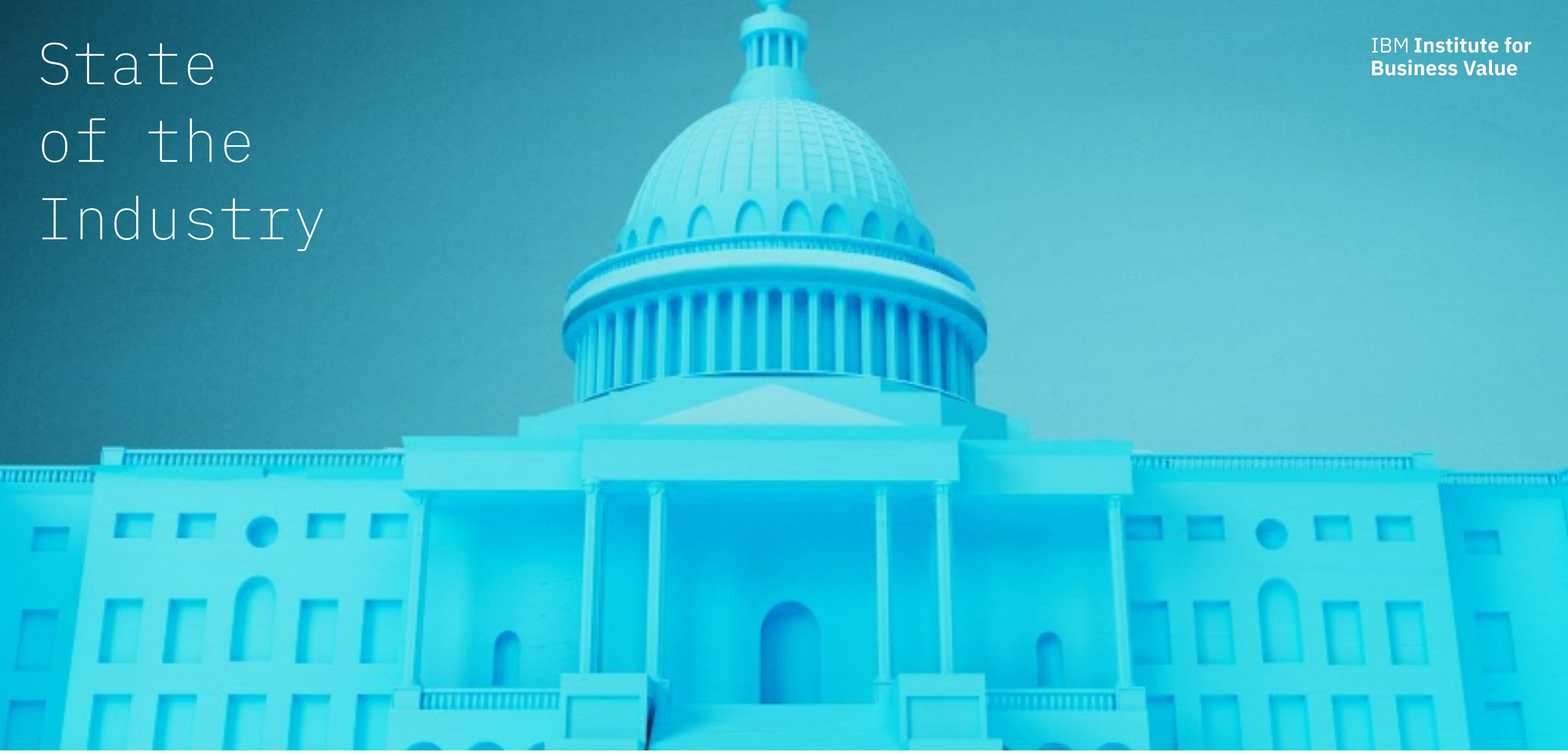
State of the Industry



IBM **Institute for Business Value**

Government

IBM

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Executive summary

In an era of geopolitical instability, economic fragmentation, rapid technological advancements, and extreme weather events and natural disasters, the mission of government—to protect, serve, and empower—has never been more critical. The ability to negotiate these seismic shifts will determine national security, economic resilience, and societal well-being for decades to come.

What follows is a strategic perspective on the forces reshaping governments worldwide along with the challenges and opportunities they create. It outlines key imperatives and transformational technologies governments must embrace to safeguard national security, drive efficiency, enhance resilience, and lead innovation. Real-world examples illustrate these dynamics, showing how governments—working with private sector partners—have moved from *invention to implementation* to successfully leverage modern technologies to address strategic imperatives and build future-ready institutions.

As governments navigate uncertainty, the ability to anticipate and prepare for shocks—unexpected disruptive events—before they occur is just as critical as the capacity to respond and recover afterward. By adopting forward-thinking strategies and fostering cross-sector collaboration, governments can help ensure resilience and adaptability in the face of future challenges.

Note: Unless otherwise indicated, data points reflect responses from government survey respondents.

Industry dynamics and technology trends

Macro trends

Governments are operating in a time increasingly defined by unprecedented uncertainty and volatility.

Geopolitical instability reshapes global power structures

Rising regional conflicts, economic protectionism, and shifting alliances are redefining international relations and national priorities. These dynamics are also contributing to growing tensions over roles and responsibilities between national, regional, and local governments—complicating mission delivery in areas such as disaster response, public safety, and critical health services.

The economic impact of violence—including armed conflict, internal unrest, and militarization—was estimated at $19.1 trillion, representing 13.5% of global GDP[1]

Cascading shocks challenge societal resilience

A surge in complex, interconnected shock events—from public health crises and extreme weather events to digital infrastructure failures—is putting unprecedented strain on communities and public institutions, demanding more agile, predictive, and collaborative response systems and networks.

60% of government leaders say shock-level events are likely to increase in frequency in the future[2]

70% of these leaders say that shocks are likely to increase in intensity and impact

Economic fragmentation redefines globalization

Trade realignment, supply chain localization, and national self-sufficiency are altering global trade dynamics, compelling governments to rethink policy strategies as well as strategic partnerships and alliances.

86% of executives said their location strategy was impacted by geopolitical disruption[3]

And that figure is expected to rise to 93% in 2026

US-imposed tariffs could result in a $1.4 trillion loss to the global economy[4]

AI and automation disrupt work, warfare, and social welfare

The rapid adoption of AI is enabling governments to reimagine public services This technological revolution presents both opportunities in work, warfare, and social warfare as well as challenges that require careful management and strategic foresight.

92 million jobs are expected to be displaced by 2030[5]

60% of government executives say their organization is actively adopting AI agents and is prepared to implement them at scale[6]

Climate and demographic shifts challenge stability

Climate and conflict-driven migration, urban crowding, and aging populations are converging and placing new pressures on governments and public resources.

122+ million people remained forcibly displaced worldwide due to war, persecution, violence, and human rights violations[7]

Key challenges and opportunities

Governments must balance the dual mandate of resilience and innovation.

Cyber and physical threats grow in complexity

Challenge: AI-driven disinformation, cyber warfare, and critical infrastructure vulnerabilities are accelerating risk exposure across sectors.

Opportunity: Investing in AI-powered threat intelligence, quantum-safe encryption, and cross-border cybersecurity partnerships can strengthen resilience.

2,553: Average number of cyberattacks per week on government organizations with government being the second-most targeted sector[1]

Mistrust and citizen anxiety are on the rise

Challenge: Globally, trust in governments and institutions is declining while concern about personal and collective safety increases. Disparities in crisis response, misinformation, and digital surveillance have widened the trust gap.

Opportunity: Transparent governance, participatory policymaking, and ethical technology frameworks can rebuild trust and foster societal cohesion.

81% of leaders say constituent trust will have a greater impact on their success than any specific product and service features, and only

1 in 3 constituents have high levels of trust in their nation's central government[2]

Global race for technological leadership accelerates

Challenge: Navigating the AI arms race, ensuring digital sovereignty, and regulating emerging technologies are urgent and complex imperatives.

Opportunity: Investing in capabilities to build national-level AI resilience—including digital and energy infrastructure, strategic alliances and partnerships, and regulatory and ethical frameworks—can enable innovation and build economic sustainability and societal prosperity.

61%: China's share of all global AI patent filings in 2023, representing more than

25x the number filed in the US[3]

Productivity and efficiency pressures intensify

Challenge: Governments face growing pressure to deliver more with less. Rising productivity demands, fiscal constraints, and labor shortages are forcing leaders to fundamentally rethink how they operate.

Opportunity: AI-powered automation and cost optimization can boost productivity, reduce inefficiencies, and free resources for mission-critical programs.

$500B: Cuts proposed to annual federal spending by the US Department of Government Efficiency[4]

69% of government executives say the potential productivity gains from automation are so great they must accept significant risk to keep pace with change[5]

Climate, economic, and demographic shocks demand adaptive strategies

Challenge: Escalating climate-related events, volatile markets, and demographic imbalances threaten national stability and economic continuity.

Opportunity: AI-enabled predictive modeling, climate-resilient infrastructure, and adaptive workforce and educational strategies can help mitigate future disruptions.

60% of government leaders say shock-level events are likely to increase in frequency in the future, and

70% of these leaders say that shocks are likely to increase in intensity and impact[6]

Key technologies and their impact

Modern technologies pave the path for smarter, safer, and future-ready governments.

Data, automation, and AI

Data, automation, and AI are key to driving efficiency, insights, and innovation.

Using data to inform decisions, leveraging automation to streamline processes and reduce human error, and applying AI to enhance capabilities such as prediction, personalization, and decision-making empower governments to optimize operations, improve and reimagine constituent experiences, and drive innovation in a rapidly evolving digital landscape.

60%

of government executives say their organization is actively adopting AI agents and are prepared to implement them at scale[1]

Hybrid cloud by design

“Hybrid cloud by design” is more than just a cloud strategy; it is a comprehensive method for businesses to operate more efficiently and effectively.

By adopting this intentional approach, governments can overcome the complexities of a disconnected IT estate, achieve higher ROI, and drive improved mission outcomes through integrated, automated, and scalable solutions.

3x

On average, IT executives from organizations adopting hybrid by design for their digital transformation efforts reported 3x higher ROI than those that don’t[2]

Secure by design

"Secure by design” prioritizes the security of constituents as a core business requirement, rather than merely treating it as a technical feature.

Key principles include implementing strong access controls, encryption, and regular vulnerability assessments, ensuring that security is built into every layer of a system.

Applying secure by design principles, governments can help minimize risks and protect data and systems from the ground up.

#2

Cybersecurity and data privacy rank second in terms of top priorities for government executives over the next 3 years[3]

Quantum

Quantum computing is an emergent field of cutting-edge computer science harnessing the unique qualities of quantum mechanics to solve problems beyond the ability of even the most powerful classical computers.

Governments can leverage quantum computing to explore how to optimize large-scale logistics and infrastructure, accelerate materials and drug discovery, model complex environmental and economic systems, and build resilient healthcare and energy systems.

10.5%

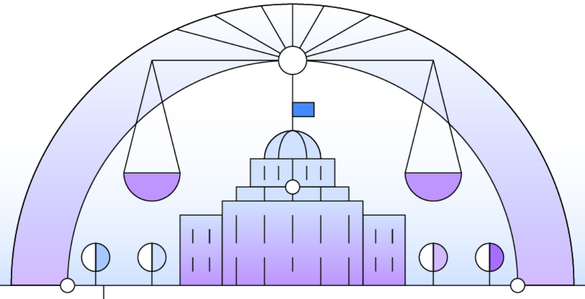
Expected ROI on quantum computing investments by 2043[4]

Government scope and complexity

These trends and dynamics are reshaping industries, economies, and societies. While they impact all sectors, their implications for governments are uniquely complex due to the breadth and scope of public sector missions—spanning citizen services, national security, public safety, healthcare, infrastructure, and economic affairs.

Government represents an “industry of industries” that shapes lives, powers economies, and responds to a world in flux.

Core functions that define the scope and complexity of government activities



General public services:
Includes executive and legislative organs, financial and fiscal affairs, external affairs, foreign economic aid, basic research, and public debt transactions.

Health:
Encompasses services such as medical products, outpatient and hospital services, public health services, and health R&D.

Defense and intelligence:
Covers military defense, civil defense, foreign military aid, and R&D related to defense.

Economic affairs:
Includes general economic, commercial and labor affairs, agriculture, energy, mining, manufacturing, construction, transport, communication, and R&D related to economic affairs.

Public order and safety:
Encompasses police services, fire protection, law courts, and prisons.

Environmental protection:
Covers waste management, water and air pollution abatement, biodiversity, and environmental R&D.

Social protection:
Encompasses sickness and disability, old age, survivors, family and children, unemployment, and housing-related social support.

Housing and community amenities:
Includes housing development, water supply, street lighting, and urban planning.

Education:
Includes pre-primary through tertiary education, subsidiary services, and education R&D.

Recreation, culture, and religion:
Covers recreational and sporting services, cultural services, broadcasting, and religious services.

Source: Derived from the OECD Classification of the Functions of Government (COFOG).

Governments must respond to the trends and dynamics shaping nations, states and communities while simultaneously addressing a growing erosion of public trust and rising concerns about safety and social cohesion.

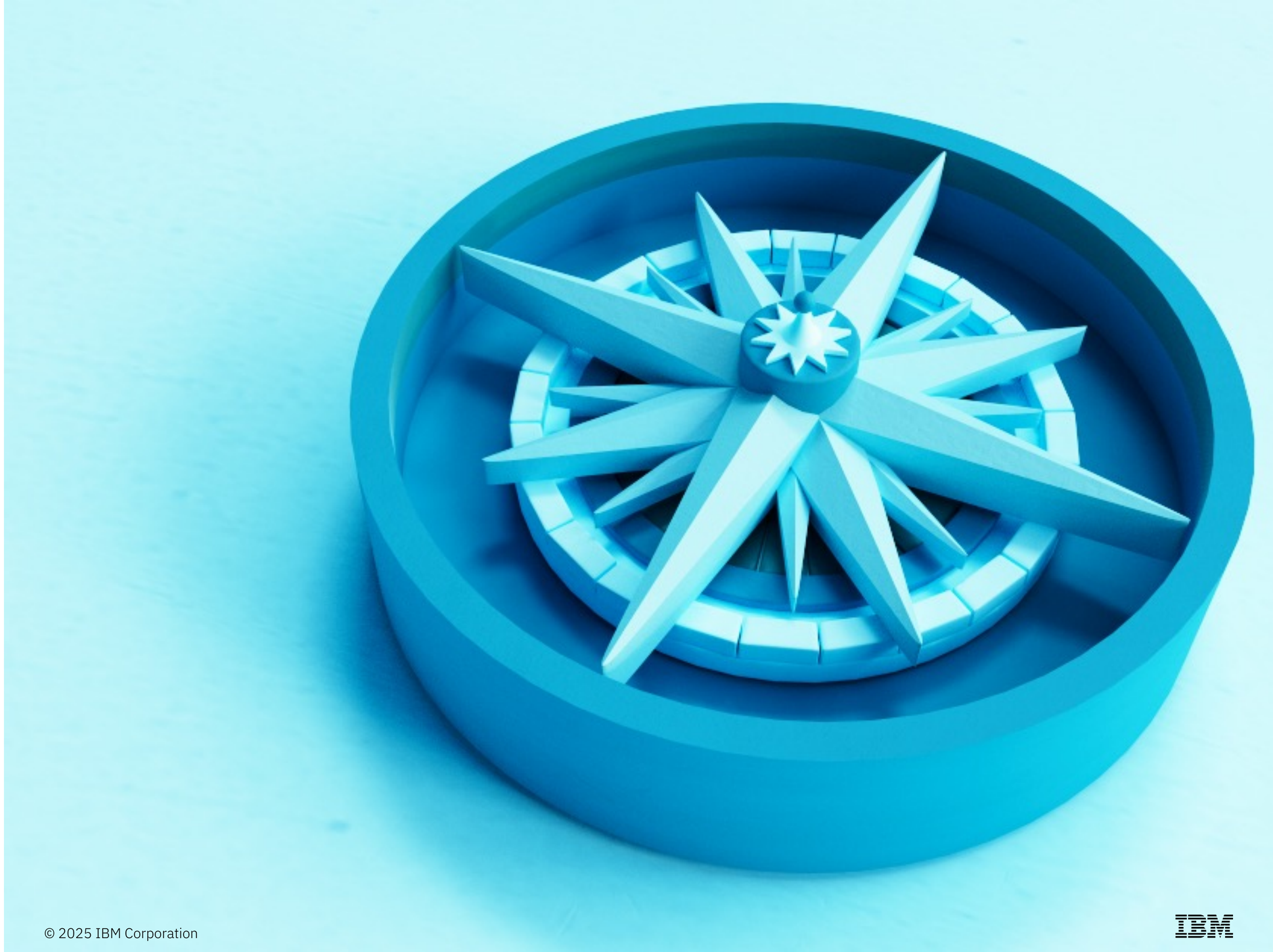
The public expects governments not only to protect and respond—but to anticipate, adapt, and lead.

Effective coordination between federal, state, and local governments, robust public-private partnerships, and cross-border coordination is essential to navigate these challenges.

Strategic imperatives

To address these challenges and seize opportunities, government leaders must act decisively in five key areas:

- Innovation
- Engagement
- Efficiency
- Security
- Resilience



What to know
Innovation

Innovation is a leadership model. It must be institutionalized across agencies and embedded into daily decision-making—not confined to labs or limited-term projects.

Future-ready governments embed innovation into culture, partnerships, and operations to outpace disruption and deliver impact at scale.

Technology is the engine for reshaping governance and expanding public and private sector capabilities.

Innovation is no longer optional for governments—it is existential. In the face of accelerating disruption, from AI to extreme weather events and global shocks, public institutions must evolve faster than the challenges they face. Yet traditional innovation models—confined to pilot projects or isolated digital teams—are too slow, too siloed, and too risk-averse to meet today's demands.

Government leaders rank product and service innovation among their top challenges—underscoring the urgent need to embed innovation into core operations, not treat it as a side initiative.[1] According to IBM's *Building Future Ready Governments* report, successful public sector organizations do just that, enabling them to proactively adapt to disruptions and drive continuous improvement.[2] Most government agencies that demonstrated resilience during the COVID-19 pandemic also shared a defining trait: they recognized that failure is inherent to the innovation process.

Success stories are emerging

- In Norway, the Agder Health Community used digital strategy mapping and collaborative risk modeling to redesign its pandemic response—creating a scalable, multiorganizational resilience framework that is now influencing crisis planning across Europe.[3]
- In Moldova, the government transformed a volunteer-built refugee website into a national digital platform within weeks—coordinating identity, housing, and healthcare services for more than a million people fleeing conflict. [4]
- In Colorado, integrated water and land use planning is driving cross-agency innovation and enabling communities to proactively address drought and water scarcity. [5]
- And NASA, in collaboration with IBM, is building open-source AI foundation models to democratize high-resolution climate forecasting—empowering local leaders to make faster, data-informed resilience decisions. [6]

30%

of government senior executives say product and service innovation is their organization's highest priority

and another

30%

state that business model innovation is their organization's highest priority[7]

What to do
Innovation

Foster a culture of innovation and experimentation and invest in skills, technology and trusted partnerships needed to drive digital transformation across sectors.

89%

of government executives say AI will drive product and service innovation

and

85%

say it will enable business model innovation over the next 3 years[8]

Institutionalize innovation beyond pilots.
Innovation needs structure, not isolation. Embed it across agencies, not just in digital labs. Governments should:

- Establish permanent innovation teams that partner across policy, IT, and operations.
- Create innovation funds and fast-track mechanisms for high-impact ideas and cross-sector digital solutions.
- Define metrics for innovation adoption and impact—not just activity.

Tap ecosystems for open, applied innovation.
The best ideas don't always come from inside. Ecosystems expand capability, speed, and scalability. Governments should:

- Collaborate with academia, startups, and civil society and trusted IT partners to co-design interoperable and scalable solutions.
- Use open standards, APIs, and data-sharing platforms to encourage joint innovation.
- Run challenge-based procurements and public innovation sprints to surface new cross-sector solutions.

Make innovation safe to try.
Progress demands risk. Innovation flourishes where teams are empowered to test, learn, and adapt. Governments should:

- Build agile governance models that protect experimentation without hindering compliance.
- Recognize and reward intelligent risk-taking at all levels of the organization.
- Use post-project reviews to capture lessons and institutionalize effective practices what work across sectors.

Innovation must be integrated into the core operations of government agencies rather than being confined to isolated projects. By embedding innovation into policies, processes, and daily practices, governments can help ensure continuous improvement and adaptability to disruptions, ultimately driving impactful and scalable outcomes.

What to know
Engagement

As public trust wanes and expectations surge, engagement must become a core strategic function.

Future-ready governments meet people where they are, listen continuously, and deliver services that feel less like a transaction and more like a relationship.

Personalized, proactive, and inclusive public services can foster trust, transparency, and satisfaction.

Citizen expectations are rising—and changing. In a world of always-on, hyper-personalized digital experiences, constituents increasingly expect government services to be intuitive, proactive, and equitable. But too often, they encounter systems built for bureaucracy, not users. Fragmented services, inaccessible platforms, and impersonal interactions add to the erosion of trust.

This is a moment of truth for public engagement. Improving the constituent experience and cybersecurity top the list of priorities for government leaders. Critically, 81% say constituent trust will have a greater impact on their success than any specific product or service feature.[1] But intent is not enough. True engagement goes beyond better websites or chatbot upgrades. It requires a shift in mindset: from one-size-fits-all transactions to responsive, inclusive, and insight-driven service ecosystems.

The stakes are high. Trust in institutions is fragile, particularly in communities historically underserved or digitally excluded. Younger generations expect transparency, speed, and real-time responsiveness. At the same time, older populations still rely on traditional channels and expect reliability and empathy. Governments must deliver for all—seamlessly bridging digital and physical channels, while anticipating needs and providing consistent, accessible support.

Designing for engagement means building around people, not processes. It requires surfacing real-time data, incorporating user feedback, and empowering frontline workers. The goal is not just satisfaction—it's legitimacy. In an era of polarization and public cynicism, effective engagement is a strategic lever for democratic resilience, operational relevance, and institutional success.

81%

of government CEOs say constituent trust will have a greater impact on their success than any specific product and service features[2]

and

65%

of government demand leaders plan to increase their focus on public trust in the next year.[3]

However,

Only 1 in 3

constituents have high levels of trust in their nation's central government.[4]

What to do
Engagement

#1

Government executives say improving the constituent experience tops their priority list over the next 3 years[5]

60%

of government executives say their organization is actively adopting AI agents and is prepared to implement them at scale[6]

65%

of government CMOs acknowledge that the success of AI hinges more on people's buy-in than the technology itself[7]

Reimagine constituent experiences, fundamentally rethinking and improving how individuals interact and engage with government organizations.

Personalize services through data and AI.
Generic services no longer cut it. Personalization fosters relevance, trust, and better outcomes. Governments should:

- Leverage citizen data to tailor communications, eligibility, and program delivery based on life events and needs.
- Deploy AI and analytics to anticipate service requests and automate next-best actions.
- Use behavioral insights to shape interactions that increase participation, satisfaction, and policy compliance.

Design services that reach everyone.
Government engagement must reflect the full range of how people live, communicate, and access support. Governments should:

- Ensure services are usable across devices, languages, and ability levels, with accessible digital interfaces.
- Offer flexible service channels—combining self-service tools with live, knowledgeable human assistance.
- Expand reach through mobile-first design, public kiosks, and local outreach in underserved communities.

Build feedback loops that drive continuous improvement.
Listening is a strategy. Feedback should be real-time, visible, and acted upon. Governments should:

- Establish embedded feedback tools across digital platforms and in-person touchpoints.
- Analyze feedback trends using AI and natural language processing to surface systemic issues.
- Empower frontline staff to escalate insights and propose service design changes.

Government services should be designed with people, not just delivered to them. Elevating communications to core strategic function means ensuring services are accessible, inclusive, and responsive, which then builds lasting trust and satisfaction.

What to know
Efficiency

Efficiency today means more than cost-cutting. As governments face fiscal pressure, labor shortages, and rising public expectations, the real challenge is to deliver more with less—without defaulting to austerity. This requires reimagining service delivery by automating the routine, streamlining operations, and building smarter, faster, and more adaptive institutions powered by AI, data, and automation.

Optimized public sector operations can improve service delivery while helping reduce costs.

Governments worldwide are grappling with compounding operational pressures—aging infrastructure, shrinking workforces, rising citizen demands, and budget constraints. The traditional tools of efficiency—outsourcing, hiring freezes, and cost-cutting—no longer suffice. What's needed is structural transformation.

AI and automation present powerful opportunities to reengineer core processes, improve service speed, and reduce operational friction. At the same time, hybrid cloud platforms enable legacy systems to evolve rather than be replaced, helping reduce cost and complexity. However, technology alone is not enough. True efficiency requires rethinking the "how" and "why" of government operations—from procurement and licensing to benefits delivery and regulatory oversight.

The future-ready government doesn't just digitize—it designs for agility, responsiveness, and scale. Public sector leaders cite productivity and efficiency as their greatest challenge over the next three years.[1]This is a call not just to modernize but to optimize—with measurable outcomes and mission alignment at every level.

69%

of government executives say the potential productivity gains from automation are so great they must accept significant risk to keep pace with change[2]

What to do
Efficiency

Only 35%
of government organizations' IT has been automated

and

Only 30%
of their cybersecurity has been automated[3]

42%
of government executives say that automation is one of the key technologies that will help deliver results by 2027[4]

Automation and AI are unlocking faster, smarter, and more agile government operations.

Modernize with intelligent automation.
Operational burdens—from manual workflows to paperwork bottlenecks—drain time and talent. Automation powered by AI and low-code platforms can radically simplify processes and redeploy staff to higher-value work. Governments should:

- Automate repetitive administrative tasks using intelligent workflows and robotic process automation (RPA).
- Integrate AI into constituent touch points and services to enhance speed and consistency.
- Use low-code/no-code platforms to accelerate solution development without overburdening IT teams.

Rethink service delivery for the digital age.
Legacy systems and outdated delivery models slow responsiveness and erode public satisfaction. By reengineering citizen services for digital-first interactions, agencies can improve both experience and efficiency. Governments should:

- Digitize high-volume processes—such as licensing, permitting, and benefits administration—by leveraging cloud-based automation and intelligent workflows.
- Consolidate siloed services into unified platforms that provide seamless multichannel access to programs and benefits.
- Design engaging, user-tested digital experiences that accommodate all constituents, improve accessibility, and build trust across communities.

Optimize resource allocation through data-driven decision-making.
Effective resource use requires more than budgeting discipline—it requires insight. Data can help leaders identify waste, anticipate demand, and align investment to outcomes. Governments should:

- Create real-time performance dashboards that connect operational data with mission metrics.
- Use predictive analytics to anticipate surges in service demand or forecast resource needs.
- Implement AI-driven tools to detect inefficiencies and fraud.

Using data and AI, governments can automate routine tasks, streamline operations, and reengineer organizations for speed and agility. These steps elevate efficiency beyond simply cutting costs to transformational service delivery.

What to know
Security

National defenses must be protected against digital and physical threats to safeguard stability.

In an era marked by escalating digital and physical threats, safeguarding national security is paramount.

Governments must fortify defenses against today's threats—AI-powered disinformation, cyberattacks, hybrid warfare, and critical infrastructure vulnerabilities—to ensure stability and public trust.

As geopolitical instability and digital aggression converge, governments must shift from reactive defense to anticipatory resilience to secure critical infrastructure and defend national security.

Security is now a dynamic, distributed challenge—defined less by geography than by interdependence. Governments face a new generation of threats: AI-generated misinformation campaigns, cyberattacks targeting energy grids and hospitals, unmanned systems in contested airspace, and future risks posed by quantum-powered decryption of our data and systems. These threats are orchestrated by both state and non-state actors, exploiting gaps in institutional readiness and infrastructure protection.

Cybersecurity, once confined to IT departments, must now become a pillar of national strategy. Yet, many agencies still operate without real-time intelligence, workforce capacity, or integrated response capabilities.

What's needed is fusion—between cyber and physical security, between agencies and sectors, and between strategy and execution. The next shock may already be unfolding. Governments must embed intelligent, collaborative, and evolving security into every layer of governance—from procurement and policy to operations and citizen trust.

#2

Cybersecurity and data privacy rank second in terms of top priorities for government executives over the next 3 years[1]

30%

annual increase in global cyberattacks against critical infrastructure[2]

What to do
Security

Only 1 in 3
constituents have high levels of trust in their nation's central government[3]

Only 25%
of gen AI projects are being secured

Many organizations are discovering this at the most inopportune time—after they've experienced a security breach[4]

Securing the future of government starts with smarter defenses and shared digital trust.

Operationalize threat intelligence at scale.
Real-time visibility and rapid response are foundational to national security in a hyperconnected world. Emerging threats require speed, adaptability, and shared intelligence across borders and sectors. Governments should:

- Deploy AI-driven threat intelligence platforms that learn from global threat data in real time.
- Automate incident response workflows to reduce mean time to detect and contain breaches.
- Collaborate with international cyber alliances to share indicators of compromise and improve early warning systems.

Secure critical infrastructure and emerging technologies.
From electric grids to AI models, today's infrastructure is both physical and digital—and increasingly targeted. Securing these assets requires proactive risk modelling and security-by-design principles. Governments should:

- Conduct digital twin simulations to identify vulnerabilities in utilities, healthcare, and defense systems.
- Harden post-quantum encryption and ensure secure-by-design architecture for AI and IoT systems.
- Establish supply chain security protocols for sensitive technology imports and procurement.

Build a culture of cyber readiness and trust.
Cybersecurity is not just a technical challenge—it's a leadership and workforce imperative. Public trust hinges on transparent practices, rapid response, and a trained, empowered cyber workforce. Governments should:

- Invest and partner to build and expand cybersecurity upskilling programs to close workforce gaps.
- Adopt zero-trust principles across agencies to validate access at every layer.
- Communicate transparently about risks and breaches to maintain public trust.

Security is not be the sole responsibility of IT departments. It is a collective effort across all departments and agencies. By embedding proactive security measures into every layer of governance and fostering collaboration, governments can better safeguard against digital and physical threats, helping ensure national stability and public trust.

What to know
Resilience

Crises today are faster, fiercer, and more interconnected. Traditional continuity plans are no match for compound disruption.

"Future-ready" and resilient governments embed flexibility and foresight into every layer of governance—from systems to strategy—and partner broadly to adapt in real time and recover stronger.

Adaptive systems are critical to persevering in the face of geopolitical, technological, and environmental shocks.

Resilience is no longer an afterthought—it's a strategic necessity. In today's interconnected world, the shocks governments face are not just more frequent, they are more complex, compounding, and cascading. From supply chain collapses and energy disruptions to cyberattacks and climate-driven disasters, governments are confronting crises that move fast and spill across institutional boundaries.

Yet many government systems remain brittle—built for stability, not volatility. Legacy IT, siloed functions, and fragmented crisis response protocols leave institutions exposed. Recovery, once the benchmark for resilience, is no longer sufficient. Governments must now anticipate disruptions, adapt in real time, and emerge stronger. That means embedding resilience into the design of policy, infrastructure, technology, and workforce strategies.

Crucially, resilient governments don't operate in silos. They cultivate coalitions—across sectors, levels of government, and regions—to detect emerging risks, share resources, and synchronize response. Real-time intelligence, enabled by AI and data platforms, strengthens situational awareness and speeds decision-making. Resilient institutions can localize action without losing strategic coherence—and scale trusted partnerships to drive coordinated results.

The implication is clear: resilience is about evolving forward. In a world of continuous disruption, adaptive capacity is the most strategic asset a government can build.

60%

of government leaders expect major disruptive events to grow more frequent,

and

70%

anticipate greater intensity[1]

What to do
Resilience

90%

of government executives plan to maintain or accelerate their organization's pace of transformational change in 2025[2]

Governments must be engineered to endure shocks and grow stronger through change.

Engineer resilience into every layer of government.
Siloed systems fracture under pressure. Resilient governments embed agility not just into systems—but into mindsets. Governments should:

- Embed whole-of-government resilience frameworks that integrate planning across agencies, sectors, and jurisdictions. This includes prioritizing investments in local industries and infrastructure, as to reduce dependency on global supply chains and foster a robust domestic economy.
- Run simulation and digital twin exercises that engage leadership and staff to rehearse complex, real-world disruptions.
- Embed resilience metrics into funding, procurement, and performance evaluation—and reward and incentivize adaptive and innovative behavior at all levels.

Deploy foresight capabilities to anticipate cascading risks.
Compound crises defy linear playbooks. Predictive intelligence enables governments to act before disruptions spiral. Governments should:

- Use AI, digital twins, and geospatial data to detect early-warning signals across physical and digital domains.
- Establish interdisciplinary resilience teams to assess systemic vulnerabilities and recommend pre-emptive action.
- Invest in scenario-based planning to inform dynamic resource deployment and strategic decisions.

Rethink continuity for an age of constant disruption.
Continuity means more than just recovering. It's about evolving forward. Plans must enable adaptability at scale. Governments should:

- Design flexible service delivery models that can shift across in-person, remote, and automated modes on demand.
- Prioritize scalable, interoperable cloud and hybrid environments to support mission continuity during disruption.
- Build resilience coalitions across public, private, and community actors to enable distributed response and mutual support.

You can't govern the future with institutions built for the past. Governments must modernize their institutions to be resilient and adaptable to contemporary challenges. Legacy systems and outdated practices hinder effective governance. By adopting forward-thinking strategies and technologies, governments can better anticipate and respond to future disruptions, ensuring sustainable and efficient operations.

Transformational technologies

Leveraging disruptive innovation for public good

To achieve these strategic imperatives, governments must harness a core set of transformational technologies that are foundational to achieving security, efficiency, resilience, innovation, and constituent satisfaction.

- Data
- AI, generative AI, and agentic AI
- Automation
- Hybrid cloud by design
- Cybersecurity
- Quantum computing

Data is the catalyst for modern governance.

45%
of CEOs say that a lack of proprietary data will be a barrier to successful generative AI initiatives[1]

40%
of CEOs say data privacy and security-related concerns are a barrier to generative AI adoption[2]

86%
of executives agree that high-quality data and transparency are necessary to achieve sustainability objectives[3]

78%
of government executives say proprietary data is key to unlocking the value of generative AI[4]

65%
of government executives say an integrated enterprise-data architecture is critical to enable cross-functional collaboration and drive innovation[5]

What to know

Data is the most critical asset for 21st-century government. It powers real-time insights, policy effectiveness, and responsive service delivery.

From national security and fraud detection to crime prevention and emergency response, data underpins a government's ability to anticipate threats, protect communities, and act swiftly in moments of crisis. For example, in the case of national security, AI-driven threat intelligence platforms can analyze global threat data in real time, enabling rapid response to potential cyberattacks. Similarly, predictive analytics can be used in healthcare to anticipate and manage disease outbreaks, helping ensure timely intervention and resource allocation. By establishing secure, ethical, and interoperable data ecosystems, governments can move from reactive governance to proactive, evidence-based decision-making.

Modern data platforms also support predictive analytics, operational transparency, and improved citizen engagement. To unlock these benefits at scale, consolidating data from across agencies and sectors is essential—enabling a holistic view that drives smarter, faster, and more resilient public outcomes. For instance, integrating data from transportation, healthcare, and public safety sectors can enhance urban planning and emergency response strategies, ultimately improving the quality of life and outcomes for all constituents.

What to do

Today, data is the most critical asset for governance, which means maintaining data privacy and earning constituent trust are essential. To harness the full potential of AI in all its forms and create competitive advantages, governments must:

- Define requisite data sets. Work backward from the constituent experience: what will our AI platform need to meet the needs of our constituents and scale capability to meet demands? What data will those AI value propositions depend on? Identify essential data sets across departments—and determine where they reside.
- Connect and activate your data—wherever it lives. Build the capability to mine unstructured and siloed data across distributed sources. Use federated data architectures and fabric approaches to securely integrate insights, improve workflows, and deliver constituent value—without requiring full data consolidation.
- Activate your ecosystem. Collaborate with agencies, industry, and constituents to surface untapped data and improve quality and context. Co-develop governance standards to ensure interoperability, transparency, and trusted use across shared services and platforms.

Technologies
AI, generative AI, and agentic AI

60%
of government executives say their organization is actively adopting AI agents and are prepared to implement them at scale[1]

$7-$10 trillion
expected productivity gains through AI, which can lead to increase of global GDP by 10% ($7-$10 trillion)[2]

75%
of government leaders indicate they're piloting or have already implemented generative AI for customer and citizen services[3]

40%
increase in productivity expected by executives by applying generative AI to business processes[4]

56%
of government executives say mission advantage depends on who has the most advanced generative AI[5]

AI-fueled intelligence and innovation can streamline operations.

What to know

AI and generative AI are redefining what's possible in government. These technologies streamline operations, accelerate decisions, and deliver personalized services at scale—enabling agencies to do more with less. From predictive analytics to autonomous agents, AI helps governments move faster, respond smarter, and build systems that adapt in real time. But realizing these benefits requires strong governance to ensure equity, accountability, and public trust.

Around the world, governments are already putting AI to work. Arizona's Department of Child Safety used AI-driven tools to reclaim 4,200 hours for caseworkers—giving them more time to support vulnerable families.[6] Austria's defense ministry leveraged AI for faster, more informed mission decisions, while California's Department of Health Care Services used natural language processing to extract critical insights from medical records.[7]

AI in government helps build institutions that are more responsive, resilient, and human-centered. For leaders, the path forward involves investing in trusted AI, designing for scale, and governing with purpose. How governments lead will define how society progresses.

What to do

As AI revolutionizes government operations, enable intelligent automation, and enhance service personalization, responsible and strategic adoption of these technologies is crucial for optimizing their potential benefits.

To effectively leverage the power of AI and generative AI, governments must

- Build AI-ready institutions. Weave AI literacy into the fabric of public service by upskilling staff in AI tools and workflows. Establish AI Centers of Excellence (COEs) to define ethical standards, set governance frameworks, and coordinate AI implementation across IT, HR, and policy teams.
- Harness agentic AI to drive productivity and service impact. Deploy autonomous agents to automate complex workflows, proactively resolve issues, and deliver tailored constituent services at scale. Design these agents to operate across systems—linking data, automation, and intelligence for measurable performance gains.
- Deploy AI to improve emergency response. Simulate disaster scenarios, optimize emergency logistics, and protect critical infrastructure against climate, geopolitical, and technological threats. Use gen AI for real-time crisis decision-making and resource optimization.

Technologies
Automation

69%
of government executives say the potential productivity gains from automation are so great they must accept significant risk to keep pace with change[1]

56%
of tech leaders expect gen AI solutions to automatically resolve IT issues with little to no human intervention[2]

63%
of IT executives say their organizations are using generative AI for code generation today and 100% executives say their organizations will use generative AI for code generation by 2026[3]

75%
of IT executives expect generative AI to improve DevSecOps, the automated workflows that incorporate security practices throughout the development lifecycle, over the next two years[4]

Automation positions organizations to scale while reduce friction and improving outcomes.

What to know

Automation is helping governments break free from legacy inefficiencies—digitizing manual tasks, streamlining backlogs, and accelerating service delivery. Technologies such as robotic process automation (RPA), intelligent workflows, and AI agents are not only modernizing operations—they're transforming how government works. Automation frees up staff for higher-value work, increases institutional agility, and enables agencies to scale services rapidly during crises or demand surges.

The results speak for themselves. New Jersey's community affairs department slashed manual processing times and expedited services for 600+ municipalities.[5] Meanwhile, a government in Europe is using AI-driven automation to streamline funding applications—boosting processing speed, ensuring consistent support, and delivering 24/7 guidance to businesses and citizens.[6]

This is the power of automation done right: measurable time savings, reduced error rates, and faster, more responsive services. As generative and agentic AI enters the picture, governments have an unprecedented opportunity to redesign processes end-to-end, embedding intelligence directly into operations. For leaders willing to act, automation enables efficiency that ultimately results in better outcomes for the people they serve.

What to do

Automation technologies are critical for governments to overcome legacy inefficiencies, reduce administrative overhead, and improve the speed of service delivery. To capture the full potential of automation and drive institutional agility, governments must

- Make hard work easier—with AI powered automation. Identify systems, applications, and workflows that can be streamlined using generative and agentic AI. Empower IT teams with platforms and tools to quickly build the APIs, models, and logic needed to automate routine tasks and orchestrate complex processes.
- Get more out of every IT dollar. Align tech spend with mission priorities—and fast-track initiatives that accelerate performance improvement. Go beyond finding efficiencies to invest in initiatives that will create new products and services and drive improved mission outcomes.
- Measure what matters. Establish a feedback loop to continually monitor and improve-automation performance. Look past traditional IT metrics, such as uptime and downtime, to gauge success. Instead, focus on business-centric metrics, such as constituent satisfaction, mission outcomes, and "speed-to-market."

Technologies
Hybrid cloud by design

69%
of executives agree that improving ROI from the IT investment portfolio by 25% or more is a top C-suite priority[1]

3x
On average, IT executives from organizations adopting hybrid by design for their digital transformation efforts reported 3x higher ROI than those that don't[2]

77%
of executives say the lack of a clear, shared vision for how IT can drive significant business performance improvements is a strong impediment to higher tech ROI[3]

Intentional design of a flexible and secure digital backbone is critical to modernization.

What to know

Hybrid cloud is the foundation for modern, resilient government. It connects legacy systems with next-gen platforms—creating secure, scalable, and interoperable environments where data flows seamlessly and AI can thrive. By designing for hybrid from the start, agencies enable real-time collaboration, remote operations, and continuity in the face of disruption. Hybrid by design isn't just an architecture choice—it's a strategic imperative.

Governments around the world are already realizing the benefits. California's Department of Health Care Services used hybrid cloud to modernize Medicaid systems, enabling faster claims processing and real-time data sharing. [4] Austria's defense ministry built secure, multicloud capabilities to support classified and unclassified missions across its network. [5] Italy's national workplace safety agency, INAIL, uses hybrid infrastructure to scale services for millions while protecting sensitive health data. [6]

Hybrid cloud empowers governments to deliver smarter, faster, and more secure public services—at scale. When a hybrid approach is designed in, not bolted on, government becomes more adaptive, more efficient, and better prepared for what's next.

What to do

Outdated systems and siloed modernization efforts are no match for the pace and complexity of today's public sector challenges. To accelerate impact, governments must adopt a hybrid-by-design approach—one that fuses the resilience of legacy systems with the agility of cloud to deliver enterprise-scale transformation, not incremental change. This isn't just modernization. It's a full reset. And it starts with raising expectations. To unlock the full value of AI and data, governments must

- Rebuild for resilience and scale. Integrate mainframe reliability with cloud agility to support AI workloads, reduce tech debt, and modernize mission-critical systems.
- Streamline data and workflows. Use APIs to connect on-prem and cloud environments, enabling real-time insights, collaboration, and innovation across agencies.
- Raise the ROI bar. Target greater than 30% return on tech investments by aligning on performance metrics, automating development, and accelerating time-to-value.

Technologies
Secure by design

Bolstering cybersecurity is essential to safeguarding digital sovereignty and public trust.

#2

Cybersecurity and data privacy rank second in terms of top priorities for government executives over the next 3 years[1]

100%

of executives plan to prioritize generative AI cybersecurity solutions over conventional cybersecurity solutions[2]

Only 25%

of gen AI projects are being secured

Many organizations are discovering this at the most inopportune time—after they've experienced a security breach.[3]

What to know

Against an ever-evolving digital landscape, governments worldwide are redefining their approach to cybersecurity. The rapid digitization of critical infrastructure, coupled with increasingly sophisticated cyber threats, has propelled cyber resilience to the forefront of national security agendas.

Recent years have witnessed a paradigm shift in how governments tackle cybersecurity challenges. No longer content with reactive measures, administrations are now adopting proactive strategies that emphasize prevention and resilience. This shift is evident in the harmonization of cybersecurity regulations across sectors and the implementation of forward-thinking policies.

A cornerstone of this new approach is the strengthening of public-private partnerships. Recognizing that cyber threats transcend traditional boundaries, governments are fostering collaboration between state agencies and private entities. These alliances facilitate real-time threat intelligence sharing, enabling a more robust and agile defense against cyber attacks.

Equally significant is the drive to modernize government IT infrastructure. Legacy systems are being overhauled with a 'secure-by-design' philosophy, embedding cybersecurity as a fundamental component rather than an afterthought. This modernization extends to critical infrastructure, where cybersecurity is now integral to the design and operation of essential services.

What to do

To defend against increasingly sophisticated cyber threats and build digital trust through proactive, collaborative, and embedded approaches, governments must:

- Modernize legacy IT and secure critical operational technology (OT). Investing in IT modernization is critical to addressing vulnerabilities in outdated systems. Governments should allocate resources to replace legacy infrastructure with secure and resilient platforms that integrate cybersecurity into the design phase of technology development, helping ensure that systems are inherently secure. Extend protections beyond IT to OT environments, including defense systems, utilities, and transportation where disruption risks are highest.
- Focus on workforce development. A skilled cybersecurity workforce is essential for resilience. Governments should invest in training programs and initiatives to build expertise within public sector organizations while addressing workforce shortages and the need to continuously upskill cyber, IT, and OT personnel. Cross-government coordination as well as international cooperation can enhance cybersecurity capabilities through joint training programs, operational collaboration, and shared resources.
- Strengthen public-private partnerships. Governments must deepen collaboration with private sector entities to share threat intelligence, resources, and expertise. By leveraging public-private partnerships, governments can enhance their ability to detect and respond to cyber threats at scale.

Technologies
Quantum computing

13
Number of years expected until quantum computing is fully integrated into the business[1]

15
Number of years expected until quantum-safe cryptography is fully integrated into the business[2]

10.5%
Expected ROI on the quantum computing investments by 2043[3]

11.5%
Proportion of the workforce that will need to reskill over the next 3 years to enable quantum-safe security standards[4]

Quantum-ready strategies and post-quantum cryptography are today’s imperatives for securing trust and leadership in the quantum era.

What to know

As technologies evolve, quantum computing stands out as a transformative force with the potential to revolutionize government operations and national security. It offers unprecedented computational power, enabling vast and varied applications governments can use to tackle complex challenges that were previously insurmountable.

The technology's ability to process enormous data sets and solve intricate problems in seconds could dramatically improve public service delivery, infrastructure management, and decision-making processes. In fields such as healthcare, energy, and environmental protection, quantum simulations promise breakthroughs that could significantly impact citizens' lives. But as quantum capabilities advance, they also present new and urgent risks: quantum computers could one day break the encryption that secures critical systems and sensitive government data.5

That’s why quantum-safe and post-quantum cryptography have emerged as immediate priorities. Adversaries may already be collecting encrypted data today with the intent to decrypt it in the future. Governments must act now to safeguard digital assets, while also seizing the scientific and economic opportunities of the quantum decade. Nations that invest strategically in both quantum computing and cryptographic resilience will be better equipped to address future challenges and maintain technological leadership.

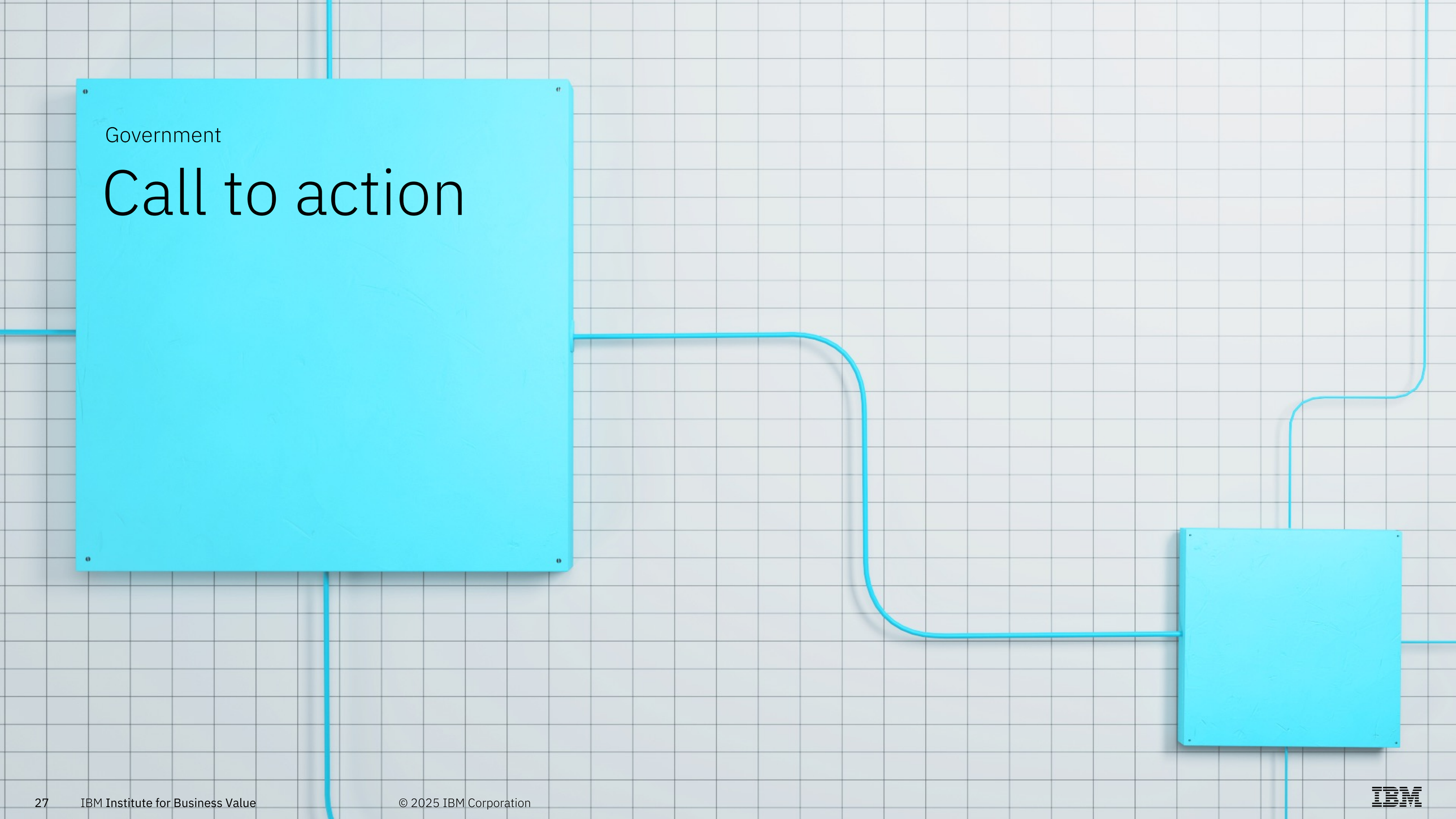
What to do

Quantum computing is fast approaching a tipping point—positioned to reshape national security, economic competitiveness, and scientific discovery. To lead in this emerging era and prepare critical systems for quantum impact, governments must:

- Define a government-wide quantum strategy with clear policy and investment roadmaps. Develop a coordinated national approach to quantum innovation—anchored by an explicit vision, defined objectives, and time-bound investment priorities. Align agencies, laboratories, and regulatory bodies around common goals, including applied research, procurement pilots, and responsible deployment frameworks that ensure safe, equitable, and mission-driven innovation.
- Accelerate the migration to quantum-safe cryptography and infrastructure modernization. Begin by identifying vulnerable systems and sensitive data at risk of “harvest now, decrypt later” attacks. Deploy post-quantum cryptographic algorithms, update cryptographic inventories, and modernize IT infrastructure to be crypto-agile and future-ready—aligned with NIST and industry standards.
- Build quantum readiness through ecosystem collaboration and workforce development. Invest in education and training pipelines while partnering with academia and industry to explore quantum use cases in areas such as climate modeling, supply chain optimization, and materials science. Fostering cross-sector coordination will ensure governments can lead safely, securely, and inclusively through the quantum decade.

Government

Call to action



Call to action

Governments are being stress-tested like never before. Systemic shocks are no longer occasional; they are constant, compounding, and increasingly difficult to predict. Trust is eroding, citizen expectations are surging, and the margin for error is vanishing. The age of incrementalism is over. What's needed now is bold reinvention. The future of government will be built by those visionary enough to reimagine it. With committed leaders, engaged constituents, and trusted partners, governments can shape a more resilient and inspired tomorrow.

To know if your organization stands ready to meet what's coming, start by asking yourself three uncomfortable, but essential, questions:

01

Are we equipped to anticipate—not just react to—crisis?

Resilience today means more than contingency plans. It means sensing shifts before they become shocks and adapting systems in real time. Leaders must ask: are we building the intelligence, interoperability, and institutional agility needed to meet increasing challenges and demands—or are we simply bracing for the inevitable?

02

Does our organization reward experimentation—or punish it?

Transformation demands more than technology—it requires cultural courage. Bureaucracies often default to caution, but progress depends on intelligent risk. Leaders must ask: are we empowering teams to test, learn, and iterate—or are we training people to avoid failure at all costs?

03

Are we cultivating the right partners—or clinging to the comfortable ones?

Innovation rarely happens in isolation. The ability to deliver at scale often depends on external collaborators that bring new capabilities, perspectives, and momentum. Leaders must ask: are we building strategic partnerships that stretch our thinking and accelerate outcomes—or just repeating procurement cycles with the usual suspects?

How IBM can help

IBM is committed to serving governments and citizens around the world— across segments including social services, government health, tax management, critical infrastructure, education, and national security. We work with stewards in federal as well as state and local agencies, building on decades of experience and trust.

Built on a foundation of security, transparency, and automation, IBM's hybrid cloud and AI technologies help governments modernize core systems, improve the citizen experience, and respond with agility to complex challenges. Whether scaling digital identity frameworks, enhancing threat detection, or deploying resilient infrastructure, IBM supports public institutions in becoming more adaptive, efficient, and trusted.

We invite you to explore some of the stories included in the Case Study section where IBM has worked in collaboration with governments to deliver meaningful outcomes for governments and constituents.

This report is just a frame for many essential conversations. Continuing the dialogue on how technology can drive meaningful, measurable change is vital to helping governments meet today's demands and shape a more resilient, future-ready tomorrow. We welcome the opportunity to continue the discussion with you—please feel free to reach out to any of the lead expert contributors for this report or our global executive leaders on the following slides to explore these ideas further.

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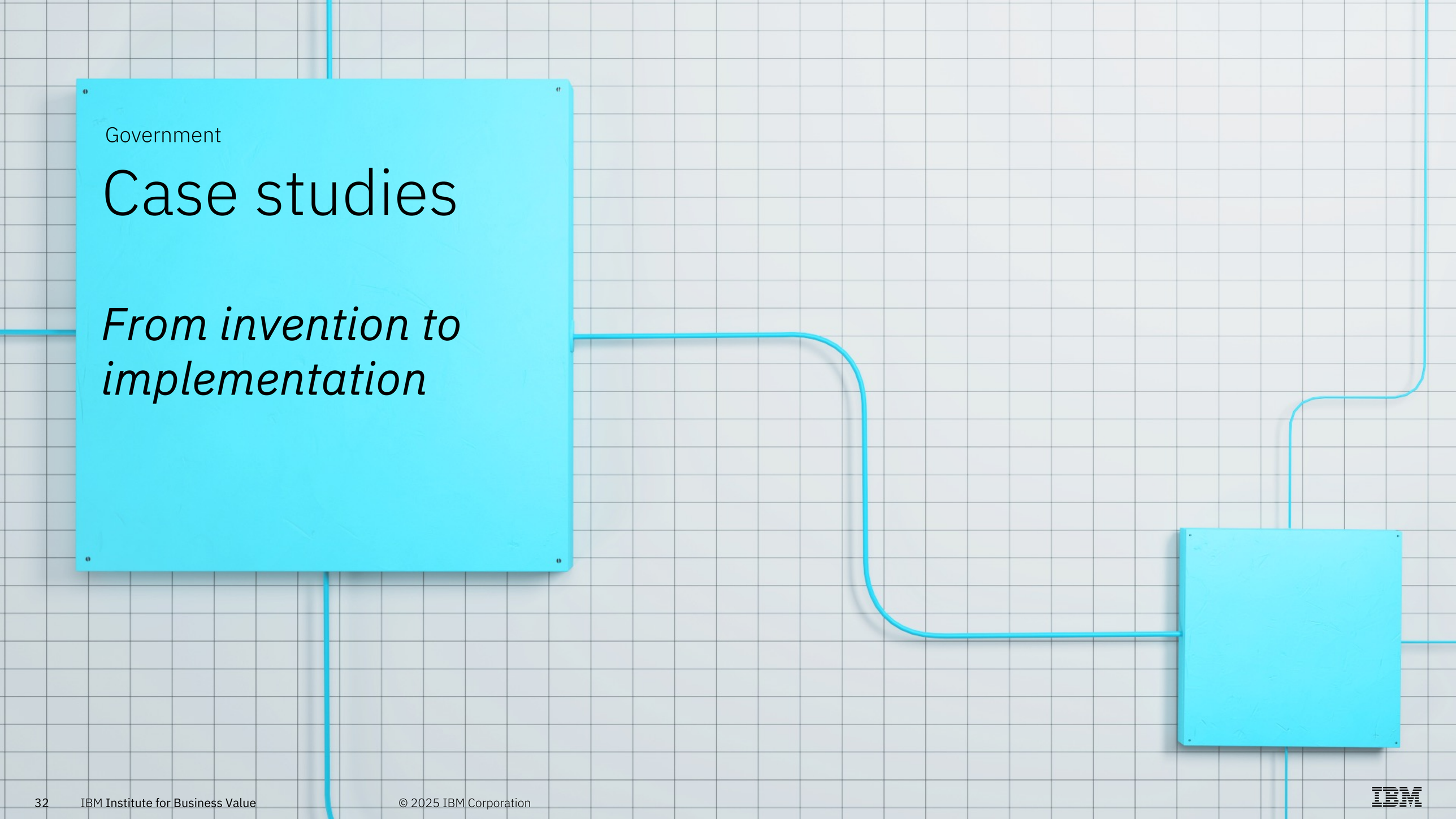
Government

Case studies

From invention to implementation



IBM and RIKEN Unveil First IBM Quantum System Two outside of the U.S

The deployment of IBM Quantum System Two at RIKEN is poised to expand previous achievements by RIKEN and IBM researchers as they seek to discover algorithms that offer quantum advantage: the point at which a quantum computer can solve a problem faster, cheaper, or more accurately than any known classical method. This includes work recently featured on the cover of *Science Advances*, based on sample-based quantum diagonalization (SQD) techniques to accurately model the electronic structure of iron sulfides, a compound present widely in nature and organic systems. The ability to realistically model such a complex system is essential for many problems in chemistry, and was historically believed to require fault-tolerant quantum computers. SQD workflows are among the first demonstrations of how the near-term quantum computers of today can provide scientific value when integrated with powerful HPC infrastructure.

IBM and RIKEN, the top national research laboratory in Japan, deployed the first IBM Quantum System Two outside of the United States and beyond an IBM Quantum Data Center. The availability of this system also marks a milestone as the first quantum computer to be co-located with RIKEN's supercomputer Fugaku — one of the most powerful HPC systems on Earth. This effort is supported by NEDO (New Energy and Industrial Technology Development Organization), an organization under the jurisdiction of Japan's Ministry of Economy, Trade and Industry (METI)'s "Development of Integrated Utilization Technology for Quantum and Supercomputers" as part of the "Project for Research and Development of Enhanced Infrastructures for Post 5G Information and Communications Systems."

Read the full story →

"Our mission is to develop and demonstrate practical quantum-HPC hybrid workflows that can be explored by both the scientific community and industry. The connection of these two systems enables us to take critical steps toward realizing this vision."

"By combining Fugaku and the IBM Quantum System Two, RIKEN aims to lead Japan into a new era of high-performance computing."

Dr. Mitsuhisa Sato
Division Director of the Quantum HPC Hybrid Platform Division, RIKEN Center for Computational Sciences

RIKEN

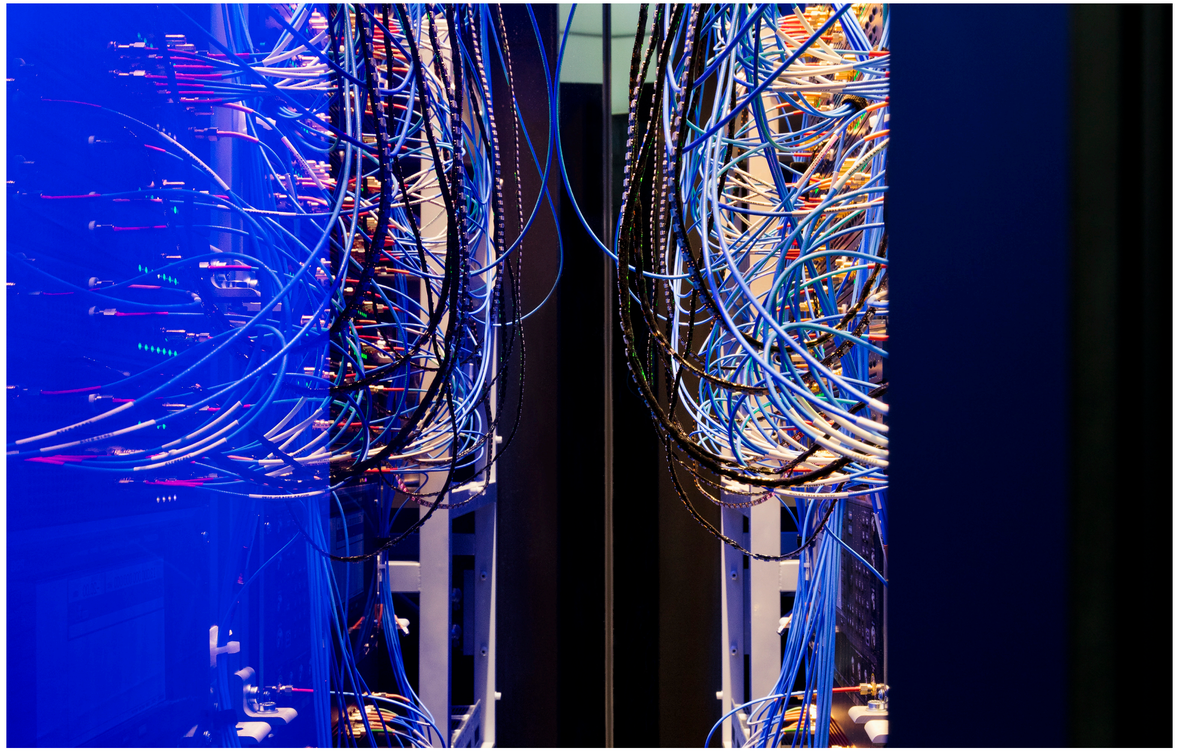
NEDO New Energy and Industrial Technology Development Organization JAPAN

University of Tokyo and IBM helping power Japan’s quantum ecosystem

As quantum computing shifts from scientific utility to applied capability with advantages beyond classical compute, the industry is pushing to develop scalable, error-corrected systems, and the algorithms capable of powering future applications.

To help address this, the University of Tokyo’s IBM Quantum System One is now equipped with an IBM Heron processor—IBM’s most performant quantum processor to date. The system will be linked by the end of 2025 to the Miyabi supercomputer, operated jointly by UTokyo and the University of Tsukuba through the Joint Center for Advanced High Performance Computing. This quantum-centric supercomputer will significantly advance the research being conducted by industry and academic members of the members of the Quantum Innovation Initiative (QII) Consortium.

Read the full story →



“This update to an IBM Heron quantum processor, linked to our Miyabi supercomputer, will allow us to further develop use cases that leverage quantum and AI capabilities, expanding the realm of computable problems in.”

Hiroaki Aihara
Executive Vice President
University of Tokyo

UTokyo

European Space Agency (ESA)
Strategic imperatives: Innovation & Resilience

From data overload to insight: TerraMind reimagines earth observation AI

Earth observation (EO) data holds enormous promise for addressing global challenges like climate resilience, disaster response, and water scarcity. But realizing its full value has been limited by fragmented data modalities, compute-heavy models, and the inability to reason across diverse inputs—satellite imagery, weather records, terrain data, and more. Traditional AI tools often fall short when tasked with synthesizing this complexity in real time.

To tackle this, IBM Research and the European Space Agency (ESA), along with KP Labs, the Jülich Supercomputing Centre, and the German Aerospace Center (DLR), launched TerraMind—a powerful, open-source generative AI model purpose-built for EO. Trained on TerraMesh, a massive, globally representative dataset spanning nine data modalities, TerraMind combines compact design with cutting-edge multimodal reasoning.

Unlike conventional models trained separately per data type, TerraMind uses a transformer-based architecture with "Thinking-in-Modalities" (TiM) tuning. This enables it to fill in missing data, reason across inputs, and outperform 12 leading EO models by 8% or more in benchmark tests led by ESA. It supports applications like land classification, change detection, and environmental forecasting—all while using less compute than multiple conventional models.

Released openly on Hugging Face, TerraMind is a breakthrough for researchers, agencies, and NGOs seeking scalable, high-precision insight into a fast-changing planet.

Read the full story →

"TerraMind combines insights from several modalities of training data to increase the accuracy of its outputs."

"The ability to intuitively bring in contextual information and generate unseen scenarios is a critical step in unlocking the value of ESA data. Compared to competitive models, it can uncover a deeper understanding of the Earth for researchers and businesses alike."

Simonetta Cheli
Director of ESA Earth Observation Programmes and Head of ESRIN

IN COLLABORATION WITH

esa

The promise of AI for enabling climate resilience

Temperatures are high this summer across the globe, but cities especially are feeling the heat. Buildings and paved surfaces trap energy from the sun, creating 'heat islands' that can feel 20°F hotter than places with more trees and vegetation. Deploying AI to track rising heat levels will be vital for immediate response efforts as well as longer term heat-mitigation measures like tree planting.

Together, NASA and IBM have created an open-source geospatial AI foundation model to analyze petabytes of satellite images to create customized maps of natural disasters and other environmental changes. The goal: provide an easier way for researchers to analyze and draw insights from large NASA data sets related to natural processes. Applications for this innovative AI model extend beyond heat tracking to estimating climate-related risks to crops, buildings, and other infrastructure, evaluating and monitoring forests for carbon-offset programs, and developing predictive models that help enterprises mitigate and adapt to environmental changes.

The family of models was expanded in 2024, with a foundation model for weather and climate data. The model was customized for more specific tasks, such as creating highly localized wind forecasts for renewable energy planning and increasing the resolution for climate simulations to better understand and plan for the local effects of climate impact.

This initiative is just the start of AI's potential to explore and understand our planet. "We hope that this spirit of ope collaboration can be a model for developing other tools aimed at unlocking very large data sets," says Dr. Juan Bernabé-Moreno, Director of IBM Research Europe (UK and Ireland).

Read the full story →

"We hope that this spirit of open collaboration can be a model for developing other tools aimed at unlocking very large data sets."

Dr. Juan Bernabé-Moreno
Director of IBM Research Europe (UK and Ireland)

Arizona Department of Child Safety (DCS) simplifies processes with gen AI.

Arizona DCS struggled to manage complex casework and keep up with constantly evolving policies. Furthermore, manual processes slowed decision-making, leading to inefficiencies and delays. Arizona DCS partnered with IBM Consulting® and applied a phased approach using Microsoft Azure and Microsoft gen AI capabilities.

The Arizona DCS transformation and modernization resulted in improved central registry classification, virtual assistant support for policy changes, and streamlined development processes that reduced workloads and increased productivity.

Outcomes

- Document upload time decreased by **500%**
- **40%** productivity gains allow more efficiency

Solution components

- IBM Consulting™
- IBM Consulting Advantage
- Microsoft Azure
- Microsoft Dynamics 365
- Tachyon GPT

Read the full story →

"The IBM Consulting team helped us implement key Microsoft gen AI solutions that have significantly improved the efficiency of caseworkers, enabling them to focus on what really matters—helping families."

Frank Sweeney
Chief Information Officer
Arizona DCS

ARIZONA DEPARTMENT OF CHILD SAFETY

National Institute for Insurance against Workplace Accidents (INAIL) (Italy)
Strategic imperatives: Engagement & Efficiency

INAIL streamlines grant funding processes with generative AI.

INAIL, Italy's workplace injury and disease compensation body, faced a 50% application surge post a 65% "Bandi ISI" budget rise in 2024. Overburdened, INAIL teamed with IBM to create an AI-powered virtual assistant. Integrated into the web application, this tool simplified the application process, alleviating contact center pressure. Leveraging IBM watsonx Assistant, Watson Discovery, and Watsonx.ai (Mistral LLM model), the solution efficiently managed the surge, ensuring reliable application processing.

Outcomes

- Productivity growth without additional staff
- Consistent responses, ensuring coherence and reliability
- Reduction in FAQs and optimization of support requests
- 24x7 assistance, reducing wait times and the risk of missed deadlines
- Traceability of inquiries

Solution components

- IBM watsonx.ai® platform
- IBM watsonx Assistant®
- IBM watson® Discovery
- IBM Consulting™

Read the full story →

INAIL
ISTITUTO NAZIONALE PER L'ASSICURAZIONE CONTRO GLI INFORTUNI SUL LAVORO

US Department of Veterans Affairs (VA) revolutionizes benefits processing with automation.

The Veterans Benefits Administration (VBA) faced lengthy, manual claims processing—often taking 4–6 months—delaying decisions for veterans, including those who were terminally ill. IBM collaborated with VBA to automate and digitize the process, replacing paper-based workflows with an integrated platform combining Robotic Process Automation (RPA), Optical Character Recognition (OCR), and AI. Delivered as a Managed Service on AWS GovCloud, the modular, repeatable framework streamlined operations, improved data management, and accelerated decision-making—freeing staff for higher-value work and significantly improving service for veterans.

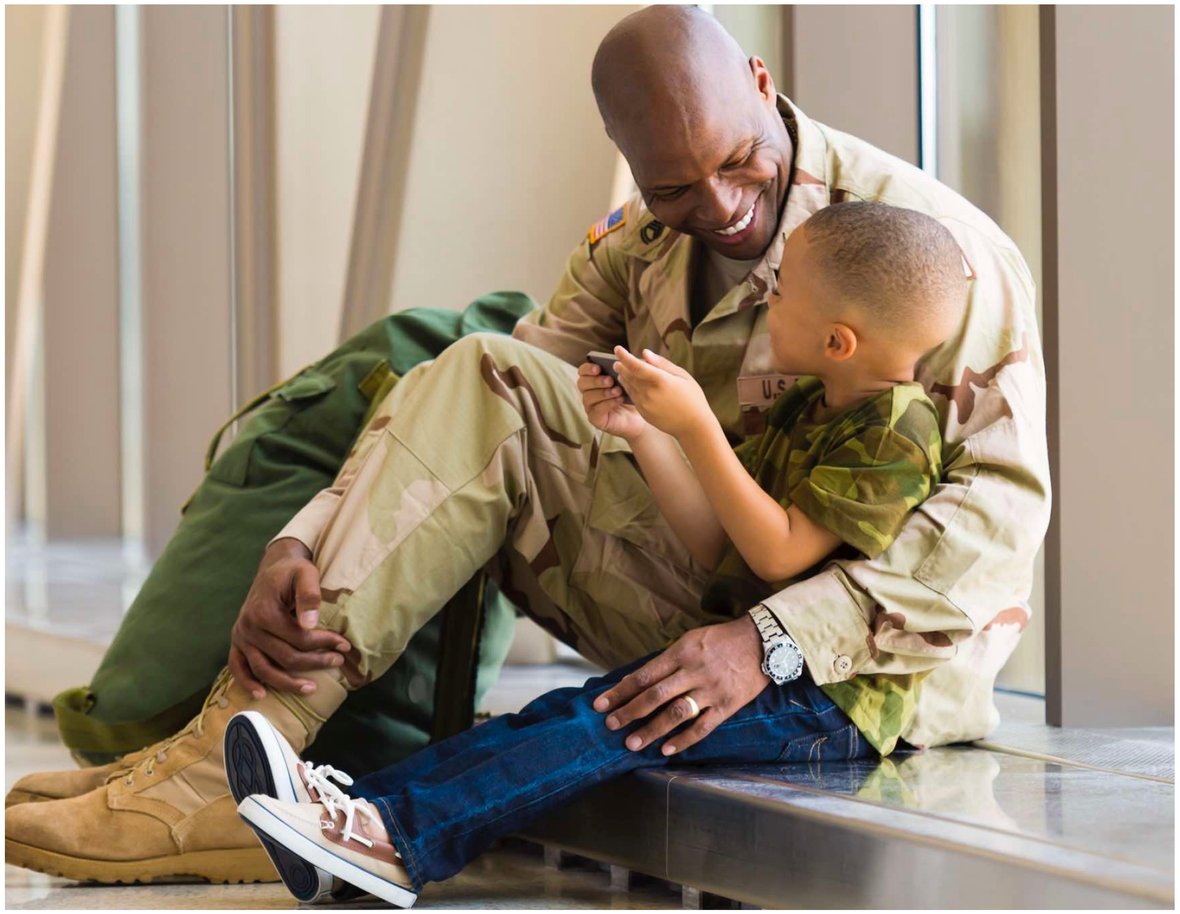
Outcomes

- 550k hours of productivity save
- 97% reduction in claims processing time
- 10M claims processed

Solution components

- IBM Consulting™
- AWS GovCloud

Read the full story →



"This delivery is perhaps the single most significant advancement for claims processing in the agency's history."

Executive Director,
Veterans Benefits Administration

Youth Welfare Office, Landratsamt Augsburg (Germany)
Strategic imperatives: Engagement & Efficiency

Landratsamt Augsburg pilots generative AI to support youth welfare caseworkers.

The Youth Welfare Office supports children, adolescents, and families, but caseworkers faced lengthy, manual research processes—gathering data from multiple legal and citizen sources before each case. This was time-consuming, error-prone, and hindered by a shortage of specialized staff. IBM Client Engineering and IBM Consulting® collaborated with the team to design a custom web application integrated with IBM watsonx Assistant®, IBM watsonx.ai®, and IBM Watson® Discovery. The solution queries multiple data sources and summarizes findings, enabling caseworkers to focus on client needs. Testing showed up to a 91% reduction in time spent compiling case data.

Outcomes

- Up to 91% reduction in time to compile case data
- Increased caseworker capacity to focus on higher-value work
- Improved accuracy and consistency of case research

Solution components

- IBM watsonx Assistant®
- IBM watsonx.ai®
- IBM Watson® Discovery

Read the full story →

New Jersey Department of Community Affairs
Strategic imperatives: Engagement & Efficiency

Utility Assistance Portal delivers help where it's needed, when it's needed.

The New Jersey Department of Community Affairs faced a manual, paper-based, and fragmented process with separate systems that couldn't communicate with each other.

IBM Consulting® collaborated to build the Utility Assistance Program (UAP) portal, which integrated CRM systems, reporting, and dashboards for residents, adjudicators, vendors, and stakeholders. As part of this IBM Consulting for Microsoft project, IBM applied Design Thinking methodology, creating a solution with resident self-service, case management, document automation, a single source of truth, and real-time analysis tools.

IBM Consulting Advantage for Cloud Transformation was used for generating key program support materials and project management documents, enhancing accuracy and decision-making.

Outcomes

- 4x increased adoption of UAP
- 60% reduction in the average time it takes a resident to complete a Universal Service Fund/Heating Energy Assistance Program (USFHEA) application
- 88% reduced adjudication timelines

Solution components

- IBM Consulting™
- IBM Consulting for Microsoft
- IBM Consulting Advantage for Cloud Transformation

Read the full story →

"The IBM team has configured a solution for NJDCA that drastically decreases the time it takes to process utility assistance applications, which gets that assistance to the families and residents of New Jersey faster, enhancing their financial security and quality of life."

John Harrison
Division Director Department of Community Affairs, Information Technology
New Jersey Department of Community Affairs

Clerk of the Superior Court in Maricopa County (Arizona, US)
Strategic imperatives: Engagement & Efficiency

A spark of innovation develops into a virtual assistant named Cleo.

The Clerk's Office serves a county of nearly 4.6 million people, handling time-sensitive requests such as marriage licenses, court records, and passports. High call volumes and repetitive inquiries diverted staff from complex tasks and slowed service.

Using IBM watsonx Assistant® and Twilio Flex, which is cloud-based contact center software, the Clerk's Office built a unified omnichannel contact center solution and brought it live within three months. The AI solution, which the team named Cleo, works alongside human agents to provide a more effective support experience for Maricopa County citizens. It uses natural language through omnichannel communications, including phone, web chat, text, social media channels, and email. It can also be combined with voice technologies such as Alexa and Google.

Outcomes

- 15,569 conversations held in 2023 with a 95.78% containment rate
- The handling of inquiries by the IBM watsonx Assistant currently saves 214 human hours per month

Solution components

- IBM Consulting™
- IBM watsonx Assistant® and Twilio Flex

Read the full story →

United Kingdom Department for Work and Pensions (DWP)
Strategic imperatives: Efficiency & Resilience

Driving digitization by transforming integration solutions

DWP is responsible for allocating welfare benefits, pensions and a range of other critical support services to millions of households in the UK. Before the COVID-19 pandemic, the department was processing millions of claims and contacts a day using multiple digital and non-digital customer engagement channels.

Lockdown restrictions eliminated in-person customer support channels overnight, leading to a sudden increase in demand on DWP Digital's IT systems and digital engagement channels. To help overhaul the integration IT infrastructure and applications underpinning its citizen-facing services, DWP Digital sought help from IBM Consulting™.

Outcomes

- Ensures seamless payment of over **GBP 200B annually** to millions of citizens
- Supported provisioning of emergency support to **5 million** unemployed or furlough-effected households
- Enabled decrease in processing time from **weeks to hours** for new claims

Solution components

- IBM Consulting™

Read the full story →

"Our technology estate at the time didn't allow us to adequately address the heightened demand for speedy, easy-to-use digital services. IBM Consulting worked alongside our DWP digital team to help us change that with a fit-for-purpose integration application landscape."

Rajendra Chauhan
Head of Integration
DWP Digital, Department for Work and Pensions

Department for Work & Pensions

California DHCS leverages cloud-based portal to boost provider satisfaction.

The California Department of Health Care Services (DHCS) faced a significant challenge with its decades-old California Medicaid Management Information System (CA-MMIS) application, hindering progress and struggling to keep pace with evolving healthcare needs. DHCS partnered with IBM Consulting® to modernize the system, leveraging IBM Garage™ Design Thinking methodologies and an agile mindset. The collaboration resulted in the development of a cloud-based portal for CA-MMIS, improving provider satisfaction and streamlining administrative processes. The solution components enabled secure, scalable, and seamless hybrid multicloud connectivity.

Outcomes

- 96.7% Medi-Cal user volume on cloud
- 60% daily business transaction volume on cloud
- 76% legacy EOS/EOL applications migrated to cloud
- 30% delivery cost reduction from inception of cloud journey
- 5 new programs leveraging hybrid cloud
- 2+ average features deployed per week
- Over 3,100 organizations adopted paperless processes
- 30,000+ providers onboarded with faster service turnaround time

Solution components

- Red Hat® OpenShift® on IBM Cloud®
- AWS consulting services
- IBM Consulting™

Read the full story →

Lidingö Stad (Sweden)
Strategic imperatives: Security

Lidingö Stad protects sensitive information with AI-powered data masking.

Lidingö Stad, a Swedish municipality, struggled to maintain transparency and democracy due to the time-consuming, manual process of reviewing and redacting PII and classified information in public document requests. To overcome this, they partnered with IBM, using IBM watsonx.ai® and natural language processing (NLP) to automatically detect and flag sensitive content. The solution combined machine learning models, foundation models, and IBM Watson® Natural Language Understanding to analyze documents. This streamlined Lidingö Stad's document assessment, reduced processing times, and helped ensure regulatory compliance.

Outcomes

- 50% reduction in processing time of public document requests

Solution components

- IBM watsonx.ai
- IBM Watson Natural Language Understanding

Read the full story →

Austrian Ministry for National Defence (BMLV)
Strategic imperatives: Security

IBM develops watsonx-based generative AI solution to provide fact-based information for the Austrian federal armed forces.

The Austrian Ministry for National Defence's Central Documentation Department (ZentDok) required an AI solution that ensured transparency, minimized hallucination risk, and upheld human-in-the-loop principles. Existing tools failed to meet these needs. IBM Austria's multidisciplinary Client Engineering team co-created an MVP using IBM watsonx.ai® to deliver fact-based, source-traceable answers through a custom interface. The resulting "ChatZentDoc" enables daily-updated information retrieval, filterable searches, and exportable results—helping BMLV maintain user trust while enhancing access and quality assurance..

Outcomes

- Increased user trust through fact-based, source-traceable responses
- Reduced risk of AI hallucinations with human-in-the-loop oversight
- Improved information access via custom, filterable search interface
- Daily data updates ensuring timeliness and relevance

Solution components

- IBM Consulting™
- watsonx.ai®

Read the full story →

"The quality of the first presentation positively surprised us all. No project has worked so quickly so successfully.

Colonel (Col) Klaus Mak
Head of the Documentation Center (ZentDok) at the National Defence Academy (NDA)
Austrian Armed Forces (AAF)

UNSER HEER

Resilient by design: The UK's new Emergency Services Network (ESN) takes shape

The UK Home Office faced a critical challenge: replacing the aging Airwave TETRA network, which supports emergency services, with a modern, resilient, nationwide LTE-based system—known as the Emergency Services Network (ESN)—while ensuring secure, uninterrupted communications during emergencies. To lead this transformation, the Home Office engaged IBM as its new user services provider, working in close collaboration with British Telecommunications (BT), through its mobile network arm EE and other key technology partners.

IBM is bringing its deep expertise in consulting, systems integration, and hybrid cloud architecture to deliver a fully integrated solution. ESN will provide mobile broadband, push-to-talk voice, messaging, and data services to police, fire, ambulance, and other emergency responders across England, Scotland, and Wales. The programme combines BT and EE's expanded 4G LTE network—including nearly 300 new mobile sites in remote areas and connectivity across the London Underground—with IBM's capabilities in secure orchestration and managed services.

By leveraging IBM Consulting®, hybrid cloud technologies, and secure infrastructure, the Home Office and IBM are advancing the next generation of emergency services. The result is a resilient, secure, and future-ready communications platform designed to keep frontline personnel connected when it matters most.

Read the full story →

"Every day our brave emergency services help members of the public facing life-or-death situations. We must do everything we can to maximise the chances of successful outcomes, and communications between frontline staff is critical to ensuring this."

"This government is working tirelessly to support this project, making sure it is delivered in a timely and cost-effective manner, and IBM will be an important part of bringing the Emergency Services Network online."

Dame Diana Johnson
UK Minister for Policing, Fire and Crime Prevention

Home Office

Government

Additional information

More insights for government leaders

Gain more insights on how to make governments more future-ready at:
https://www.ibm.com/thought-leadership/institute-business-value/en-us/industry/government

And explore some of our most recent insights and perspectives for government leaders:

- Drought, deluge, and data: Success stories on emergency preparedness and response
  https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/climate-resilience-case-studies
- Building future ready governments: Transformational lessons learned from a global shock
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About the IBM Institute for Business Value

IBM Institute for Business Value

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The right partner for a changing world

At IBM, we collaborate with our clients, bringing together business insights, advanced research, and technology to give them a distinct advantage in today's rapidly changing environment.

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