KPMG

Technology in government today

Insights from the KPMG government digital pulse survey report 2024

Foreword

It is rare these days to have a conversation with our clients that does not touch on generative AI (GenAI) and workforce—both challenges and strategies. The two topics are intertwined, with our clients wanting to understand the cause and effect. The third component of most discussions is customer or constituent experience and increasingly employee experience.

Embracing technology is what you might now consider the “basics,” but while governments have made significant progress in modernizing technology and moving to the cloud, there is still an imperative to keep the pace. In an era of constant change and constituent expectations and demands, leveraging technology can be the key to delivering efficient and effective public services. By embracing emerging technologies, agencies can enhance their mission, streamline operations, and improve constituent engagement.

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Lorna is the US Line of Business Leader for Government and Healthcare and she also serves as the lead account partner for the City of New York. Lorna has over 35 years of experience serving clients across these sectors. She is responsible for leading teams in developing strategic solutions to meet clients’ changing needs and efforts to modernize delivery of services.

Understanding the forces driving innovation in government

In July 2024, KPMG conducted a survey of 200 federal and state government decision-makers and influencers to understand their perspective and outlook for public sector technology trends.

In this digital pulse survey report, we look at the technology advances government leaders are making, their priorities, the challenges they face, and the opportunities that lie before them using technology to empower their workforce and improve constituent experience.

At a high level, we see increasing awareness among agencies about technological advances that may impact their agencies. Over 90 percent of respondents are familiar with cloud technology, and 81 percent say the same about GenAI, artificial intelligence (AI), and machine learning. Additionally, 72 percent said their outlook toward the adoption of emerging technology has improved over the last 12 months.

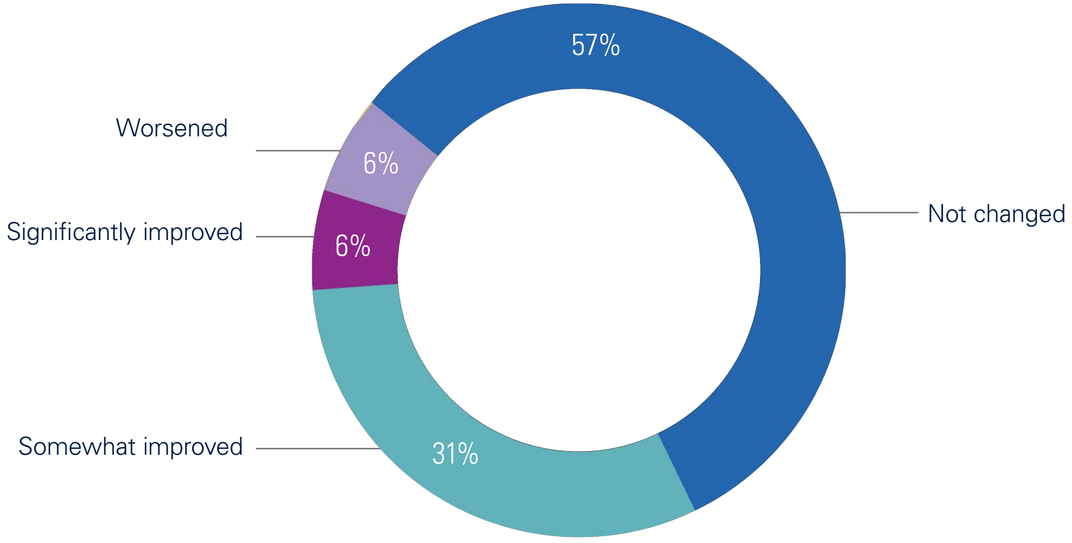
However, challenges remain when it comes to implementing and deriving value from technology transformation.

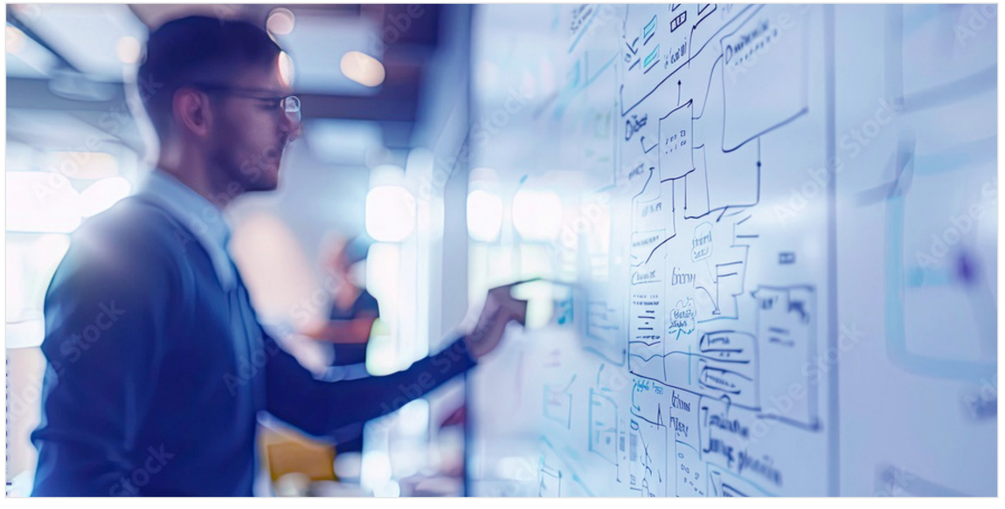
> “Without a comprehensive strategic approach, new technologies may be implemented but business processes ignored. AI or advanced analytics may be implemented, but access to data still constrained or data quality overlooked.”
>
> ***Rob Breakiron***
> *Managing Director, KPMG LLP*

All for naught?

The most surprising finding from the survey was that a substantial majority of respondents—57 percent overall and nearly two-thirds of those in federal government—said that new technologies in their agencies have had little or no impact on their daily work and productivity. Only 6 percent said new technologies have significantly improved productivity.

Technology's impact on daily work and productivity





This could be that respondents haven't noticed the gradually improving productivity or positive impacts on their daily work—it is often difficult to recall how we did something before technology once that muscle memory is gone. One way to demonstrate the improvements is to set and measure key performance indicators (KPIs), but this step is too frequently skipped in favor of getting to the finish line.

More likely, though, it's the inescapable truth that technology rarely can carry this burden alone. The actual technology is often the easy part. The organizational challenges are typically more difficult. Transformation must be approached in a comprehensive, strategic, and structural way, driven by decisions based on return on investment (ROI) and value along with a willingness to change processes to leverage the most value out of your technology investment.

Source: KPMG LLP (US) government digital pulse survey report 2024.

Is the private sector doing any better?

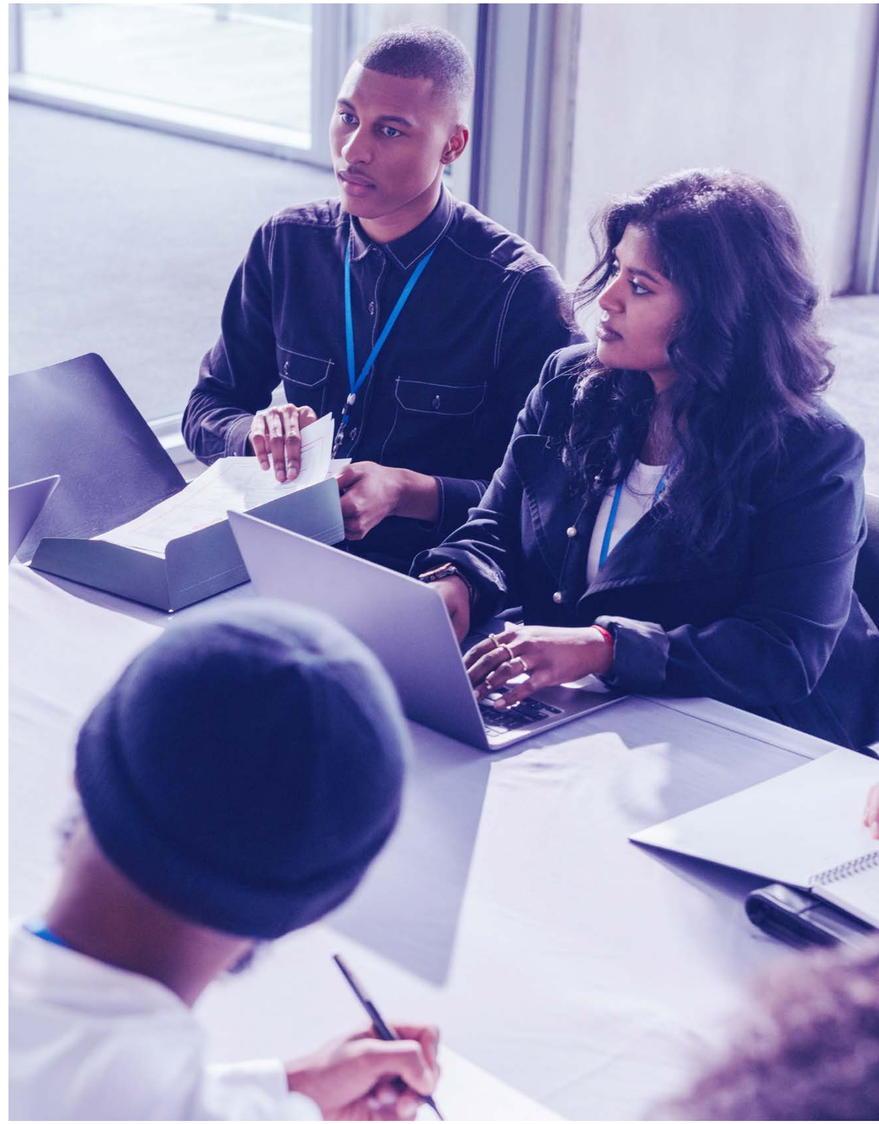
In another KPMG survey, the KPMG global tech report 2024,[1] only 45 percent of companies reported improvements in profitability and performance from digital transformation efforts in 2023—implying that 55 percent did not see improvements.

This roughly aligns with the 57 percent of government respondents who said that new technologies have had no impact on their daily work and productivity. This alignment of public sector to commercial impacts is surprising. Additionally, 72 percent said their outlook toward the adoption of emerging technology has improved over the last 12 months.

However, challenges remain when it comes to implementing and deriving value from technology transformation.

In addition to highlighting the need for a clear business case in driving transformation, these results also suggest that defining appropriate value-tracking metrics is critical for evaluating a project's impact at launch and beyond. Primary goals may include data integrity, increased cybersecurity, and improved constituent experience—not every project is focused on budget savings or productivity.

Defining these KPIs and how they will be measured should be part of the planning process, and strategically utilizing new tools and available data is vital. For projects aimed at improving workforce or constituent experience, for example, gathering feedback and sentiment data, coupled with GenAI-based summary and analysis tools, can be an effective way to track value.



1. Source: KPMG global tech report 2024.

A positive outlook on innovation

If the impact of past efforts has been disappointing, it hasn't yet discouraged decision-makers and influencers on adopting emerging technologies.

Nine out of ten say their awareness of emerging technologies has improved in the last year. A strong majority—more than seven in ten—say their outlook toward adopting such technologies has also improved, as has support from leadership for such efforts.

say their awareness of emerging technology improved over the last 12 months

Progress on cloud

Cloud technologies are now considered more commonplace than "emerging" within public sector organizations. This is a significant move from before the pandemic—one that was literally forced on many organizations.

Almost all respondents—93 percent—said they were very or extremely familiar with cloud technologies. Nearly three-quarters said cloud technologies could help their organization overcome its technology challenges in the next one-to-three years—it was the number one answer, up from 67 percent in last year's survey. Meanwhile, 62 percent said they have already implemented a cloud solution, and more than half had implemented enterprise cloud platforms such as enterprise resource planning (ERP). Nearly two-thirds said they were extremely or very prepared to implement cloud technologies.

This means leaders can focus on leveraging certain bespoke cloud services to deliver differentiated business capabilities that were not possible earlier. For example, seamless document handling across agencies that utilize the same cloud provider to eliminate redundant storage or even to optimize the cross-agency business processes.

Generative AI gaining ground

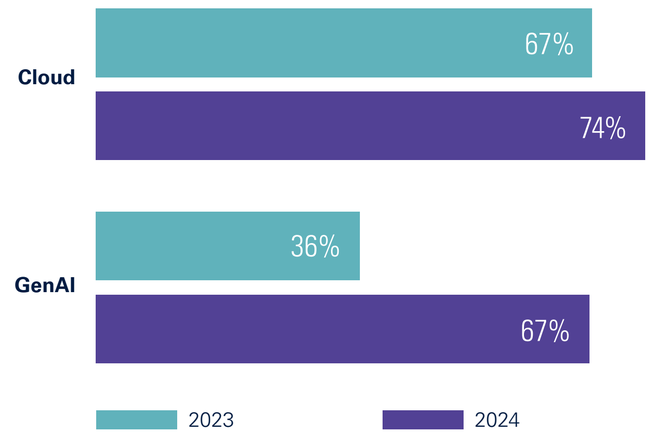
There appears to be a significant enthusiasm for GenAI solutions such as ChatGPT, but it may be offset by a lack of readiness to do so.

Given GenAI's prominence in the news, it may not be surprising that 84 percent of respondents said they were extremely or very familiar with GenAI. Sixty-eight percent said it was in their top three areas of current focus. Nearly the same number (67 percent) listed it among the top three strategies they believed could help overcome their agency's technology challenges in the next one-to-three years, up from just 36 percent of respondents last year.

Despite the enthusiasm, agencies largely appear to be at the "dipping-a-toe-in-the-water" stage. More than half of respondents mentioned AI or machine learning pilot projects already underway—more than three times the next item on the list (efficiency improvements).

Ranked in top 3 for overcoming challenges

Percent of respondents



Source: KPMG LLP (US) government digital pulse survey report 2024.

Only 14 percent said they had already implemented GenAI, but 60 percent said they will likely implement in the next one-to-three years. This is a significant increase over last year, where only 26 percent of respondents said they had plans to implement it within the next three years. Despite this enthusiasm, it was number one on the list of high or very high implementation risks, and just 16 percent said they were very or extremely prepared to implement it.

By contrast, many private sector firms are already seeing value from their GenAI implementations. Almost one-third (31 percent) of respondents in our global tech report said they are already deploying it at scale and in many cases are achieving a return on investment. Another 43 percent say they are investing strategically in GenAI and have use cases deployed throughout their organization.

While forging ahead with GenAI-based solutions and capabilities, government agencies should not overlook its potential to help accelerate their other transformation efforts. It's true there are many challenges to deploying GenAI, but utilizing it as an enabler can help us to execute complex technology initiatives.

At KPMG, for example, our cloud teams are using GenAI and other AI technologies to help automate much of the modernization and migration process—including identifying opportunities where modernization could create value. These tools can help us examine legacy applications, determine how best to migrate them, and how to design and build a modern digital architecture with configurations and integrations optimized for the specific circumstances. For agencies with many legacy systems and workforce skill gaps, GenAI may prove equally valuable as a transformation tool.

Traditional AI

GenAI appears to have stolen the spotlight from other AI technologies.

While two-thirds of respondents said that GenAI could help them overcome their technology challenges in the next one-to-three years, just 29 percent said that advanced data analytics and only 19 percent said traditional AI could do the same.

This result may be expected given the attention GenAI has garnered over the last year, but it is important for agencies to understand that GenAI is a subset of AI that may be optimal for many use cases but is not ideal for all of them. There are still many situations where traditional AI is a better fit, and understanding the difference is key to successful implementation.

It's all about the data

Not surprisingly, our global tech report found that organizations at higher AI adoption levels are more likely to be in the higher stages of data maturity than those at lower AI adoption levels.

Since data integrity and reliability are critical for deploying GenAI at scale, it is encouraging that our government survey reveals a solid appreciation of the value of data.

In the digital pulse survey, enhancing internal data and IT systems for improved agency decision-making was a close second on the list of areas of current focus (included by 70 percent of respondents). The same topped the list of priorities for the next one-to-three years, followed closely by improving the interoperability of data and IT systems among agencies. A full 82 percent said they have or are planning to implement data management to support advanced data analytics capabilities.

> "A clear roadmap with the what, why, and how for evolving and prioritizing business capabilities is essential for transformation success. It helps articulate a technology architecture that supports your vision, adapts to rapid technological changes, and maintains focus on critical data assets, which are fundamental to any modernization journey."

Ishan Kaul
Principal, KPMG LLP

Mixed messages on security

Enhancing digital security and privacy was the top answer (73 percent) when asked about their current area of focus.

This mirrors the results of the NASCIO State CIO Top Priorities survey,[2] where cybersecurity tied for the top position. Yet it dropped to number four on the list of top priorities for the next one-to-three years in the digital pulse survey—only 35 percent included it in their top three priorities. When asked about projects they may already have underway, only 7 percent mentioned cybersecurity, threat detection, or threat response.

In contrast, our global tech report found that many "leaders" (organizations that are at the highest levels of technology maturity) view cybersecurity as a key to thriving in the digital economy, and 38 percent of those respondents see risk and cybersecurity metrics as a top three priority for monitoring value achieved on technology investment and include security considerations at the earliest stages of projects.

say enhancing security and privacy is current focus

say it is a top three priority over the next 1-3 years

In a rapidly evolving technology landscape, it is essential that government agencies keep pace with cybersecurity advances. Self-adaptive security in particular may be undervalued or perhaps its benefits not fully appreciated. Only one in five said self-adaptive security could help them overcome their technology challenges in the next three years—even quantum computing ranked higher. Just 17 percent said they had already implemented it—less than the number who said they had already implemented extended or virtual reality. Only one in ten said their agency was extremely or very prepared to implement self-adaptive security.

While it's encouraging that government agencies are focused on security now, they should follow the lead of private sector organizations that have made cybersecurity a requirement, and often a success metric, for all technology initiatives.

2. NASCIO State CIO Top Ten Policy and Technology Priorities for 2024.

What about constituents?

Of course, any technology-driven enhancements are designed to improve the agency's ability to fulfill its mission, but most of the emphasis appears to be on internal improvements rather than constituent-facing initiatives.

In fact, prioritization of the constituent experience was on a downward trend from last year with 63 percent of respondents listing it as a current focus versus 76 percent in the previous year's survey. Similarly, only 52 percent ranked support for upskilling/re-skilling to prepare the US public to be future-ready as a top priority, down from 71 percent last year.

Furthermore, constituent experience ranked eighth on the list of priorities for the next one-to-three years, with only 24 percent of respondents including it among their top three. Other constituent-facing initiatives ranked even lower. Just 10 percent included mitigating fraud and misinformation in the same list of priorities; only 8 percent included leveraging advanced analytics to address social challenges.

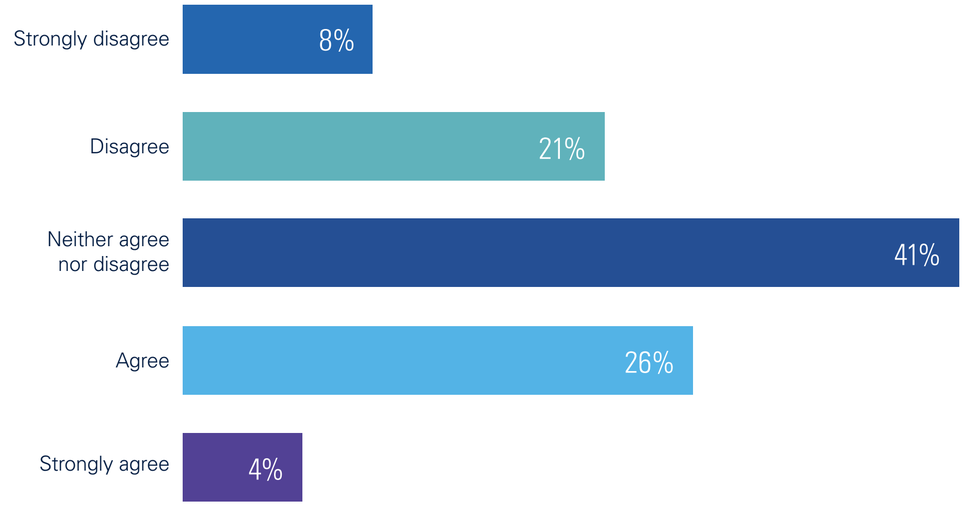
> "In a technology-driven initiative, there is often a clear correlation between constituent-centric approach and value realization. Constituent-centric approach prioritizes on creating a positive impact to constituents and their experience thereby enabling leaders to maximize the delivered value and return on investment."

Saravanan Subbarayan
Managing Director, KPMG LLP

And what do those constituents believe?

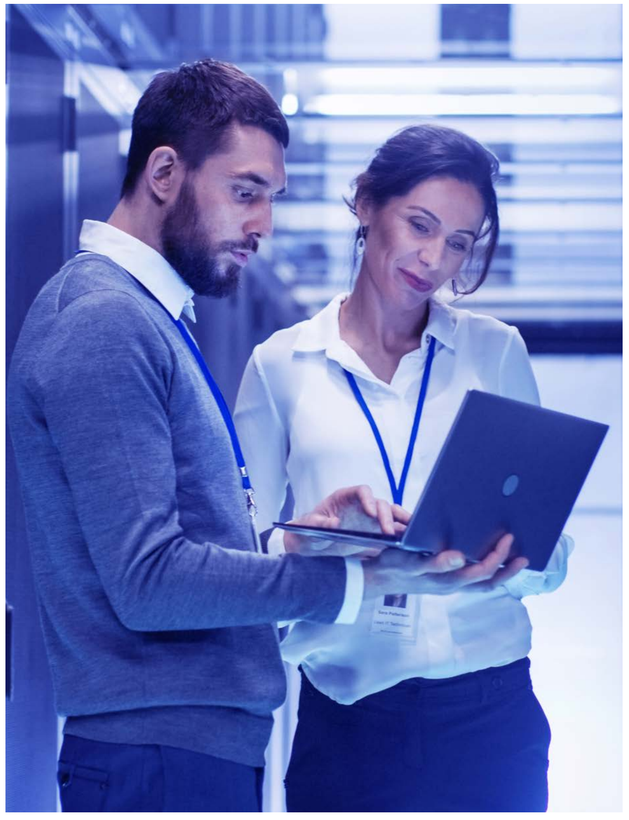
In a separate survey, the KPMG American Perspectives Survey,[3] which assessed the views of 1,100 adults across the US, we asked if government agencies adequately leverage technology to improve services and interactions with people.

Do government agencies adequately leverage technology to improve services and interactions with people?

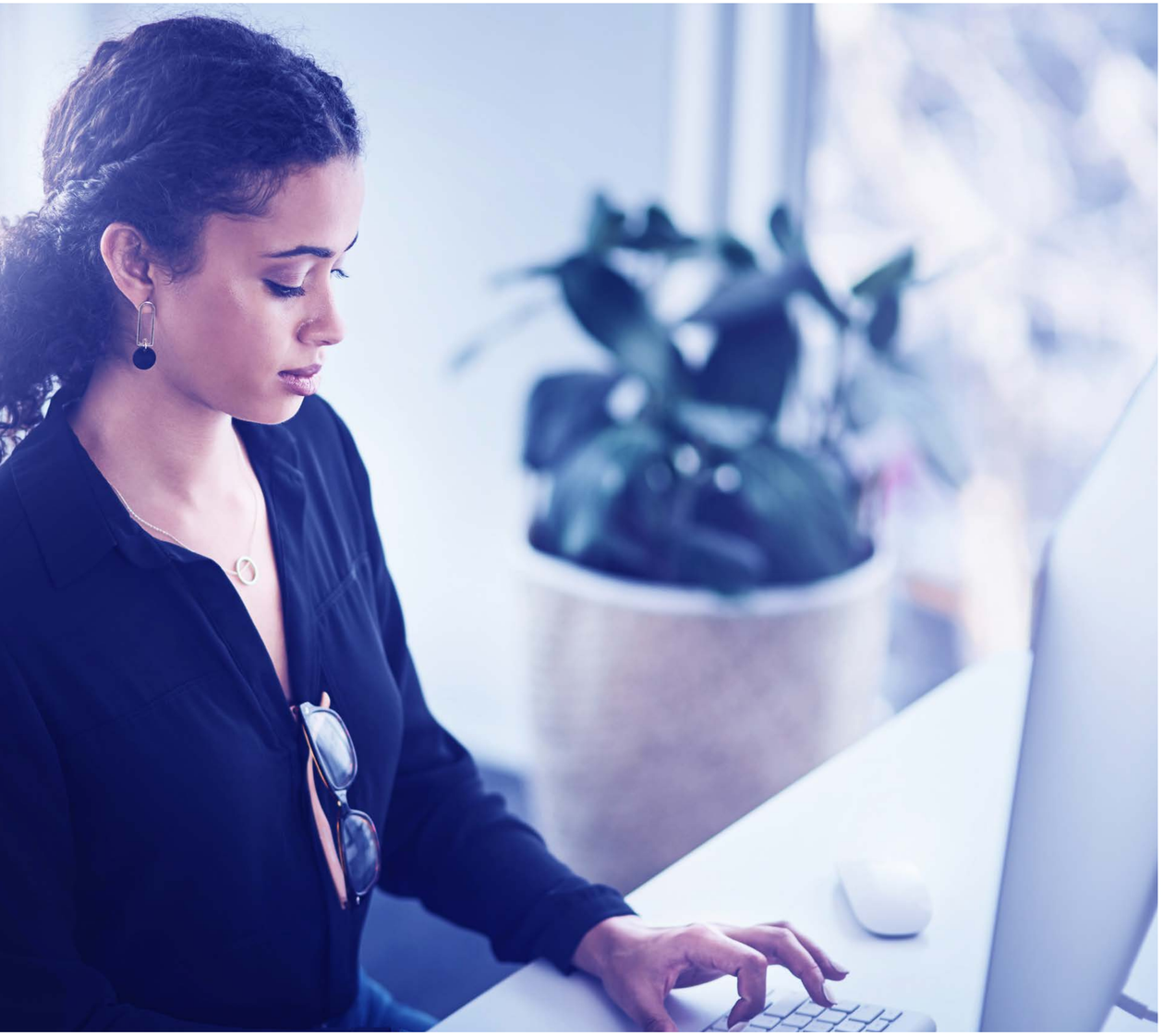


In general, people are evenly split—nearly the same number of people agreed that government uses technology adequately to improve services and interactions than those who disagreed, and the majority (41 percent) neither agree nor disagree. Interestingly, results split along generational lines—but not as you might expect.

Twice as many Gen Z and Millennials say the government uses technology adequately than not. But Gen X and Baby Boomers—the older people—appear to expect more. Eleven percent more of them believe government is not adequately using technology.



3. Source: KPMG American Perspectives Survey, Summer 2024.



Room to expand the use of technology—especially GenAI

In the same KPMG American Perspectives Survey,[4] we also asked how important they believed it was for government to use GenAI in various services if it improved the user experience.

There appears to be significant enthusiasm for GenAI. Sixty percent said it was very or extremely important for the DMV to incorporate GenAI. And roughly half of respondents said it was very or extremely important for several other services, including healthcare benefits, Social Security benefits, tax services, veterans' services, consumer complaints, and voter registration.

We believe that constituent-centric thinking can help focus government agencies on delivering services more efficiently and effectively. New technologies like GenAI paired with the increasing maturity of cloud and data infrastructure create opportunities to reimagine many service offerings and processes to better serve constituents and government employees.

4. Source: Ibid.

Elements of successful implementation

What does it take to successfully implement a new technology in government? It appears to be the same passion, drive, commitment, and leadership it takes to make any challenging effort succeed, whether it's inside or outside of government.

Strong leadership support was the number one answer (63 percent), topping even adequate funding (58 percent). One might expect this in government with changing administrations, yet when asked about their top three barriers to implementation, respondents put changes in leadership or administration near the bottom of the list—mentioned by just 15 percent.

Barriers to implementation

Cost or funding availability ranked at the top of the list of barriers to technology implementation (64 percent), nearly twice the number of the next item on the list, compatibility with existing systems (34 percent). This is a 9-point increase over last year's response rate, suggesting that cost is a growing concern.

Lack of talent rose 6 points over last year, with 32 percent of respondents listing it as a top three barrier to implementation. Given the rapid pace of technology change, this upward trend may not be unexpected.

Interestingly, data or security concerns were not perceived to be a leading barrier by the majority of respondents—only 27 percent included it in their top three. However, the concern was significantly greater for those in federal government (33 percent) compared to state government, where just 20 percent included it in their top three.

say cost or funding availability is the top barrier to technology implementation.

This differs sharply from what we see in the KPMG global tech report 2024, in which US private sector firms list cybersecurity and privacy as their top barriers to digital transformation.[5]

Finally, lack of a clear business case jumped to 20 percent from only 6 percent last year. While not a top concern, this increase suggests a growing acknowledgment that defining clear business goals is crucial for launching a successful technology transformation.

5. Source: KPMG global tech report 2024.

What comes next?

Overall, the survey is encouraging for the future of technology in government. Agencies are increasingly aware of emerging technologies and their potential within their organizations.

The survey also reflects the stark realities of prioritization—it is not practical to tackle every project on the wish list. Limited budgets, legacy infrastructure, talent gaps, and security concerns all require that agencies choose carefully how they allocate resources.

Transformation should be driven by clear and measurable goals, and we believe many agencies would do well to apply a constituent-centric approach when defining these objectives to ensure high-value outcomes. It is also important to consider how these technologies interact from a holistic viewpoint. Have you considered cybersecurity implications of the new service offering you're designing? Is your data reliable and secure enough for a production GenAI deployment? Prioritizing and executing strategically can help minimize roadblocks and poor results.

Although it requires a thoughtful and comprehensive approach, technology continues to hold great promise for helping government agencies fulfill their mission.

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 use 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 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 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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