Improving Tech ROI in Government

A strategic roadmap for Government CIOs in the age of AI

8 steps to help government CIOs improve technology ROI

In today's rapidly evolving technological landscape, CIOs play an increasingly pivotal role in propelling enterprise growth. Not long ago, CIOs were focused on solving the challenges of system-to-system communication. Today, with the emergence of artificial intelligence (AI) as the new area of focus, they have entered a new realm where they are also addressing agent-to-agent communications, leveraging advanced protocols such as MCP from OpenAI and A2A from Google. Modern CIOs are perceived as strategic partners responsible for aligning IT investments with overarching objectives. AI is dramatically transforming enterprises and approaches to meeting business objectives by unlocking unprecedented levels of automation, enhancing decision-making through advanced data analytics, and driving innovation with intelligent systems that can learn, adapt, and optimize processes in real-time. This alignment is crucial for navigating the complexities of emerging technologies such as AI and cloud computing.

Modern CIOs are expected to deliver robust ROI from tech investments while ensuring operational efficiency, cost predictability, and enhanced customer experiences. Achieving these goals requires a comprehensive approach that consolidates fragmented solutions, manages capability demands across functions, and prepares the infrastructure to support an intelligent cloud environment.

Achieve IT and agency alignment

About twenty years ago, the shift from conventional on-premise technology to SaaS compelled CIOs and IT leaders to reassess how IT could best support business needs. Today, AI is prompting CIOs to once again reexamine the role of IT—and their role personally—to advance objectives and maximize technology return on investment (ROI) with the right technology adoption strategy.

As pressure grows for CIOs to implement AI and generative AI (GenAI) solutions within the enterprise to improve cost efficiency or productivity, so too does the need for a modern IT organization to be capable of building an "intelligent transformation" designed to help achieve exponential value from leveraging its technology investments and data assets. This approach helps deliver seamless integration of AI that leverages streamlined data with the right-sized cloud to create a cohesive, scalable, and adaptive technology environment. This delivers advanced infrastructure which allows organizations to manage and process vast amounts of data efficiently. The result? Enhanced decision-making, enriched customer experiences, and improved operations. The modern infrastructure has the ability to deliver real-time data insights, predictive analytics, and automated operations, all within a secure and resilient framework.

Simply put, IT must undertake its own transformation if it is to effectively support the organization in the age of AI.

A roadmap that is both pragmatic and actionable

To master the digital transformation journey, a dynamic and actionable roadmap is crucial. Implementing a modern environment can supercharge an organization's capabilities and seamlessly align IT investments with agency objectives.

We believe there are eight fundamental steps CIOs must take to begin that journey.

1 Align IT investments with agency objectives

The first step is to ensure that every IT investment drives strategic agency goals. Begin by conducting a thorough AI-aware assessment of the existing IT infrastructure, applications, and processes to uncover inefficiencies and areas for improvement. Following the assessment, it is equally important to engage with leadership to align IT strategy with agency objectives. Incorporating ROI metrics helps ensure that IT initiatives are directly linked to agency outcomes, shifting the focus from a tech-for-tech's-sake approach to one centered on value creation.

2 Simplify and consolidate your IT infrastructure

CIOs must find a way to consolidate and connect fragmented solutions and manage capability demands from stakeholders holistically to realize operational efficiency, cost predictability, data and tech connectivity, and AI-powered applications. That's easier said than done. IT systems seem inevitably headed for increased complexity despite any effort to prevent it. It's not unusual for a large enterprise to have literally thousands of applications managed by IT. At one commercial client, we found 2700+ applications and 72 different ERP systems in use—and they have an ERP simplification roadmap that spans a decade.

Understanding the complexity: For the last decade, the agile concept of empowered teams gave internal organizations a carte blanche to innovate and purchase what they chose, which in turn brought a lot of innovation but also unprecedented complexity to the landscape. Moreover, the SaaS model fostered the emergence of shadow IT organizations that created multi-cloud environments—and dozens of silos of data. Data may reside in multiple hyperscalers, data lakes, NoSQL databases, and legacy on-prem systems. Strategies that created this disorder may have been sound at the time, enabling quick implementations and spreading risk. AI is now exposing those cracks in the foundation since it is only as good at the data that goes in. These fragmented systems are now hindering any effort aimed at enabling an AI-powered enterprise.

Mapping the infrastructure: Despite the Herculean nature of consolidating and connecting fragmented systems and data, the boulder must be pushed uphill if AI transformations are to deliver value. As the proverb says, a journey of a thousand miles begins with a single step. Here, that step is to use an AI-aware current state assessment tool to map out the entire infrastructure. These tools can quickly expose

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2 Simplify and consolidate your IT infrastructure

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cracks within your data cloud and application foundations—highlighting complexities, redundancies, inefficiencies, and roadblocks.

The key is to prioritize. You must determine which cracks in the foundation are undermining the larger agency goals and which ones can be ignored for the time being. Here's where that clarity on agency objectives comes into play. It may be extraordinarily frustrating and costly to maintain the half a dozen or more ERP systems, but if consolidation doesn't advance a priority, then they may be better off left alone—for now.

Hierarchical framework: To address this in a methodical way, it may be helpful to envision all of the technologies, capabilities, and agency objectives required of IT in a transformation effort as a hierarchical framework. The framework we've developed provides a structured approach designed to help IT and the organization get the most value from its technology investments and data assets.

Its multi-layered design informs what we believe is the right approach to any transformation effort. Our typical recommendation is to start at the bottom of the stack, but given the current budgetary constraints finding the funds to fix what's important may be hard. Given that, leveraging our AI-powered assessment and building a horizontal roadmap to attack the low to medium effort, but high ROI initiatives, could be the best path.

Solid foundation: A solid foundation is required at each level in order for the next level to be successful. Bypassing a foundational layer is the equivalent of building a skyscraper on sand, and it's often why transformation projects fail to deliver ROI. This is especially true for transformation projects designed to deliver AI-powered experiences. AI is only as good as your data and its connectivity to that data, and your data is only as good as your underlying infrastructure. Unless your infrastructure decisions are sound, you can't make sound data decisions, application decisions, connectivity and integration decisions, and so on.

You must make sure that the data the organization requires is available, integrated, and trusted—that it's ready for AI, including strategies for handling unstructured data. The thousands of applications create at least as many different entry points in the pyramid where data can be simplified. It's modernizing with a purpose, to manage your data as a strategic asset by getting it ready for AI at the most fundamental, foundational level.

3 Holistic planning and agile implementation

Develop a holistic and flexible implementation strategy tailored to the organization’s specific needs. This involves creating an adaptable IT roadmap that is aligned to the strategic objectives. A holistic planning approach helps ensure technology remains in sync with evolving agency goals, allowing quick adaptation to changing needs. Integrating continuous feedback loops lowers misalignment risks and helps ensure IT investments contribute effectively to strategic objectives.

4 Incremental investments and strategic initiatives

Foundational investments in technology and infrastructure are crucial for deploying advanced AI and cloud capabilities. Prioritize addressing baseline infrastructure needs first to ensure a robust foundation. Embed AI into operational workflows to automate routine tasks, refine data analyses, and streamline operations. An incremental approach manages risk and allows adaptation based on performance data, aligning investments with strategic goals.

5 Protect the crown jewels

Adopting a zero-trust security model helps ensure that every access request is authenticated, authorized, and encrypted, safeguarding critical data. Implementing solid data governance frameworks maintains data integrity, regulatory compliance, and secure access. Furthermore, proactive risk management involves identifying and addressing potential security risks before they escalate. Fostering a culture of security awareness across the organization can significantly mitigate such risks.

Recognizing the existential threat posed by security vulnerabilities is crucial. For instance, Satya Nadella, the CEO of Microsoft, has traditionally focused on revenue growth as most CEOs do. But recently he made an executive decision saying everything must be secured by design. "We are doubling down on this very important work, putting security above all else—before all other features and investments."[1] That's a profound shift in priorities, but clearly one the tech giant sees as essential for its continued existence.

Focusing on security can significantly increase the ROI of transformation initiatives by helping to prevent costly breaches and compliance violations (and their associated fines and legal costs), enable continuity, and avoid the erosion of citizen trust. Calculating risk ROI must be an essential part of any transformation effort.

1 Source; "Haunted by breaches, Microsoft is 'putting security above all else,' vows CEO Satya Nadella," Todd Bishop, GeekWire, April 25, 2024

6 Leverage AI for your own initiatives

As you help implement AI solutions for the rest of the agency, also determine how they can help IT advance transformation initiatives and improve technology ROI. IT advance transformation initiatives and improve technology ROI. AI has quickly become a force-multiplier and accelerator for digital transformation initiatives. AI and GenAI tools can be used to power key components at each step of the transformation journey—and at each level of the transformation hierarchy, from cloud-based platforms to AI-powered user experiences.

AI tools can help create an IT organization and infrastructure optimized to deliver AI-powered experiences for citizens, employees, and partners because AI is an essential component of any transformation effort from the start.

Beyond conducting a current state assessment, AI can help at the initial phases of a project to identify stakeholders, gather input, and make that input readily accessible to decision-makers, designers, and developers. It can help developers not only speed code development but also more readily access code specifications and design requirements that otherwise may be buried in volumes of documents. It can help gather and analyze feedback and sentiment data from various sources, such as social media, online forums, surveys, and customer service interactions.

GenAI can be leveraged to customize comprehensive training programs. It can help address skills gaps, allowing your personnel to focus time and attention on critical tasks that require human expertise, creativity, and judgment. For organizations managing an aging workforce and the challenge of maintaining legacy systems, GenAI can significantly broaden the spectrum of employees who can contribute to these essential functions.

Consider, too, that one of the more powerful aspects of GenAI is its ability to democratize AI, moving it out of the realm of data scientists and technical experts and into the hands of "regular" people. That means that it's never been so easy for so many people to work on transformation. Engaging people with domain-specific expertise and "spreading the load" away from IT alone can be of tremendous value. Simply using GenAI to take minutes of a meeting, for example, will save time for project managers or scrum masters, enabling them to focus more on execution and address blockers and dependencies.

7 Phased implementation and monitoring

Launch AI and cloud pilots within selected governmental units to validate their value and refine implementation strategies. Early successes can build momentum and secure broader buy-in from stakeholders. Continuous monitoring and optimization of technology deployments are crucial. Utilize AI-driven analytics to track progress, identify new opportunities, measure success factors, and address challenges. This ongoing monitoring ensures the organization remains agile and responsive to evolving needs.

8 Scalable, tailored solutions

Develop scalable AI and cloud solutions tailored to specific needs. Scaled, tailored solutions help ensure flexibility and responsiveness to changing requirements. Promoting cross-functional collaboration between IT and governmental units fosters cohesive technology integration across the enterprise. A culture of innovation and collaboration drives effective technology integration, ensuring all IT investments contribute to overall success.

Moving forward: Secure and sustainable growth

For CIOs, aligning IT investments with agency goals via intelligent cloud solutions is essential for sustaining growth and maintaining competitive advantage. By adopting a holistic, strategic, and incremental approach, CIOs can drive transformative value and help ensure technology investments support success. Leveraging these modern solutions helps navigate future complexities with agility, driving sustainable growth and unlocking limitless possibilities.

KPMG Intelligent Transformation: The smart solution for CIOs

The KPMG Intelligent Transformation solutions address the distinct challenges faced by contemporary CIOs. Our approach emphasizes strategic alignment, holistic integration, and incremental progress, ensuring that technology investments deliver sustainable value.

Here's how KPMG's approach stands out:

Strategic Alignment: Our first step is to align the cloud strategy with your overarching objectives. We understand that technology should not just support the organization but drive it. By aligning IT goals with agency outcomes, we help ensure that every technological advancement propels the organization towards its strategic aims.

Expert Guidance: Navigating the complexities of digital transformation requires expertise. Collaborate with KPMG seasoned experts to develop a clear, actionable roadmap for your IT and agency transformations. Our consultants work closely with your team, ensuring that every step of the plan aligns with your strategic goals and addresses your unique challenges.

Holistic Integration: Fragmented solutions and data silos can hinder your digital transformation efforts. Our cross-functional expertise aims to consolidate and connect these fragmented solutions. By integrating IT systems and data effectively, we streamline operations, reduce redundancies, and create an environment where data flows seamlessly across the organization.

Incremental Advancement: Transformation is not an overnight process. We advocate for a phased, incremental approach to technology investments. This strategy allows organizations to realize immediate gains while laying the groundwork for long-term success. Each phase builds on the previous one, incorporating feedback and adjustments to help ensure continuous improvement and alignment with agency goals.

Enhanced Security and Compliance: In an age where cyber threats are ever-evolving, our approach emphasizes robust security measures. We incorporate zero-trust security models, advanced encryption, and continuous monitoring to safeguard critical data and help ensure compliance with regulatory standards.

Adaptive and Scalable Solutions: The landscape is dynamic, and so are our solutions. We design cloud environments that are not only resilient but also adaptable to changing needs.

How to improve your journey to Intelligent Transformation

To effectively transition, follow these steps:

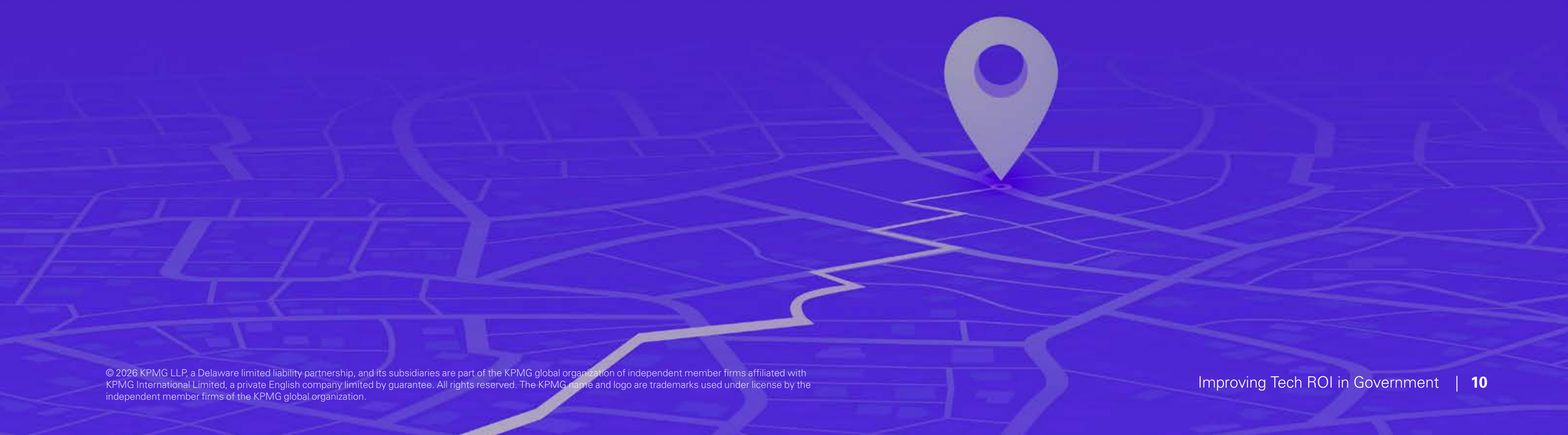
1 Comprehensive assessments and strategic planning: We begin with a thorough assessment of your current IT and agency environment, identifying gaps and opportunities. We then co-create a strategic plan that aligns technology initiatives with your objectives.

2 Integration and optimization: We facilitate the integration of cloud services and AI technologies into your existing infrastructure. Our focus is on optimizing performance while maintaining security and compliance, focusing on a seamless transition to a modern environment.

3 Sustainable and incremental transformation: Understanding that transformation is a journey, we emphasize sustainable progress through incremental advancements. This approach minimizes disruption, manages risks, and provides measurable improvements at each stage, building confidence and ensuring continued alignment with agency goals.

4 Continuous Monitoring and Support: Post-implementation, we offer continuous monitoring and support to help ensure the solutions remain effective and aligned with evolving needs. Our proactive approach includes real-time analytics, performance tracking, and regular updates to address any emerging challenges.

5 Elevating outcomes: Our ultimate goal is to elevate outcomes by leveraging the Intelligent Transformation framework. This means not just maintaining but enhancing operational efficiency, fostering innovation, and enabling exponential growth through a resilient and adaptive technology environment.



Taking action: The urgency of CIOs

The urgency for CIOs to adopt this measured approach cannot be overstated. Delaying action risks missed opportunities, inefficiencies, and efficient and effective delivery of government services. By adopting a holistic, strategic, and incremental approach, CIOs can drive transformative value and help ensure technology investments support success.

Intelligent transformation:

The path to future readiness

The KPMG Intelligent Transformation solutions are designed to help organizations navigate future complexities with agility. Embracing these solutions helps ensure sustainable growth, secures lasting competitive advantages, and positions organizations for future readiness. Together, we can build a resilient and modern environment that drives exponential outcomes.

Contact us to learn how KPMG can support your journey to sustained success.

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