respondents reporting that aging systems hinder the successful execution of their missions.

Further, legacy systems are costly to maintain. In FY19, the federal government reports that about \$90 billion was earmarked for IT—80 percent of which was for maintaining existing IT investments, including legacy systems.<sup>21</sup>

### 41 percent of survey respondents say they are working with IT infrastructures that are 10+ years old



Source: KPMG survey among government executives; n=79

<sup>19</sup> Source: Interest groups call on Congress for IT relief package. FederalTimes website, April 26, 2020. <https://www.federaltimes.com/it-networks/cloud/2020/04/16/interest-groups-call-on-congress-for-it-relief-package/>

<sup>20</sup> Source: Wanted urgently: People who know a half-century-old computer language so states can process unemployment claims, CNN website, April 8, 2020.

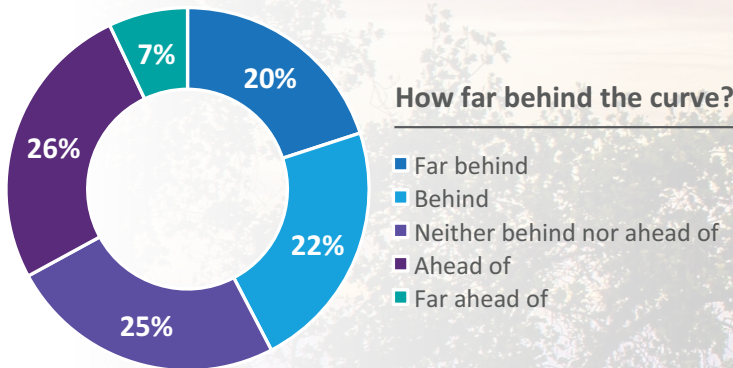
<sup>21</sup> Source: Agencies Need to Develop Modernization Plans for Critical Legacy Systems, Government Accountability Office, June 2019. <https://www.gao.gov/assets/700/699616.pdf>

**79%** say the age of their IT systems negatively impacts their mission.

Source: KPMG survey among government executives; n=79

Government agencies often face challenges when pursuing strategic technology upgrades. Security of critical, sensitive data is one of the more significant risks. There are also the continual issues of budget constraints and regulations. Because budgets are affected by election cycles and changing administrations, leaders who may have a vision for innovation may be frustrated in their efforts to bring their ideas into reality. Finally, personnel can be resistant to change and operate in silos because of the complexities and size of their missions.

**Transformative technologies:** Government officials are more than aware of the need to modernize their systems: when asked about the top obstacles to modernization, 47 percent of KPMG survey respondents said insufficient budgets, 38 percent said bureaucracy, and 31 percent said a culture of complacency.<sup>22</sup> Many also believe their agencies are behind the curve when it comes to modernizing policies, processes, and access to government services.



Source: KPMG survey among government executives; n=85

<sup>22</sup> Source: KPMG survey among government executives



# Addressing government's legacy systems

In the mid-20th century, governments were among the first organizations to adopt new technologies for computing, calculating, and recordkeeping. The internet, without which much of today's technology would be impossible, was created through the efforts of the U.S. Department of Defense's Advanced Research Projects Agency.

Many governments still rely on their legacy systems supported by outdated programming languages, which they have maintained and adapted over the years.

At the federal level, in 2019, the U.S. Government Accounting Office identified the 10 most critical IT systems that needed modernization because they were using outdated languages, were operating unsupported software or hardware, or were operating with known security vulnerabilities. Remarkably, some federal agencies have IT systems that are more than 50 years old.

For example, the Department of the Interior's system contains obsolete hardware, which is no longer supported by their manufacturers. As of September 2018, the Department of Homeland Security's system had reported several vulnerabilities related to cyber security, of which 168 were considered high or critical risks to the network. Meanwhile, the Office of Personnel Management operates a legacy system that is 34 years old, supported by hardware some of which is 14 years old.

#### Sources:

A Brief History of the Internet & Related Networks, Internet Society website, Undated. <https://www.internetsociety.org/internet/history-internet/brief-history-internet-related-networks>

Agencies Need to Develop Modernization Plans for Critical Legacy Systems, U.S. Government Accountability Office, June 2019. <https://www.gao.gov/assets/700/699616.pdf>.



## Transformative technology initiatives in flight

— In December 2017, the Modernizing Government Technology (MGT) Act became law, furthering support for government modernization by creating working capital funds for federal agency IT projects. Key focus areas include upgrading legacy systems, moving to cloud-based email, emphasizing shared services, and using artificial intelligence to detect malicious activities across networks.<sup>23</sup>

— State and local government IT spending amounted to \$111 billion in 2020, up 3.2 percent from the previous year. This breaks down to state-level IT spending of \$56.6 billion and local-level spending of \$54.4 billion.<sup>24</sup>

**The takeaway:** A powered government is nimble and scalable, enabled by the latest technologies, leading business practices, and tested solutions for a smarter, faster path to the right operating model. This process can begin by surveying what other agencies and state governments have already accomplished and adopting their practices. While initial projects can be quick wins that provide immediate benefit and value, it will be critical to create a long-term plan for modernization and a strategy for talent acquisition.

<sup>23</sup> Source: Implementation of the Modernization Government Technology Act, Office of Management and Budget memo, February 27, 2018.

<sup>24</sup> Source: 2020 State and Local Annual IT Spending, GovTech Navigator website, May 28, 2020.



## A next-generation workforce

To realize technology transformation imperatives, government leaders need to focus on creating a workforce imbued with the talent and passion to move their modernization agenda forward. That said, there is an urgent need for an influx of employees with the skills to design a positive experience for the public through implementation of the latest technologies such as cloud, artificial intelligence, and automation. In fact, COVID-19 put a spotlight on the lack of much-needed technology skills among current government employees. In our survey of government executives, 45 percent said that COVID-19 revealed that their workforces weren't adequately trained or prepared to work remotely, and only 39 percent of respondents said that their employees have the necessary skills to embrace emerging technologies.

Yet governments are challenged by the fact that younger talent with up-to-date tech skills can be deterred by government's outdated technology. In our survey, nearly 60 percent of government executives said that their agencies struggled to attract and retain younger, skilled talent in comparison to the private sector. Governments need a workforce that understands the role and function of public service, demonstrates personal integrity, and even sees government work as a calling to help promote the common good.

Governments need to address obstacles around workforce demographics and longevity. Currently, the average age of a federal employee is 46 compared to 42 in the private sector, and there are twice as many government employees over the age of 60 as there are under 30.<sup>25</sup> Older workers tend to lack the technical skills to advance modernization efforts, so if governments can promote the attractiveness of public service, they may be able to appeal to the more public-minded millennials and Generation Z and entice them to join their workforce.<sup>26</sup>

New technology can help governments retain their best workers as well as attract new talent with the skills agencies will need to move their modernization efforts forward. As they seek to move in this direction, they can look to shared services as a short- or even long-term solution to filling talent gaps. Shared services can help agencies reduce administrative burdens and increase collaboration, allowing more time to focus on core mission functions. Further, intra-agency shared services enablement helps improve mission-critical functions and reduces the costs of utilizing the same data again and again, across agencies. One study found that use of shared services is estimated to generate between \$21 billion and \$47.2 billion in cost savings between 2015 and 2025. Once fully utilized, total savings and cost avoidance are estimated at \$47 billion per year.<sup>27</sup>

<sup>25</sup> Source: The Aging Federal Workforce Needs 'New Blood,' Experts say, Government Executive website, August 30, 2019.

<sup>26</sup> Source: On the Cusp of Adulthood and Facing an Uncertain Future: What We Know about Gen Z So Far, Pew Research Center website, May 14, 2020.

<sup>27</sup> Source: Federal Shared Services, CIO.gov, February 4, 2016. <https://www.cio.gov/assets/resources/sofit/02.04.shared.services.pdf>



Agencies can leverage mobile applications, cloud-based solutions, and artificial intelligence/cognitive technologies to streamline the work of their employees and help them be more productive during the workday. For example, process automation technologies can enhance government employees' performance by eliminating transactional work and reducing time spent on repetitive activities, allowing a focus on higher-level tasks. Cloud and mobile applications can enable government employees to work remotely, both during times of crisis and as means to improving work/life balance.

Finally, to get to a more powered future, governments need not only highly skilled and motivated professionals, but also leaders that have the vision and entrepreneurial spirit to tackle today's challenges. For example, the U.S. Air Force has hired its first chief experience officer to ensure the service's digital tools help airmen do their jobs and not get in their way.<sup>28</sup>

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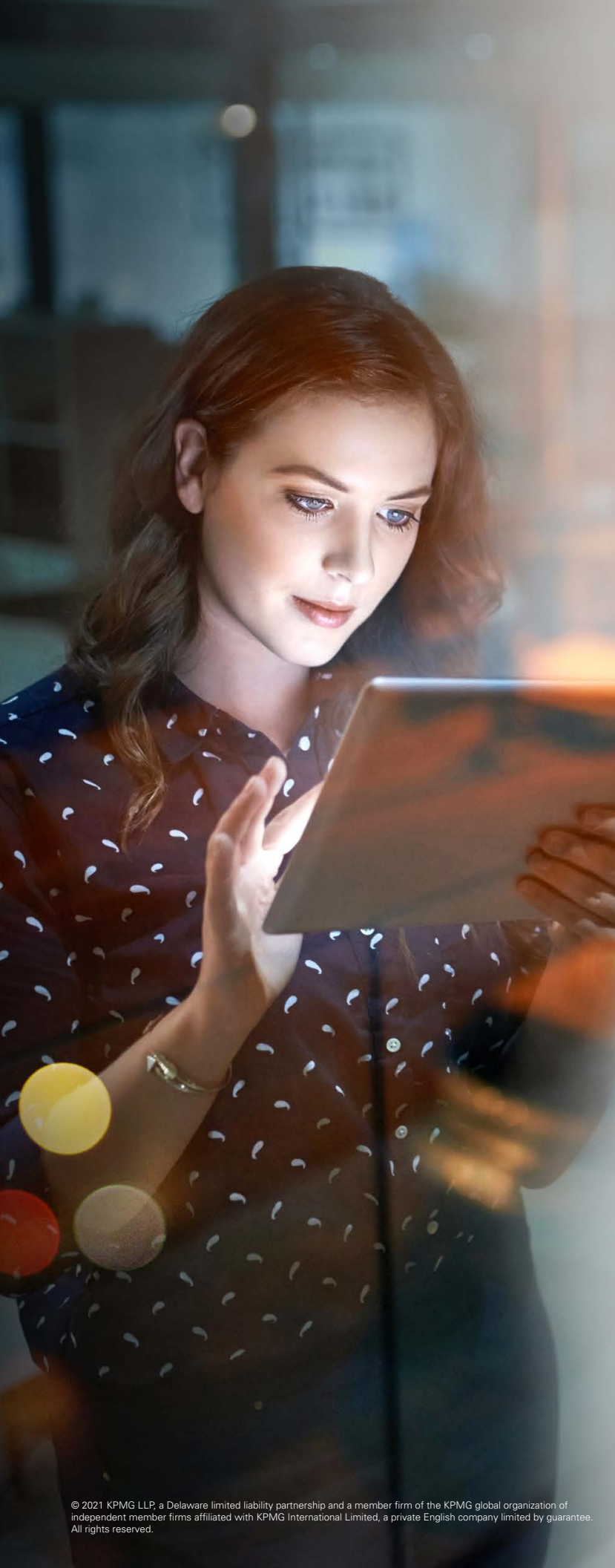
**The takeaway:** To be more appealing to the up-and-coming workforce, leaders will need to reassess their agencies' visions, cultures, benefits, and recruiting processes to align with the outlook and values of a younger generation. At the same time, they should ensure that emerging technologies continue to be implemented to facilitate a more digitalized, streamlined experience for both employees and the public.

### Agencies struggle to attract and retain younger, skilled workers in comparison to the private sector



Source: KPMG survey among government executives; n=73

<sup>28</sup> Source: Air Force CXO: We Don't have to Delight the User, Aaron Boyd, Nextgov website, October 4, 2019.



# Modernization and the cloud

Organizations turn to cloud service providers and cloud applications as a way of jump-starting technology modernization efforts.

But a move to the cloud isn't a panacea, and any issues in on-premises applications need to be rectified first.

"People just want to do a lift and shift from what they have on premises to the cloud. And frankly, when you do that, you're not getting any of the benefits of the cloud. All you've done is you've moved an issue you had in your on-premises data center to a cloud data center. You still have the same issue. So, the lift and shift to the cloud misses the whole point of why you should be using the cloud."

—**Vid Desai**, Chief Technology Officer, U.S. Food and Drug Administration

# Final thoughts

Typical citizens—like Laura—are already enjoying some of the benefits of modern government. COVID-19 showed how agencies can adapt to emerging technologies and use them to meet evolving constituent needs and preferences—in many cases more quickly and effectively than anyone thought possible. While some citizens have already taken advantage of online access to government services, the number is expected to increase even more as we move past COVID-19. In fact, the number of survey respondents using online government services rose from 33 percent prepandemic to a projected 41 percent during the pandemic.<sup>29</sup>

Digital transformation would not only improve the relationship between citizens and government agencies, it would also provide a potentially huge cost savings. Technology CEO Council's report, "One Trillion Reasons," states that the federal government could save \$1 trillion by modernizing its technologies and operations over the course of 10 years. For example, moving toward

green data centers via IT consolidation could save \$76 billion annually, decreasing duplication (\$500 billion), combating fraud with analytics (\$200 billion), digitalizing the infrastructure (\$50 billion, over 10 years), and consolidating excess and underutilized buildings (\$150 billion, over 10 years).<sup>30</sup>

Given these positive trends, the focus should be on building on government agencies' progress to date and continuing the journey towards a government that is connected, powered, and trusted. However, a technology-only focus will only take governments so far. Equal emphasis should be placed on ensuring that government workers have the skills and tools to provide the innovative services today's constituents expect. This will require a new way of approaching workplace culture that offers some of the flexibility and benefits available in the private sector and, perhaps more important, a concerted effort to reignite the flame of passion for public service to help foster a better world.

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<sup>29</sup> Source: KPMG survey among U.S. citizens

<sup>30</sup> Source: Could Technology Save Government US\$1 Trillion? GovTech website, October 21, 2010. <https://www.govtech.com/budget-finance/Technology-Could-Save-Government-1-Trillion.html>

# How KPMG can help

## Five reasons to work with KPMG

As governments look to modernize, they must focus on becoming connected, powered, and trusted, so they can better fulfill their missions to meet citizens' needs as well as transform their operations to foster greater employee satisfaction and attract talent with the latest skills.

Governments face their own unique challenges in their journey toward modernization. Having worked with government organizations for more than 100 years, KPMG has a deep understanding of these challenges and how to meet and overcome them.

For each project, we strive to bring a holistic perspective, drawing on our knowledge of government operations. We work closely with governments at all levels—federal, state, and local—to help agencies modernize outdated technology and inefficient operating processes. That means embracing modern technologies and delivery models, including the cloud, advanced analytics, intelligent automation, and cyber security.

We work hard to make your goal our goal: creating positive change that benefits government workers, citizens, and communities.

That is, a government that is **connected, powered, and trusted.**

### We deliver results that matter

KPMG is agile and versatile and can offer methodologies tailored to your unique challenges. We work with you from the beginning until the job is done—from strategy and design to implementation, and then follow through with improvements and governance. If we do the work, we deliver the value.

### We know how your agencies work

It's good to work with people who know the issues and pressures you face. Many of our partners and professionals walked in your shoes. Our deep knowledge of the government sector gives us insight into current trends as well as future challenges—be they disruptions, opportunities, or innovations.

### We know how to get things done

When you change the way you run key functions, you need to think about how that change affects your people as well as processes and technology. Because our consultants know how governments work, we also know how to put the right skills in the room to help manage the risks and enhance the value of everything we do.

### We strive to get the best out of technology

Virtually every issue is now a digital issue, but technology is only an enabler—a means to an end. It's your strategy that shapes the solution that makes the right things happen. Perhaps the most important aspect of our digital capability is that we can help your people get the best out of technology.

### We are on your side, all the way

Clients choose KPMG for all kinds of reasons. But the one we value the most is the quality and commitment of the people we can put on your team. Our job satisfaction and professional fulfillment come from creating value, inspiring trust, and building performance for our clients.

## Start by asking the right questions

**Is your agency prepared to meet the evolving citizen and constituent expectations?**

**How do your current skills map to the workforce of the future?**

**Are you leveraging the latest advances in technology?**

**How do you unlock valuable insights from existing data?**

**How will you keep your agency functions ahead of the progress curve?**

**Can automation augment your people and allow them to function at a higher level?**

**Have you built stakeholder and citizen trust?**

**Is every part of your agency wired for digital success?**

## The mission of modern government

**Enhance citizen and constituent experience**

**Build the workforce of the future**

**Securely implement emerging technology**

**Extract value from data and analytical engineering**

**Reinvent your operations**

**Modernize support functions**


**Turn risk into trust**

**Revolutionize the supply chain**


## How far along is your agency in its modernization efforts?

KPMG can perform a modern government maturity assessment to determine how far your agency has progressed along each of the three dimensions of a modern government—connected, powered, and trusted. Our online diagnostic tool can assess where your agency ranks in each of the eight capabilities of a connected agency against leading benchmarks, providing a clear roadmap to advancing your agency on its journey to modernization. To get started with the diagnostic, [click here](#).


# The eight capabilities of a connected agency

Insight-driven strategies and actions 


Harness data, advanced analytics and actionable insights with a real-time understanding of the customer and the business to shape integrated decisions.

Innovative products and services 

Develop compelling value propositions on products and services to engage citizens and create economic sustainability.

Aligned and empowered workforce 


Build a customer-centric organization and culture that inspires people to deliver on the mission and drive improved business performance.

Digitally enabled technology architecture 

Create intelligent and agile services, technologies, and platforms, enabling the customer agenda with solutions that are secure, scalable, and cost effective.

Smooth interactions and commerce 

Interact and transact with citizens and constituents across all services while achieving measurable results.

Responsive operations and supply chain 

Operate the business with efficiency and agility to fulfill the mission.

Experience centricity by design 

Design smooth, intentional experiences for citizens, employees, and partners, supporting value propositions and delivering business objectives.

Integrated partner and alliance ecosystem 

Engage, integrate, and manage third parties to deliver wide-ranging citizen services, reduce costs, mitigate risk, and close capability gaps while delivering the mission.





# Contact us

## Lorna Stark

Partner, National Leader,  
Government and Public Sector  
917-601-7336  
lstark@kpmg.com

## Brenda Walker

Partner, Federal Advisory Leader  
703-286-8621  
bwalker@kpmg.com

Let's work together to shape your vision  
of the future—and then make it happen.

Mobilize your agency to own your future.

**Connected. Powered. Trusted.**

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