Digital transformation done right

Methods to help governments centre transformation on humans

Digital transformation is more about humans than technology

Boosting digital transformation of governments remains a top priority for the European Union[1]. Government leaders understand digital transformation does not mean swapping out old systems for new ones. Modernising continues to push to the top of CIO agendas because more government leaders realise, especially after the events of 2020, the importance of a resilient, agile organisation to evolve with organisation needs and deliver virtual public services. They witness industry and technology trends taking shape and stakeholders 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 organisation, its employees, as well as those who use its products or services benefit for the long term.

Organisations 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 organisations** is the only way organisations can operate as a modern government in a digital world. But government organisations should manage the risk of a transformation, especially at the state and local levels. Changes should be easy for human stakeholders to adopt. The Civil Service Renewal 2030 strategy places a strong emphasis on citizen centric design and use of more digital services to deliver important outcomes.[2] 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.

Why modern government is important

Government organisations should modernise 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 modernising 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 modernisation efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered and trusted.

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 prioritised way.

1 "eGovernment Benchmark Report 2022 Insight Report - Synchronising Digital Governments"
2 "Design Principles for Government in Ireland" October 2022

What it takes to make humans the focus of your transformation

Each organisation'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 organisations to evolve to meet changing conditions and mission goals. The following are five components of successful digital transformation journeys that centre on humans from the beginning throughout the journey.

1. Understand users' needs

In the past, for example, organisations often purchased an enterprise resource system and built organisational 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 likely 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-centric methods

Organisations that **use agile and human-centric methods** to rethink and transform processes **incorporate trust into the entire transformation lifecycle** by design, since these methods consider people from start to finish.

Agile and human-centric design approaches and technology work together to **achieve digital transformation rather than just automating a process**. Think about an organisation digitalising a paper filing and mainframe process it has used for decades. Agile is the delivery method to build the solution (versus waterfall). Human-centric design provides the approach that examines how people interact with the process so the organisation 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. It ensures a continuous flow of work supported by incremental value delivery. The agile approach allows the organisation 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-centric design guides the experience-creation process by helping **contextualise** to understand the high-level problem to be solved and **empathise** 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-centric design

Contextualise

Empathise

Ideate

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 modernisation 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 organisations 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 organisations 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 modernisation includes evaluating to modernise 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 organisation. With disconnected data locked in these systems, most organisations cannot access their data, which disables their ability to see the clear journey picture.

Policy makers need to understand which citizen groups require benefits and what types of assistance they need. Data siloes would prevent organisations from efficiently achieving either goal.

To modernise data architecture, organisations should consider adopting a new organisational structure, architectural design, and technologies such as data mesh, data fabric, or data virtualisation to connect and manage data at scale. Team members in organisations that use data virtualisation 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-centric design phases. Applying data expertise and advanced analytics techniques in the contextualise 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 optimisation 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 organisations automate basic, repetitive tasks such as ingesting and storing documents. Combine automation with advanced, predictive tools and technologies and government organisations can fundamentally reinvent how they operate. With cloud as the enabler, emerging technologies such as those listed below can **add scalability** and **enable organisations 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 likely help organisations thrive in the future.

- **Robotic process automation (RPA)** enables government organisations to streamline citizen inquiries and processes.

- **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 organisations use it, from networks and applications to data and vendors.

Government organisations can use new technologies in ways that support organisational 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. Organisations should train the workforce to cultivate AI until it becomes a trusted core capability.

5. Build and reskill an adaptable workforce

An adaptable, flexible workforce is vital to helping transform an organisation to manoeuvre 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.

Modernising 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. Organisation 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 organisation and the complexity of its transformation.

Most governments will likely need digital technologists with skills and experience working with all of the emerging technologies as well as digital design, data visualisation, digital ethics and cybersecurity. Outside technology departments, organisations 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.

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. Central and local governments are in a unique position to influence curriculum with in demand knowledge at universities, community colleges and the technical schools.

Modern digital enablers

Digital transformation starts with your digital strategy and considers not just where you want to be, but where you need to be as an organisation; then your organisation can integrate digital solutions within the relevant business processes that will be essential to drive successful digital transformation.

Your digital core is purpose driven - **business led, technology enabled**. Your digital enablers accelerate your strategy, ensuring **future ready processes.**

Interaction

Provide a harmonised human-centred experience for end users across devices and channels

Information

Use modern data platforms to acquire, ingest and persist the data in storage options including lakes

Intelligence

Visualise, draw inferences and insights from data

Automation

Automate and optimise processes by integrating with back-end systems applications

---

"Modernising a government organisation 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. ‧

Cormac Deady - Partner, Head of Government

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 organisations 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 organisation and its stakeholders get long-term benefits from your digital transformation.

About KPMG

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

We start with the business issue before we determine the approach because we understand the ultimate mission. When the way people work changes, our teams bring leading training practices to help ensure your workforce 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.

Contact us

Cormac Deady
Partner, Head of Government
E: cormac.deady@kpmg.ie

Saoirse Stronge
Director, Strategy & Operations
E: saoirse.stronge@kpmg.ie

Richard Franck
Director, Cloud & Digital
E: richard.franck@kpmg.ie