



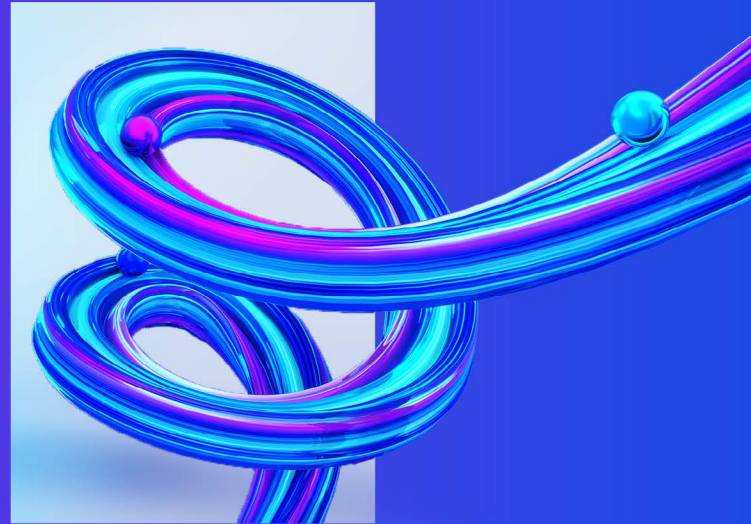
Re-boot efficiency

Consider AI on your transformation journey

KPMG Smart Government

Catalyse digital progress

Insight Briefing



Start your AI journey in the right place

Leaders of a government organisation knew they needed to use AI and process automation to achieve their missions on time and budget. First they tried to prioritise their needs and match each need with the right solution. With so many technology possibilities, from foundational AI capabilities to prepacked automation solutions, they were unable to choose. The projects stalled. This is a common example that frustrates many central and local government leaders.

Using AI to improve operations is no longer an option. Organisations must understand how to get the best out of these new technologies to ensure they experience the benefits as well as their citizens. This article is intended to help government CIOs, IT and operations executives, and anyone involved in digital transformation, learn the latest on how AI can help augment modernisation efforts — where to start and how to knock down barriers and build trust in AI. National, and local governments have different needs, so we separate messages to focus on each.

What AI means to government organisations

Imagine your organisation's workers never having to scan and store documents or do other basic, repetitive tasks. This already happens in some government organisations. Consider the potential

if AI and automation, along with advanced, predictive tools, could analyse unlimited data sources in a secure cloud environment to improve your team's ability to make decisions. These are the possibilities that emerging technologies offer.

When organisations rethink processes and the way people work before making their technology selection, emerging technologies such as AI, robotic process automation (RPA), and low-code platforms can redefine businesses and operating models. AI can help government organisations perform better and deliver benefits and objectives, enhancing the lives of citizens and their staff through new digital products and work-aiding technology.

Why smart government is important

Government organisations and departments around the world should modernise in order to keep up with changing user needs, regulations, and health and public safety requirements. Leaders involved in government modernisation are reviewing their user's experiences to plan what upgrades are needed in their business processes and service delivery models.

This article is one of a series that features how modernising can affect the government workforce and the user experience, improve security and public trust, and accelerate the digital journey. KPMG offers insights intended to help guide governments and public sector organisations in their modernisation efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, and trusted organisations.

¹ "Thriving in an AI World 2021: Government," KPMG, June 2021.

² Brittany A. Roston, "Government UFO task force will use AI to study bizarre 'alien' aircraft," SlashGear, June 28, 2021.

AI use is still in the infancy stage in most government organisations. Some departments use AI tools to monitor infrastructure wear patterns — from traffic lights to road hazards to bridges. Early government organisation adopters now use chatbots and process automation in financial organisations and to allow citizens to apply for social services, licences and other services. While the original value proposition for bots was to replace repetitive tasks, some organisations see additional value. In the UK, a number of public sector organisations are already successfully using AI for tasks ranging from fraud detection to answering customer queries.

Chatbots and RPA were lifesavers during the pandemic when in-office contact halted for months. Front- and back-office automation enabled employees to work remotely and citizens to access services when they needed them without in-person contact. Beyond the earliest bots' simple copy-here-paste-there tasks, RPA is an essential tool in the toolkit for any large-scale modernisation effort. Governments can quickly and reliably deploy bots and benefit from their flexibility and expanding capabilities.

The next step is to **add the cognitive power of AI and machine learning.** AI can speed up and improve data analysis to help people make faster, more thorough decisions. AI can expand workforce capacity and improve quality that will help organisations thrive in the future. AI also creates better employee and citizen experiences by addressing scale issues. It also helps with latency and enables organisations to more accurately project and predict future outcomes. Government organisations use AI to identify possible fraud and look for other programs for which a citizen could qualify.



Artificial intelligence (AI) is a collection of advanced technologies that allows machines to sense, discover, comprehend, reason, act, and learn. AI can take multiple types of data including unstructured images and voice recordings. It uses a large landscape of algorithms and tools to perform, for example, machine learning and natural language processing.



Machine learning is a subcategory of AI, which uses algorithms to automatically learn insights and recognise patterns from existing data, applying that learning to new data, to help make increasingly better decisions.



Natural language processing is embedded in many AI and RPA tools and allows the technology to understand, and use, written and spoken human language.



Robotic process automation (RPA) is the application of technology that enables organisations to configure computer software or a 'bot' to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses and communicating with other digital systems.



Low-code references software development environments that are visual with little code. Developers drag, drop and connect application components to create apps.



Generative AI (GenAI) is a type of AI that can create a wide variety of data, such as images, videos, audio, text, and 3D models. It does this by learning patterns from existing data, then using this knowledge to generate new and unique outputs.



Removing possible roadblocks to AI

Beginning and scaling AI-enabled solutions is a challenge for many government organisations. Some need to work fast to catch up. Others need to work fast to begin. Some government organisations have to change cultures before they can secure support to progress. Finding qualified workers to develop and use these technologies can be difficult. While each organisation's digital journey and challenges are different, many encounter similar roadblocks. Here are some methods to clear the way and accelerate your journey.

Some of government organisations' biggest challenges include **lack of budget and time to focus on modernisation efforts**. The work seems massive with legacy systems and processes with reams of documents and other information not digitised. With the right methods and tools, modernising is doable. Modernisation is also critical to stop organisations from imploding under the pressure to deliver in a digital world. With AI and automation, what used to take weeks or months and dozens to hundreds of people can take minutes or seconds. The potential time and money saved over the long term is a huge motivator to make time to modernise. Massively improved employee and customer experience is the biggest advantage. Would you rather your team input data from piles of paper or solve problems that have worried citizens for weeks?

Automation is not a hammer looking for a nail.

Most organisation leaders have heard vendor claims that any process can be automated. This may be true technically, but like the opening scenario, the automation effort will likely stall. Rather than forcing technology into an organisation, we prefer to take a business-first approach and then engage the appropriate technologies to help strategically solve a mission or objective. The first step is to take that **business-first approach to identify what problems should be solved**. Understand existing processes, systems, and user preferences to be able to **identify**

gaps and what is usable.

This business-first method is especially critical for high-demand citizen-facing services. Most government organisations have what we call technical debt — where legacy systems don't talk to each other. Data and data models do not sync. Processes do not flow smoothly and are not documented, which **inhibits employee and citizen experiences**. A collaborative team with representatives from IT and operations is critical to starting a process that has such a dramatic effect on people, processes and technology. Working together will allow the group to reimagine the way the organisation operates.

Offset lack of budget with solid ROI. To do this, think about the mission first and apply the technology to achieve the objective. Speed to value can be on your side. The good news is that taking steps along a digital journey can show value faster than an enterprise resource planning project that can take five or more years. Complete small-scale pilots to prove the technologies' capabilities. Careful planning can keep pilot budgets within purchasing limits to speed up approvals.

Organisations can also consider agile approaches - CI/CD, GDS or CDDO guidelines that will ensure the link with wider government standards.

With the right approach and some successes, organisations can get quick wins in meaningful areas. Organisation leaders will see the momentum — and the value — when you can show the return. Here are some tips on measuring ROI:

- ➔ Measure time and efficiency gains during AI and automation pilot programs.
- ➔ Add and measure other important metrics: reduce backlogs, service impact, morale effect, employee retention, and hiring.
- ➔ Report intrinsic, anecdotal, and calculated benefits in ways decision makers relate to achieving the mission long term.

⁴ Richard Johnstone, "UK civil servants highlight barriers to digital transformation in government." Global Government Forum, 1 December 2022.



Explore low-code as a part of your digital journey. We view low-code applications as a key automation tool alone, but also as the enabling foundation of a business-driven approach called hyperautomation that some believe is necessary for successful digital transformation. Use of a broad set of tools, platforms, and technologies enables hyperautomation. The low-code platform serves as the foundation from which to manage the integration of RPA, machine learning, AI, virtual assistants, process automation tools, and others.

Many government organisations lack the skills to successfully complete their digital journey. For instance, more than 37 percent of civil servants claim to have little to no knowledge of how automation, machine learning, and artificial intelligence might be used to enhance the delivery of public services. However, nearly 19 percent of civil servants reported that they had not received internal or external training within the last two years.⁵

Government organisations need employees with hands-on experience and knowledge of cloud, AI, RPA, digital design, data visualisation, and more to build a positive experience for the public. They also need holistic thinkers who can use data, interpret real-time analytics and navigate the fast-changing ways business and technology interact to thrive in

digital environments. Finally, they need people with strong leadership qualities to lead, motivate and develop these employees.

Use the outcomes from completing these steps to help change organisational culture. AI and automation have proven time and again to improve efficiency, productivity, and most of all, employee and customer experience.⁶ AI isn't new, it's just become more accessible.



⁵ Richard Johnstone, "UK civil servants highlight barriers to digital transformation in government." Global Government Forum, 1 December 2022.

⁶ "Automation evolution: from single task to strategic, unified tool set," KPMG and HFS, December 2020.

Technology means nothing without good data to analyse

One of the most valuable government assets is its data. Governments have massive amounts of data stored across a variety of systems that do not connect. Data is the fuel that runs AI, so governments should consider improving the quality and access to data a priority in order to reap the valuable benefits AI and automation bring.

Many organisations have focused on digitising paper records, so data is sharable. GOV.UK Forms supports a number of government departments to easily create accessible, digital forms in minutes.⁷ With digital data, government organisations can use tools to enable **advanced analytics** such as machine learning, natural language processing, and computer vision to identify, extract, interpret, and visualise relevant data patterns from multiple sources. AI algorithms can realise the full value of data to provide advanced insight. For example, RPA routes claims to the right claim's analyst by either the pre-defined business rules, or mathematically optimised assignments from advanced analytics models that reroute resources to other citizen engagement channels during peak times. Algorithms can also help identify waste, fraud and abuse, and spot trends to guide projection decisions.

For governments organisations, **modernising data** access is the best place to begin. Departments at the central and local levels are so focused on delivering citizen services, they often struggle to find the resources to prioritise innovation. Data is equally important for government organisations, which often have larger budgets and more data, and many have multiple RPA and AI projects in use or underway. The journey is long for some with small budgets and system scopes, and many systems still use COBOL. With legacy systems, the challenge is getting data where it needs to be.



⁷ "Making it easy to create and publish digital forms on GOV.UK," Gov.UK, 6 October 2022.

Adopt AI governance that instills trust

Governance plays a critical role in how much people trust AI and automation. As with any technology capability, **government** organisations need rigorous governance and **controls** including access controls, encryption, monitoring, backup, and recovery. Governance policies, standards, and processes will help minimise risks of cyberattacks or private and confidential data leaks.

Some organisations develop AI policy and standards that include guidance to promote ethical AI efforts. Others create a cross-department group to govern AI projects. The goal is to **secure and monitor training data** and build in **transparency to remove bias** in data, algorithms and decision-making. This transparency helps ensure organisations can explain the decisions they make and how they make them. Humans should be a part of all automation efforts to monitor for bias and to make sure automation continues to meet ethical standards.

As people use and understand automation and AI, their doubts subside, especially as they see automation boost employee morale along with improving employee and citizen experiences. Employees appreciate working with new technologies that increase their productivity, engagement, and work satisfaction.

Delivering the promise of AI is not possible without including humans in the loop. 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.

The goal is to **create more capacity** so organisations and workers can choose the everyday work and side projects that are most meaningful. Organisations are more productive, and people have the capacity to make better decisions and be more innovative and do not get bogged down in the process.

About KPMG

KPMG firms have many years of experience of working with national, regional and local governments, so we know how departments work. KPMG professionals understand the issues, pressures, and challenges you encounter in the journey to modernise. Drawing on KPMG firms' government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you to deliver the results that matter.

KPMG teams start with the business issue before we help clients determine their preferred approach because we understand the ultimate mission. When the way people work changes, KPMG firms can offer client insight on leading training practices to help ensure your employees have the right knowledge and skills. KPMG in the UK is one of the largest learning providers in Europe, specialising in helping our clients build the skills and talent they need for future plans. With our Powered Government offering we provide a blueprint for a customer centric, digitally enabled public sector organisation.

KPMG firms are committed to helping clients create value, inspire trust, and help governments deliver better experiences to workers, citizens, and communities.



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