



# Digital transformation done right

Methods to help governments center transformation on humans



## Digital transformation is more about humans than technology

Nearly 80 percent of government organizations said their customer-centric strategy was a high or top priority even before the pandemic.<sup>1</sup> These government leaders understand digital transformation does not mean swapping out old systems for new ones. Modernizing continues to push to the top of CIO agendas because more government leaders realize, especially after 2020 events, the importance of a resilient, agile organization to evolve with agency needs and deliver virtual public services. They witness industry and technology trends taking shape and stakeholder needs changing. Many understand how aligning processes and technology with business objectives will feed an innovation culture and drive the overall human experience. The challenge is transforming properly so the department or agency, its employees, as well as those who use its products or services benefit for the long term.

Organizations achieve a more successful transformation journey when they **rethink internal- and external-facing processes and how people interact with them first, then data and technology**. Transforming all four areas so **they all work together to create connected, powered, trusted organizations** is the only way agencies can operate as a modern government in a digital world. But government organizations have to manage the risk of a transformation, especially at the state and local levels. Changes must be easy for human stakeholders to adopt. This article will provide an understanding of what digital transformation means, the main components to include in transformation efforts, and how transformation can affect humans—the citizens as well as the people who hold critical government roles.

### Digital transformation

is the profound and accelerating revolution of business activities, processes, competencies, and models to leverage the changes and opportunities digital technologies allow and guide their impact across society in a strategic and prioritized way.

### Why modern government is important

Government agencies in the U.S. must modernize in order to keep up with changing user needs, regulations, and health and public safety requirements. Leaders of modern governments rethink business processes and service delivery models to more effectively achieve their mission. This article is one of a series that features how modernizing affects the government workforce and the user experience, improves security and public trust, and accelerates the digital journey. KPMG team members offer insights intended to help guide governments in their modernization efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, and trusted.



<sup>1</sup> "Impacts of COVID-19 on digital transformation strategies and the future of work," Forrester and KPMG, July 2020.



# What it takes to make humans the focus of your transformation

Each organization's transformation will vary, but some things will be common. For example, technology will never stop changing, and neither will human needs. This means digital transformation is a continuous process that enables government organizations to evolve to meet changing conditions and mission goals. Following are five components of successful digital transformation journeys that center on humans from the beginning throughout the journey.

## 1. Understand users' needs

In the past, for example, organizations often purchased an enterprise resource system and built organizational functions around the system. Many of these implementations failed because employees never learned how to use the new system. **Engaging employees and citizens early in the transformation process to understand their needs and preferences** gives them a sense of ownership of the products or services and improves user adoption. Seek input from a range of employees. Similarly with citizens, gather input from a variety of citizens, not just those who are outspoken. Seeking out the right people will give a truer account of user needs and preferences. Then focus on the most common issues people have with current processes to help drive what needs to change.

## 2. Use agile and human-centered methods

Organizations that **use agile and human-centered methods** to rethink and transform processes **incorporate trust into the entire transformation lifecycle** by design, since these methods consider people from start to finish. Leaders with one state were surprised when they brought agile and human-centered design into their process. Their team now designs in sprints and seeks user feedback on how the solution should work after each. By bringing in multiple users' points of view, the scope expanded from 20 to 140 functions to prioritize and address. Now the team cannot operate without these new methods that help them understand user needs and design to meet them.

Agile and human-centered design approaches and technology work together to **achieve digital transformation rather than just automating a process**. Think about an agency digitizing a paper filing and mainframe process it has used for decades. Agile is the delivery method to build the solution (versus waterfall). Human-centered design provides the approach that examines how people interact with the process so the organization transforms in ways that center on users.

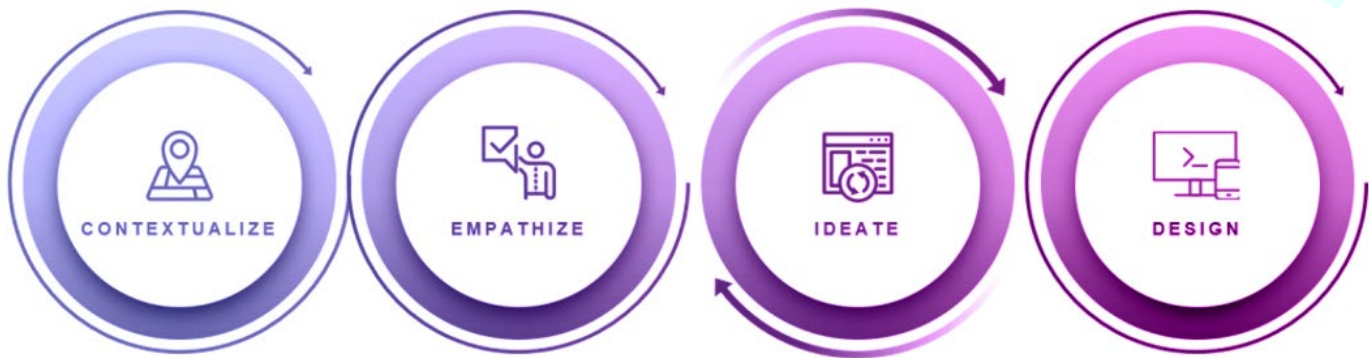
An **agile development method** can speed up outcomes and help ensure they meet users' expectations since the approach focuses on continuous improvement and how technology affects people. An agile method uses short



development cycles and delivers smaller functions every few months. For example, a KPMG team used an agile approach to analyze and identify opportunities to streamline all channels caseworkers for one agency and residents used to apply for and manage benefits. The agile approach allows the agency to monitor progress, discover additional enhancement opportunities, and reduce function and design gaps. It also sets them up to more easily scale and add functions so they are prepared for the next crisis or opportunity.

**Human-centered design** guides the experience-creation process by helping **contextualize** to understand the high-level problem to be solved and **empathize** by talking directly to the individuals the program most affects. It also helps to **ideate** with program beneficiaries to bring new perspectives and unheard voices to help solve the problem and **design** to represent the vision of the experience.

# Four phases of human-centered design



## 3. Build data expertise as the foundation

Building data expertise as the foundation **prepares data for intelligent applications that could better capture and meet users' needs.** When digital modernization is done correctly, starting with the user experience, processes constantly reuse data to reinform and improve. For example, many popular online retailers use something similar to suggest products that might complement what a customer just purchased.

Building a foundation of data expertise requires three **capabilities. Develop the ability to handle big, small, and wide data.** Without expertise to collect, store, ingest, and mine data, government organizations could miss critical demand and insights deep in the data ocean. Data could contain critical internal and external stakeholder information such as what they need, when they need it, and why. During and after a digital transformation, government team members will be able to connect and process data in various shapes including:

- **Big data** is detailed transactional-level data that stores every footprint of all parts flowing in the supply chain network.
- **Small data** examples are spreadsheets that many organizations create and maintain for routine or ad hoc reporting and analysis.
- **Wide data** includes unstructured data in various formats including tabular, text (such as benefit application forms, social media, open online forums, and voice-to-text transcripts), image (such as roadside cameras), video, audio, voice (including customer service), temperature (from sensors), or even smell a vibration.

Digital modernization includes evaluating to modernize data architecture that could **connect data silos to draw a complete picture of a citizen or stakeholder's journey.** Complex IT environments, legacy architecture, and disparate systems mean information resides in multiple sources across the organization. With disconnected data locked in these systems, most agencies cannot access their data, which disables their ability to see the clear journey picture.

Over the years, some agencies used various technologies and vendors to build case management systems to allow case workers to monitor the benefits each applicant or household received. This allowed case workers to spot double-dipping or if citizens did not receive their benefits. Policy makers need to understand which citizen groups require benefits and what types of assistance they need. Data siloes would prevent agencies from efficiently achieving either goal.

To modernize data architecture, agencies should consider adopting a new organizational structure, architectural design, and technologies such as data mesh, data fabric, or data virtualization to connect and manage data at scale. Team members in organizations that use data virtualization can easily and securely query data across multiple cloud or on-premise sources. This eliminates data siloes without physically moving data to a central location. They can also see hidden data relationships and learn more about and compare citizens' and stakeholders' complex behaviors and how they interact.

**Embrace data and analytics techniques to enhance all human-centered design phases.** Applying data expertise and advanced analytics techniques in the contextualize phase enables teams to understand users' needs in a dynamic and continuous process. Data and analytics techniques such as process mining help identify process improvement and optimization opportunities in the ideation phase. Team members could quickly prototype and test possible solutions in a simulated environment with no risk. This allows users to understand the pros and cons of each option and select the one that best fits their needs. Many solutions in the design phase are intelligent applications that could better meet internal and external users' needs. For example, middle- and back-office employees use these applications to more efficiently identify fraud, waste, and abuse and find the most vulnerable parts that require maintenance. Citizens can get benefit application decisions and reasons faster. The new data these applications generate can be continuously monitored for performance and future improvement opportunities.



#### 4. Use emerging technologies ethically and efficiently

Another critical digital transformation component is using emerging technologies in ways that ethically and efficiently meet users' needs and support the mission. The foundation is a modern hardware infrastructure, whether on premise, cloud based or multicloud and hybrid strategy and design. Imagine the potential if government agencies automate basic, repetitive tasks such as ingesting and storing documents. Combine automation with advanced, predictive tools and technologies and government agencies can fundamentally reinvent how they operate. With cloud as the enabler, emerging technologies such as those listed below can **add scalability** and **enable organizations to think and work differently**. More important, they can **enhance the way citizens live and government employees work**.

- **Artificial intelligence (AI)** can enhance, accelerate, automate, and augment decisions as well as workforce capacity and quality that will help agencies thrive in the future.
- **Robotic process automation (RPA)** enables government organizations to streamline citizen inquiries, and processes transactions while improving the user experience.
- **Low-code** platforms are a path to automation that can enable a broader set of emerging technologies.
- **Internet of Things** helps governments use data from connected devices to transform the way they operate and reduce costs while improving decision-making, productivity, and human experiences.
- **Blockchain** injects trust wherever government organizations use it, from networks and applications to data and vendors.

Government organizations can use new technologies in ways that support organizational and ethical goals as well as comply with regulations. Delivering the promise of emerging technologies such as AI is not possible without including humans in the loop. For example, AI has no perspective, point of view, or purpose and requires humans to train, test, and tune. Organizations must train the workforce to cultivate AI until it becomes a trusted core capability.

Many U.S. federal government agencies have dedicated offices focused on emerging technology use. These organizations, most often with external assistance, have the opportunity to help agencies realize greater value faster from a continuum of technologies used ethically and engage employees and citizens while addressing risk and governance.



## 5. Build and reskill an adaptable workforce

An adaptable, flexible workforce is vital to helping transform an organization to maneuver in a digital environment. This engaged, empowered team will not only shift with new demands but also anticipate and meet transformation change. In order to build this workforce, the need to engage and upskill employees should be a top priority.

Modernizing requires employees at all levels to adapt skills and work in different ways. From the start, all employees need **change management** to reskill and refocus so they understand and are prepared for how the transformation will affect their work. Effective change management also improves user adoption and transformation success.

Organization leaders should collaborate with Human Resources departments to define and map the roles and skills needed in the digitally transformed operation as well as learning paths to obtain these skills. Future **roles** depend on the organization and the complexity of its transformation. Most governments will need digital technologists with **skills and experience** working with all of the emerging technologies as well as digital design, data visualization, digital ethics, and cybersecurity. Outside of technology departments, agencies need individual performers and leaders who are holistic thinkers with abilities to use data, interpret real-time analytics, and navigate the fast-changing ways business and technology interact.

**Learning pathways** outside of traditional classroom training include coaching and mentoring, on-the-job experience, scenario-based active learning, and rotational learning. These methods allow employees to build skills over time as they work. State and local governments are in unique positions to influence curriculum with in-demand knowledge at universities, community colleges, and the technical schools in which they operate, and also recruit from them. Read more about [how to build a government workforce for the accelerating digital era](#).

# What digital transformation means for government leaders

Modernizing a federal agency encompasses processes, technology, and the workforce. The goal is to integrate what are historically stove-piped functions and enable them to work seamlessly across the enterprise and efficiently deliver on the mission today and in the future. Kshemendra Paul, Chief Data Officer for the U.S. Department of Veterans Affairs (VA), recently sat down with us to address digital transformation and the impact on data and customer experience at VA.

This year, VA published its first data strategy and roadmap to enable the agency to strengthen data management and analytics and give a voice to the data workforce. The strategy includes five core objectives: stewardship for data quality, analytics, enterprise technology architecture, people's roles and career plans, and governance. It provides VA with a long-term, systemic plan, which uses modern data management tools and analytics, to understand and close gaps in reaching these objectives. Ultimately, Paul is working to enable VA to unlock "data as a superpower" and use it to drive excellent customer experiences and advocacy for America's 19.2 million living veterans.

Cybersecurity is a concern of every federal agency, especially with more open data. To address this concern, VA is working toward using zero trust to protect data, resources, networks, and systems. Everyone in the organization understands the importance of public trust and their individual responsibility to use data ethically. With better data access, they hope to meet veterans' unmet needs. For example, pushing information to veterans at certain points in their lives can help them make more informed choices. According to Paul, VA's vision is to lead American wellness and healthcare. "If we can make it work with veterans, it can scale as a model for all Americans," he said.

—**Kshemendra Paul**, Chief Data Officer  
United States Department of Veterans Affairs

# What do the humans in your world think?

Welcome to agile, digital, human-centric public service. It is the future of government and includes remote work, rapid service design, and agile policies. Blending modern methods, processes, and technologies together for a transformation done right takes skill, experience, and time. KPMG has guided many government organizations through successful digital transformations. Our experienced teams help government leaders understand users, rethink processes, and use the right blend of development methods, processes, technology, and change management for successful transformation. Let us help your organization and its stakeholders get long-term benefits from your digital transformation.

## About KPMG

KPMG has worked with federal, state, and local governments for more than a century, so we know how agencies work. Our team understands the unique issues, pressures, and challenges you encounter in the journey to modernize. We draw on our government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you from beginning to end to deliver the results that matter.

The KPMG team starts with the business issue before we determine the solution because we understand the ultimate mission. When the way people work changes, our team brings the leading training practices to make sure your employees have the right knowledge and skills. We also help your people get value out of technology while also assisting with cloud, advanced analytics, intelligent automation, and cybersecurity. Our passion is to create value, inspire trust, and help government clients deliver better experiences to workers, citizens, and communities.



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