

A group of emergency room doctors has a powerful new assistant—a generative AI tool on a hands-free mobile device automatically transcribes and organizes notes from patient interviews that the doctors review before they are sent to electronic health records for fast, secure sharing among care workers. This pilot program, which includes 75 doctors in four US emergency rooms, could automate over 50 percent of patient record-keeping¹ (a driver of physician burnout²) and enable doctors to focus more on patients.

This innovative pilot is part of a broader movement where federal, state, and local agencies prioritize the adoption of generative AI to enhance the delivery of healthcare, benefits, emergency management, and national security for constituents, thereby making public service more human-centered.

To help fuel adoption, federal spending on AI increased 22 percent since 2021—and 250 percent since 2017.³ For example, the Technology Modernization Fund—a federal program to upgrade agency technology infrastructure—is funding AI projects that enhance the constituent experience, such as potential tools for automatic language translation and more intelligent self-service features that can help users navigate government benefits and systems.⁴

However, despite the potential of generative AI to truly revolutionize constituent experiences, several significant challenges have arisen. The KPMG Customer Experience Excellence report found customer satisfaction across sectors, including the public sector, declined for the past two years. Part of the problem is technology has often emerged

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 organizations.

as a poor substitute for human interaction, such as overreliance on automated systems where customers expect human responsiveness. Moreover, generative AI takes agencies into uncharted territory. A recent presidential executive order requires agencies to promote AI innovation while mitigating complex challenges such as algorithmic bias, user privacy, and content accuracy. Agencies must navigate rapid technology change and an uncertain regulatory and trust and safety landscape.

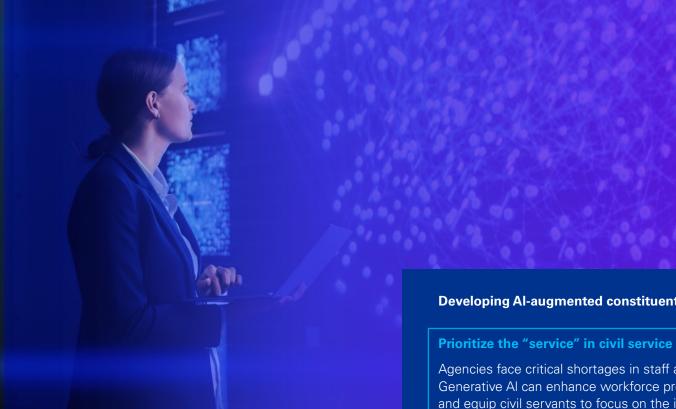
⁵ "Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," The White House, October 30, 2023



¹ Katie Adams, "How HCA Is Integrating Google's Generative AI Into Its Emergency Departments," Medcity News, September 18, 2023

² Adam Gaffney, Stephanie Woolhandler, Christopher Cai, et al., "Medical Documentation Burden Among US Office-Based Physicians in 2019," JAMA Internal Medicine, March 28, 2022

³ Nestor Maslej, Loredana Fattorini, Erik Brynjolfsson, John Etchemendy, Katrina Ligett, Terah Lyons, James Manyika, Helen Ngo, Juan Carlos Niebles, Vanessa Parli, Yoav Shoham, Russell Wald, Jack Clark, and Raymond Perrault, "Artificial Intelligence Index Report 2023," Institute for Human-Centered AI, Stanford University, April 2023
⁴ Technology Modernization Fund, "We drive modernization," Office of the Administrator for the General Services Administration, website accessed February 13, 2024



To help chart a path forward, KPMG has explored how agencies can create an Al-augmented constituent experience. This requires identifying where AI can empower employees and deliver a superior service rather than just replacing humans.

Governments must thoughtfully balance human interaction, automation, and risk management. Drawing on promising use cases from US agencies, foreign governments, and the private sector, the first part of this three-part series focuses on how civil servants can use generative AI to be both more productive and focused on the interpersonal, strategic, and creative aspects of their roles. In short, generative Al can make public service more human, not less.

Developing Al-augmented constituent experiences

Agencies face critical shortages in staff and skills. Generative AI can enhance workforce productivity and equip civil servants to focus on the interpersonal, creative, and strategic aspects of the constituent experience.

Create streamlined, accessible constituent experiences

Today's interfaces are often static and many chatbots are limited and frustrating. Advances in generative Al can provide dynamic, intelligent features-including more personalized customer journeys and automated scheduling and applications.

Enhance agency research, data, and decision-making

From emergency management to environmental stewardship, constituents need timely information and responsive governments. Generative Al can help agencies reach faster decisions and act when it counts.



Prioritize the "service" in civil service

Interactions with front-line civil servants shape constituent experiences. However, civil servants often face barriers to serving constituents most effectively. Many agencies have critical staff shortages. In recent years, the turnover rate in state and local governments has been double the average of the previous two decades. 6 This has delayed and degraded service delivery in departments of motor vehicles, benefit programs, and public safety, as civil servants manage high case volumes with limited resources.7 Federal workers, moreover, have to spend a total of seven weeks per year on low-value tasks, such as managing paperwork.8

Developing Al-augmented constituent experiences can help offset these challenges. Used well, generative AI enables civil servants to be more productive and do more with less. A recent study found that providing customer-support agents with a generative Al assistant—in this case, a tool similar to ChatGPT—improved productivity by up to 35 percent.9 The AI assistant provided employees with real-time recommendations for customer issues. which accelerated issue resolution and helped improve customer satisfaction. The study found employees were also less likely to quit, as they were better supported.

There are a wide-range of generative Al applications that can help civil servants enhance the constituent experience—for everything from automating routine tasks to facilitating customer interactions.

Providing civil servants with generative Al assistants

Governments are equipping civil servants with increasingly sophisticated generative Al assistants. As a global innovation leader, ¹⁰ Singapore is emerging as a pace-setter for using AI in government. For example, generative AI can help civil servants access and analyze internal data, such as synthesizing laws, policies, and reports, for constituent questions. It can also transcribe hearings and write ministerial correspondences with models trained in appropriate administrative and technical vernacular.11

Singapore is building technology infrastructure for further AI adoption. Singapore introduced the AI Government Cloud Cluster, a platform that allows civil servants to develop customized AI solutions using Google Cloud's technology and partner ecosystem. The platform offers customizable models, no-code tools, and data governance guidelines—supporting developers with varying skill levels and use cases.¹²

These tools help civil servants spend less time on routine and administrative tasks and more on the strategic and interpersonal aspects of their roles, such as fieldwork and community engagement.

¹² "Launch of the Artificial Intelligence Government Cloud Cluster," Smart Nation Singapore, May 31, 2023



David A. Lieb, "Mounting job vacancies push state and local governments into a wage war for workers," Associated Press, July 28, 2023

⁷ Lauren Drake, "Oregon state government workers struggle to deliver services amid staffing shortages," OPB, April 25, 2023

Mike Rigas and Emily Murphy, "The Liberation of Federal Employees from Low-Value Work is Underway," Performance.Gov, September 9, 2020
Katia Savchuk, "Generative AI Can Boost Productivity Without Replacing Workers," Stanford Graduate School of Business, December 11, 2023

^{10 &}quot;Global Innovation Index 2023: Switzerland, Sweden and the U.S. lead the Global Innovation Ranking; Innovation Robust but Startup Funding Increasingly Uncertain," World Intellectual Property Organization, September 27, 2023

Microsoft, "Empowering Asia's citizens: The generative Al opportunity for government," MIT Technology Review, June 28, 2023



Generative AI to facilitate constituent interactions

Generative AI has the versatility to help augment direct interaction between civil servants and constituents—with tools tailored for diverse contexts and situations.

Estonia has long been a leader in digital government and is working toward an ambitious vision for generative AI. The Baltic nation has unveiled a plan to equip every civil servant—and constituent—with highly specialized AI assistants. According to Dr. Ott Velsberg, Chief Data Officer of Estonia, "By 2030, we envision a government where every individual has personalized digital assistants for education, mental health and other areas. Doctors, police and other professionals will have specialized assistants, optimizing human work while automating simpler tasks." ¹³

Estonia has implemented over 80 Al tools in government.¹⁴ One of them, *Bürokrat*, is a suite of Al-enabled virtual assistants available nationwide with models specific to policing, national security, public records, and other applications.¹⁵ Users can ask questions and generate recommendations or access services from Al tools trained on Estonian policies, procedures, and statistics.

Looking ahead, Estonia and other countries can draw upon emerging generative AI technologies to provide specialized virtual assistants.

- **Training bots:** Generative AI bots can simulate conversations with constituents to help case workers prepare for real situations. For example, highly conversational and authentic bots are being used to train mental health crisis counselors and first response dispatchers. ¹⁶
- **Translation tools:** Generative AI can enable real-time language translation. ¹⁷ Text or voice-enabled translation tools can help case workers engage with constituents who speak different languages—both with translating and generating responses—during calls or fieldwork.
- Field and incident reports: Today law enforcement officers spend up to 50 percent of their time creating reports.

 Begin Generative Al can help police, corrections officers, and social workers generate reports faster—such as converting constituent interviews (e.g., victim statements) from audio into text and synthesizing relevant legal and jurisdictional information.
- is pairing electronic health records with the broader medical literature. Using a generative Al application, doctors can enter questions and receive analysis of a patient's health records as well as clinical guidelines and studies. For example, a doctor could generate a report on the medications a patient is taking and receive guidance on adverse interactions from potential new medications.

Generative AI tools like these can help civil servants meet and serve constituents where they are.

¹⁹ Aashima Gupta and Greg Corrado, "How 3 healthcare organizations are using generative AI," The Keyword, August 29, 2023



^{13 &}quot;Estonia's Al vision: Building a data-driven society and government," Apolitical, February 12, 2024

^{14 &}quot;Digital Agenda 2030," Republic of Estonia Ministry of Economic Affairs and Communications, August 17, 2023

Yogesh Hirdaramani, "#DigiGovSpotlightThe world's most digital society to pursue personalised services - Estonia's Information System Authority," GovInsider, March 25, 2024

¹⁶ Rachel Metz, "How chatbots are being used to train crisis counselors," CNN, December 7, 2021

¹⁷ Emilia David, "Roblox releases real-time AI chat translator," The Verge, February 5, 2024

¹⁸ Ali Al Bataineh, Rachel Sickler, W. Travis Morris, and Kristen Pedersen, "The Impact of Al-Generated Reports for Law Enforcement: A Call for Responsible Integration and Interpretability," Information Professionals Association, website accessed March 27, 2024



Enhancing back-office capabilities

While direct engagement with constituents is vital, a good experience also requires back-office capabilities that enable rapid issue resolution. However, complex documentation and processes often cause delays and add to employee workloads. Generative AI can help mitigate these bottlenecks.

In recent years, claims processors at the US Department of Veterans Affairs (VA) faced a 37 percent increase in benefit applications—each of which can run hundreds of pages contributing to employee burnout and turnover.²⁰ In response, the VA is exploring generative AI tools to help reconfigure, summarize, and manage documents and records. For example, the VA is developing tools that combine generative Al and optical character recognition to convert written documentation into digital formats.21 With this technology, employees could simply scan or even photograph written materials to create a digital version in the appropriate format. The VA is developing a tool that can review thousands of pages of documentation and generate summaries of relevant claims information.²² Moreover, generative AI could be used to convert documentation in different formats—such as records from different health systems—into standard templates for improved interoperability.

Agencies are also exploring the use of generative AI to summarize public feedback and comments.²³ For example, the Department of Health and Human Services is developing natural language processing tools to aggregate, sort, and analyze public comments during the agency rule making process. This can help civil servants distill key themes and similar comments to facilitate faster analysis. Civil servants could utilize AI assistants to generate responses trained on data from public comments.



²⁰ Melissa Chan, "Thousands of workers leave the VA amid a flood of new cases and quota demands," NBC News, September 30, 2023

²³ Beth Novack, "Generative Al and Policymaking for the New Frontier," Government Technology, December 1, 2023



²¹ Michele Sandiford, "At VA, Al and data optimization hold the promise of better health outcomes, job satisfaction," Federal News Network, March 12, 2024

²² "Al to process veteran feedback," Al.gov/ai-use-cases, website accessed December 2023

Overcoming governance challenges to Al adoption

Generative AI has many use cases, but agencies will face challenges establishing trust and effective governance. Only 37 percent of Americans are comfortable with agencies using AI for decisions that directly affect them.²⁴ Moreover, agencies are understandably reticent to move first—as they could run afoul of evolving regulation, find unexpected challenges with fast-changing technology, or even expose sensitive constituent data. Despite these challenges, there are strategies that can help agencies mitigate risk and realize value from generative AI.

Establish an Al governance framework

For agencies to mitigate risks and realize value, they will need to apply governance leading practices:

- Create a centralized process for AI and machine learning models and tools
- Enhance security operations, such as limiting training model access to sensitive data
- Develop clear protocols for threat identification and escalation processes
- Address systemic, human, and statistical biases through evaluation, training, and education
- Apply controls in response to how employees use Al technology to make decisions.

Test and learn internally

Generative AI leaders tend to roll out new tools internally. For example, Wal-Mart, Meta, and LinkedIn are launching internal generative AI tools for employees to test in-house.²⁵ This approach allows organizations to gather data and identify problems for public tools to launch as more mature products.

Create AI sandboxes

While centralized governance is important, team members will also need space to experiment with generative Al. Given the many applications, team members may identify uses not initial seen from the center. Generative Al leaders are developing Al sandboxes—such as a central cloud ecosystem with a suite of tools, models and datasets, and no-code/low-code applications—for employees to build customer applications in a secure way.



²⁵ Sharon Goldman, "Walmart, LinkedIn, Meta test internal generative AI options for employees," VentureBeat, June 13, 2023



²⁴ "Al Trust Gap," Mitre, website accessed March 27, 2024



How KPMG can help

KPMG has worked with federal, state, and local governments for more than a century, so we know how public sector agencies, education institutions, and healthcare organizations work—and we're helping them design and implement real Al use cases today.

We're experienced, nimble, and flexible. We understand the unique issues, pressures, and challenges government organizations face on the journey to Al adoption. We'll meet you where you are on that journey and help advance your progress with no agenda other than to see you succeed. We'll help you leverage the investments you've already made to help maximize their value—not try to sell you something new.

We offer clarity and insight. As a trusted advisor, we can help you make sense of everything going on in the highly dynamic world of Al that can impact your mission, from regulatory mandates to emerging technologies. We can help align your efforts with leading practices from both the private and public sectors, and help keep you moving forward quickly with confidence and conviction.

We see the big picture. We can help you anticipate and adapt to the wide-ranging impacts AI can have on your organization, including budgets and financial controls, business processes and operating models, and employee growth and retention. We can help you understand your data—where it comes from, what controls are required, how to help maximize value locked in it, and how to share that value across organizations. We can help you harness the power of AI ethically and responsibly with trusted AI principles and governance models for managing risk.



We can help you from strategy through implementation.

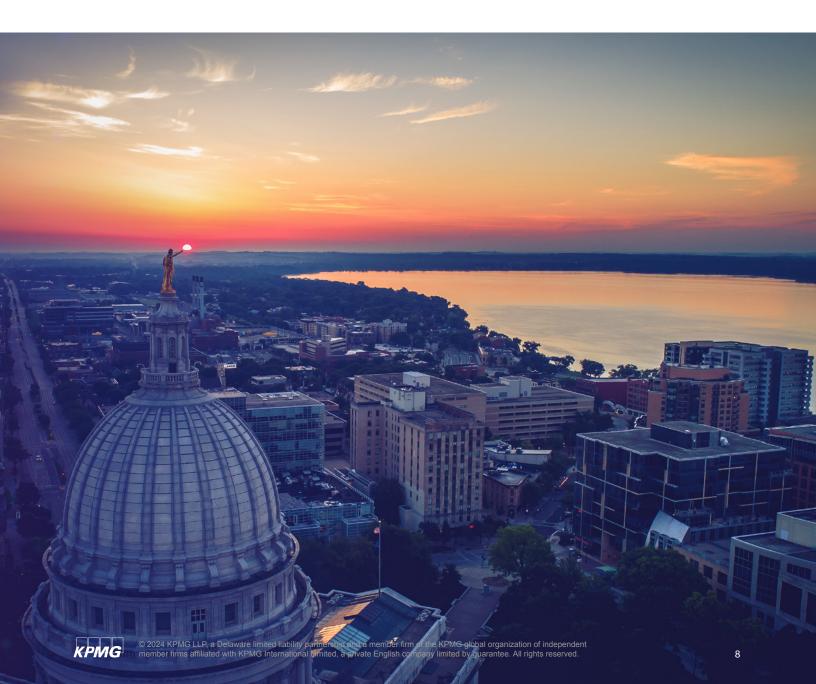
Unlike business-only consultancies, our more than 15,000 technology professionals have the resources, the skills and experience, the battle-tested tools and methodologies, and the close alignment with leading Al technology providers to help achieve your vision, quickly, efficiently, and reliably. And unlike technology-only firms, we have the business credentials, subject matter professionals, and public sector experience to help you deliver measurable results, not just blinking lights.



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.



Contact us



Arthur Higbee
Managing Director, Advisory
Transformation Delivery
KPMG LLP
ahigbee@kpmg.com



Amiran Gelashvili Managing Director, Advisory Health and Government Solutions KPMG LLP agelashvili@KPMG.com



Tom Frame
Managing Director, Advisory
Digital Transformation
KPMG LLP
tframe@kpmg.com

read.kpmg.us/modgov

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