Human-centered artificial intelligence

Government AI implementations aren't technology transformations—they're human transformations

AI success depends on closing the gap between employee fear of AI and its ability to empower them

It's difficult to think of any other technology that has advanced as quickly as artificial intelligence (AI). Few of us had heard of generative AI (GenAI) just five years ago; today it's fundamentally reshaping the way we work and transforming an astonishing array of employee and customer experiences.

The private sector has been rushing to implement AI solutions, but the rate of adoption at government organizations has failed to keep pace. By the end of 2024, two-thirds of private-sector workers reported using generative AI compared to just a quarter of civil servants. But that 25 percent number conceals some significant differences based on job function: faculty and staff at public universities and colleges reported rates as high as 71 percent, while rates for the judiciary, social workers, corrections officers, law enforcement, and property managers range from 13 percent to zero.[1]

While governmental organizations take time to consider the security implications, the technology continues to advance at an astonishing pace. In 2020, AI was only able to perform tasks that would typically take a human expert a couple of seconds to do. By 2024, that had risen to almost an hour. By 2028, AI is projected to be able to complete tasks that would take a human several weeks to do.[2] Reinforcement learning, a new approach to training being used by AI firms, is enabling AI models to reason and begin to be capable of adapting to a wide variety of situations and tasks.

Why modern government is important

Government agencies in the US 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.

In 2024, this approach let them surpass human PhDs at answering difficult scientific reasoning questions and achieve expert-level performance on one-hour software coding tasks.[3]

Just as the cloud transformed IT, AI agents are prompting a similar upheaval, demanding timely adaptation. Over the next 12 to 18 months, AI agents are expected to gain multimodal capabilities, broadening their potential applications. By preparing now—aligning IT strategies with governance, security, and talent—businesses can position themselves to harness future advancements before they become mainstream.[4]

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[1] Source: "Generative AI use in US public sector on the rise, survey by Hoover fellow suggests," Oliver Giesecke, The Hoover Institution, December 2, 2024.
[2] Source: "Why AGI could be here by 2030: the case for and against," Benjamin Todd, 80000 Hours, March 21, 2025.
[3] Ibid.
[4] Source: "AI agentic systems will change business operating models," Sam Ganga, LinkedIn, June 12, 2025.

Overcoming the biggest obstacle: employee resistance

These remarkable capabilities are increasing pressure on governments to catch up to their private-sector counterparts. By aligning AI technologies with organizational goals, governments can increase the efficiency of public services, improving transparency and responsiveness. AI solutions can significantly improve customer experiences by streamlining processes, reducing wait times, and providing personalized customer service.

AI can help collect and analyze public feedback and sentiment from sources such as social media, online forums, surveys, and customer service interactions. It can quickly process vast amounts of research and data, offering government officials more precise, actionable insights for informed policy decisions. It can make technical knowledge accessible to a wider range of staff, which, in turn, can help improve operational continuity, resilience, and efficiency, while empowering employees to engage in more meaningful and impactful work. Agentic AI, for example, goes one step further in expanding efficiency by transitioning from passive information retrieval to proactive execution and decision-making.[5] For agencies grappling with an aging workforce and the upkeep of legacy systems, AI can expand the pool of employees capable of supporting these critical functions.

Despite these advantages, agencies face obstacles to AI adoption that many commercial operations don't, including budget constraints, the sensitivity of data, and the tangled web of legacy IT systems that often underpins their operations.

The biggest impediment to successful AI adoption, however, isn't a budget, data, or technology challenge—it's a human one. The success of any AI initiative relies on employees at every level choosing to support it. They can either be allies—contributing their insights and experience to help ensure success—or obstacles that reduce its value and potentially lead to failure.

There's reason for concern. A recent survey from Pew Research shows that more than half of workers fear AI, and about a third are worried it will lead to fewer job opportunities.[6] Another survey reveals that 33 percent of workers want to see AI banned from the workplace entirely.[7]

While employees may fear AI, state and local governments are increasingly afraid they're missing out on its benefits. They recognize AI as a powerful tool that can significantly improve productivity by augmenting human capabilities, automating mundane or repetitive tasks, reducing errors, and helping address skill gaps, allowing employees to focus their time and attention on critical tasks that require human expertise, creativity, and judgment.

Rushing to implement AI without a clear strategy or approach to address the disconnect between employee fear and mistrust of AI and agency desire to adopt it can be a recipe for failure. Whether employees see AI as an enhancement to their experience or a threat to it depends on the approach organizations take to AI adoption. Here, as with any significant organizational change, intentional employee involvement and communication is critical to gaining buy-in, and, ultimately, adoption.

[5] Ibid.
[6] Source: "US Workers Are More Worried Than Hopeful About Future AI Use in the Workplace," Luona Kim and Kim Parker, Pew Research, February 25, 2025.
[7] Source: "Bridging the digital AI divide," Cypher Learning, September 18, 2024.

Human-centered artificial intelligence

Human-centered artificial intelligence (HCAI) is one such approach. It's focused on augmenting or enhancing human capabilities, prioritizing user needs, and ensuring ethical and responsible AI use. Instead of replacing humans, the aim of HCAI is to create AI systems that work alongside people to improve decision-making, creativity, and productivity while maintaining transparency and trust.

HCAI puts the human at the center of AI implementations, not the technology. Unlocking value from any AI initiative, therefore, starts by understanding that the effort isn't a digital transformation—it's a human transformation. HCAI focuses on understanding employee needs, behaviors, and experiences to create AI systems that are intuitive, user friendly, and accessible. It seeks to preserve human autonomy control and agency in AI systems—so that employees are empowered by AI rather than threatened by it.

When considering the implementation of HCAI tools in an organization, it's essential to recognize that one size does not fit all. HCAI tools should be tailored to the specific needs and workflows of an organization's employees to drive value. For example, a state or local government agency might benefit significantly from AI-powered citizen service assistants that can manage and respond to routine inquiries, thus allowing government employees to focus on more complex administrative tasks and direct citizen interactions. Conversely, a public health department could find value in AI-driven analytics that streamline the process of monitoring and responding to health trends and outbreaks.

The key to successfully implementing these tools lies in involving the end users. By engaging with teams to understand their daily challenges and needs, organizations are more likely to select HCAI tools that are more relevant and that enhance the employee experience. With the growing emphasis on improving employee experience as a strategy to retain talent and reduce both the cost and productivity loss associated with attrition, selecting the right HCAI tool is necessary for success to help maximize the return on investment while meeting organizational demands.
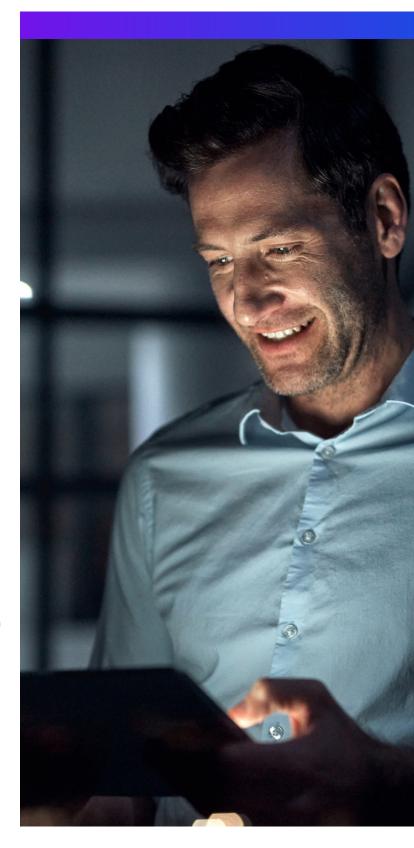
Overcoming skepticism and empowering an army of AI strategists

It's not unusual for government employees to be both fearful of AI and skeptical that AI can add value to their specific job. HCAI is designed to overcome this fear and skepticism with its emphasis on human control and agency.

AI upskilling plays an essential role in the process. Upskilling can offer more value than just giving people a practical understanding of how to use the technology—it also can help open their eyes to the possibilities of its use. InnovateUS, a project of Northeastern University, for example, is a program to train government employees on how to leverage AI in their jobs. Students are surveyed both before and after completing the program. In a pre-course survey, more than half said they had no use for AI in their jobs; but in the post-course survey, 84 percent said they now saw its applicability and value.[8]

A key takeaway here is that you don't necessarily have to have all the answers for how AI can be used within your agency or department before you adopt it. By focusing on user-centric design, ethical use, and empowering the workforce through comprehensive training, governments can harness AI's transformative power for improved service delivery, policy development, and resource management, leading to modernized public sector operations that meet current and future needs. Empowering employees through training and involving them in AI planning and implementation can create an army of imaginative people who may come up with answers to that question you may never have dreamed of. It's the embodiment of HCAI's objective to free up employees to be more strategic and creative.

These strategies can alleviate fears, demonstrate AI's supportive role, and foster an environment of collaboration between human intelligence and AI capabilities. This opens the door to strategic AI requirements that bring more unique capabilities to accelerate your workforce through the use HCAI, like agentic AI.

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[8] Source: Amanda Welsh, PhD, The Burnes Center for Social Change at Northeastern University.

AI as a teammate

A growing body of research is showing the benefits of empowering people with AI tools. For example, in research from the Hoover Institute, 70 percent of public sector employees said that their work quality was better or significantly better with the help of AI.[9]

But perhaps at least as important as productivity or quality gains—benefits the agency realizes—are the benefits that empowered and engaged employees themselves enjoy. Researchers at Harvard University, for example, ran a real-world experiment at Procter and Gamble in which product teams without AI were compared to individuals who were given AI. Among their findings, they determined that individuals with AI outperform teams without AI and that AI-enabled employees are happier.[10]

Researchers noted that this last finding—that AI-enabled employees are happier—was based on AI's language-based, conversational interface, which made it feel like interacting with another person, effectively replicating many of the benefits of human collaboration. In other words, rather than viewing AI as a threat, AI-enabled employees viewed AI as a supportive and highly knowledgeable teammate. AI, particularly agentic AI, with its capacity to reason and adapt, offers transformative benefits that can enhance efficiency, accuracy, and productivity.

The value of employee happiness shouldn't be underestimated. There's evidence that happier employees translate directly to better customer satisfaction and organizational performance. For example, a study conducted by researchers at Glassdoor, a job search and career community platform, revealed a strong statistical link between employee well-being and customer satisfaction. As the researchers noted, "A happier workforce is clearly associated with companies' ability to deliver better customer satisfaction—particularly in industries with the closest contact between workers and customers."[11]

In another recent analysis, Gallup noted that "engaged employees produce better business outcomes than other employees do—across industries, company sizes and nationalities, and in good economic times and bad." They report that organizations with engaged employees show an 81 percent difference in absenteeism, a 14 percent difference in productivity, a 10 percent difference in customer ratings, and an 18 percent difference in sales.[12]

We've seen this in our own research at KPMG LLP (KPMG), too, across a range of industries. For example, healthcare organizations that prioritize the employee experience see better patient outcomes.[13]

[9] Source: "Generative AI use in US public sector on the rise, survey by Hoover fellow suggests," Oliver Giesecke, The Hoover Institution, December 2, 2024.
[10] Source: "The Cybernetic Teammate: A Field Experiment on Generative AI Reshaping Teamwork and Expertise," Fabrizio Dell'Acqua et al, Harvard Business School, April 2025.
[11] Source: "The Key to Happy Customers? Happy Employees," Andrew Chamberlain and Daniel Zhao, Harvard Business Review, August 19, 2019.
[12] Source: "Employee Engagement vs. Employee Satisfaction and Organizational Culture," Jim Harter, Gallup, August 13, 2022.
[13] Source: "Improving the patient experience: Insights for healthcare professionals from the 2023-24 KPMG US Customer Experience Excellence report," KPMG, August 2024.

Ethical and privacy concerns

Another concern is that in the rush to adopt AI, agencies may overlook the risks. The Hoover Institution noted that while adoption of AI in the public sector is quickly gaining momentum, "adoption at this point outpaces institutional safeguards and available training options." It observed that "nine percent of respondents said their organization had no formal policies on the use of generative AI, and another 51 percent said they were unaware whether any such policies existed."[14]

Ethical and privacy risks are legitimate concerns, especially for government organizations such as health and human services agencies that handle sensitive customer data. AI systems can be black boxes; how decisions are made by the system can be opaque and un-auditable. Can eligibility decisions that are outsourced to such machines be trusted?

The HCAI approach is designed to address these concerns by helping to select AI solutions that are transparent and explainable, allowing users to understand how AI decisions are made. It also focuses on ethical considerations such as fairness, privacy, and security, so that AI systems are used responsibly and ethically.

Here, too, the HCAI focus on employees rather than technology alone is key to success. Addressing privacy and ethical concerns starts with awareness. The post-course survey data from Northeastern University's InnovateUS program, for example, showed that the biggest benefit of the course reported by respondents was how it helped them better assess the potential risks and ethical considerations of using GenAI.[15]

No better time to get started

With mounting pressure on agencies to improve efficiency and do more with less, coupled with rapid advances in the technology, this is an opportune time to consider incorporating AI into their operations. Taking an HCAI approach can be an effective first step toward adoption by focusing on the human workforce and how AI tools can best serve them. Engaging employees to help identify opportunities for AI usage can both reduce resistance to implementation and increase its chance of success.

[14] Source: "Generative AI use in US public sector on the rise, survey by Hoover fellow suggests," Oliver Giesecke, The Hoover Institution, December 2, 2024.
[15] Source: Amanda Welsh, PhD, The Burnes Center for Social Change at Northeastern University.

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 AI uses cases today.

We're experienced, nimble, and flexible. We understand the unique issues, pressures, and challenges government organizations face on the journey to AI 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 AI 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 AI 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.

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