

# From ideas to impact: a government leader's guide to responsible AI implementation

Turning AI ambition into real-world value

October 2025



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The better the world works.

The EY logo, consisting of the letters 'EY' in a bold, white, sans-serif font. The background of the entire page features a man with a beard and headphones looking at a smartphone, with abstract digital wave patterns in yellow and blue.

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# Turning AI ambition into real-world value

Around the world, governments are increasingly adopting artificial intelligence (AI) – not just to improve efficiency in public services, but to change how they deliver results for citizens. The question is no longer whether AI should be adopted, but how to do so responsibly, effectively and at scale.

As governments move from planning to implementation, a key question emerges: How can they understand and prepare for the full complexity of scaling AI – moving beyond successful pilots and proof-of-concept projects to deliver real public value?

In our first report,<sup>1</sup> based on extensive research conducted with Oxford Economics (see Research methodology on p.3), we showed how AI is already reshaping the way governments deliver public services across six key value drivers: productivity and efficiency, employee experience, citizen and end-user experience, strategic service planning, financial optimization, and risk and resilience.

We emphasized the importance of making a strong strategic commitment to data and AI, aligned with the organization's overall vision. And we outlined five essential foundations: data and technology, talent and skills, an adaptive culture, trust and ethical governance, and a collaborative ecosystem (see sidebar Five essential foundations for AI success).

But even with these foundations in place, the journey from strategy to impact remains challenging. Many bold visions often stall in pilot projects, hampered by data and infrastructure limitations, privacy and ethical concerns, employee resistance and integration hurdles, skill shortages or unclear return on investment (ROI).

Governments that act quickly to remove these barriers can unlock new efficiencies and enhance citizen experiences. Those that hesitate risk falling behind, as delays lead to rising costs, missed opportunities for productivity gains and smarter policymaking, and unmet public expectations. As other nations advance, failing to keep pace can damage trust and widen the gap in digital progress.

## Five essential foundations for AI success.

### 1 Data and technology

The foundational platforms (including cloud), modern architecture, systems and high-quality, accessible data assets and products that enable advanced capabilities.

### 2 Talent and skills

Comprehensive digital literacy coupled with dedicated data science and AI skillsets distributed strategically throughout the organization.

### 3 Adaptive culture

An innovation mindset that embraces experimentation, continuous learning and the ability to evolve rapidly as technologies advance.

### 4 Trust and ethical governance

Building confidence through transparent data practices, robust privacy safeguards and ethical frameworks so that AI systems serve the public good.

### 5 Collaborative ecosystem

Strong partnerships across government, industry and civil society that support interoperability and accelerate innovation and implementation.



## Who should read this report and why?

This report helps government leaders navigate complexity and drive effective execution, whether they are just getting started with AI or scaling existing efforts. It is intended for those responsible for digital transformation and AI strategy – such as chief data officers, chief AI officers, chief technology officers, commissioners and directors general. Policymakers overseeing public sector innovation, as well as professionals in regulatory, ethics and compliance roles guiding responsible AI adoption, will also find this report highly relevant.

Drawing on insights from the interviews and the pioneering public sector initiatives they told us about, it offers a roadmap to unlock AI's full potential and turn ambition into measurable outcomes. We offer practical insights on the five critical steps: identifying high-impact and transformational opportunities, preparing for responsible implementation, piloting and evaluating solutions, building organizational readiness for solutions, measuring value, and sharing learning to ensure continuous improvement and broader government adoption.



### **Sheena Thompson**

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## Research methodology

Between July and December 2024, in collaboration with Oxford Economics, the EY global organization conducted research to answer the question: How can governments leverage data and AI to create more public value? We surveyed 492 government leaders across 14 countries who had significant experience or involvement in their organization's data and AI initiatives. This included roles such as chief executive officer, chief information officer, chief data officer, chief strategy officer, chief AI officer, chief innovation officer, chief operating officer or director of operations, chief technology officer, director general and commissioner.

To supplement the quantitative data and gain deeper insights, we conducted 46 in-depth qualitative interviews. These included 38 with public officials, four with academic and policy experts, and four with private sector leaders involved in AI deployment. These interviews provided additional perspectives on the maturity of data and AI adoption, challenges faced and best practices for overcoming those challenges.

Advanced AI tools, including EY Large Language Model (LLM), EYQ and Microsoft Copilot, were used to synthesize transcripts and extract key findings. EYQ analyzed large amounts of textual data, identifying patterns and themes with natural language processing (NLP) techniques. Copilot helped refine these insights by generating summaries and emphasizing important points from the transcripts. Together, these AI tools help enable efficient and accurate synthesis of qualitative data, supporting the identification of critical findings and trends.

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# Executive summary

## The challenge

Governments worldwide are moving beyond asking if they should adopt AI to addressing how to implement it responsibly and at scale. While many have strong AI foundations, the journey from ideas to impact remains challenging, with bold visions often stalling due to infrastructure and data limitations, security concerns, skills shortages, cultural resistance to change, integration complexity, insufficient funding and unclear ROI. This creates implementation paralysis when decisive action is needed to unlock efficiencies, improve outcomes and build trust.

This report, based on research with Oxford Economics, offers a practical guide for government leaders to move from strategic ambition to measurable impact. It draws on insights from 46 in-depth interviews, supported by advanced AI tools for data synthesis, and highlights successful examples from countries including Australia, Estonia, France, Canada, the UK and the US. These show how AI can be purpose-led, citizen-centric and scalable when implemented with discipline and foresight.

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The real challenge isn't proving AI works — it's proving it works at scale, in a complex public sector environment. Success depends on a business case that fully captures projected costs, demonstrates measurable benefits, and includes a credible plan for user engagement and adoption. This is the difference between pilots that stall and programs that deliver real public value.

**Sheena Thompson**

EY Global Government and Public Sector AI Co-Leader

## The solution: A proven five-step roadmap

### 1 Identify and prioritize high-impact opportunities:

Begin with desired outcomes, not technology. Top-down strategic alignment and bottom-up insights from frontline workers and citizens combine to identify meaningful use cases. Structured processes such as idea funnels, innovation hubs and prioritization frameworks help filter and rank initiatives. Governance structures ensure oversight and alignment with public value goals.

### 2 Prepare for responsible implementation:

Before piloting, assess data and infrastructure readiness, including technology architecture, data quality and security protocols. Privacy and ethics must be embedded from the start, while early engagement with regulators can avoid costly revisions. Ethical oversight, risk management and cross-functional governance boards are essential to ensure compliance and build trust.

### 3 Pilot and evaluate:

Pilots validate AI solutions in controlled environments that aim to reflect real-world conditions. Success depends on well-defined objectives, cross-functional collaboration and early involvement of end users to ensure relevance. Rigorous evaluation and iterative development help shape scalable solutions. Crucially, effective pilots underpin credible business cases — clearly demonstrating value, cost, security, and scalability. Without this, AI initiatives risk being shelved due to weak justification or unresolved executive concerns.

### 4 Build organizational readiness for scaling:

Select an operating model — centralized, decentralized or hybrid — based on existing structure, strategic goals, culture, and digital maturity. Change management is critical, with clear communication and co-design helping to overcome resistance to AI tools. Building internal AI capabilities through training, hiring and literacy programs supports sustainable adoption. Agile procurement approaches can broaden supplier access, foster innovation and strengthen internal capacity for co-developing scalable solutions.

### 5 Measure, learn and share to sustain impact:

KPIs and baseline metrics should be established before implementation, capturing the full range of benefits, from operational efficiency, productivity, service quality and accessibility, to broader societal benefits such as economic development, inclusion, sustainability and resilience. Dashboards and scorecards track the value delivered while stakeholder feedback enables real-time refinement. Sharing learnings through cross-agency events and case studies accelerates wider adoption across government and builds a culture of continuous improvement.

## The imperative

As AI advances, public expectations rise. Governments that delay risk widening gaps and eroding trust. With debt growing and budgets shrinking amid rising demand, they must do more with less — requiring efficiency beyond human capacity. Without AI, these challenges can't be met.

The window for action is narrowing, but the roadmap is clear. For leaders prepared to follow this structured approach, AI offers transformative potential. Governments that act swiftly and strategically can unlock significant value across key dimensions, including operational efficiency, employee experience, citizen engagement, strategic planning, financial management and resilience.

# Navigating the AI implementation journey: A five-step roadmap for government leaders

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Our first report revealed that while many governments have a strategic vision and strong AI foundations, a critical execution gap persists.<sup>2</sup> Organizations consistently struggle to bridge the space between successful pilots and enterprise-wide deployment – a challenge that requires systematic navigation of both technical and organizational complexities. The following five-step roadmap provides a proven methodology for overcoming this implementation challenge.

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Governments don't lack ambition when it comes to AI — but they often lack the mechanisms to translate that ambition into lasting impact. Our research consistently showed that success depends on disciplined execution: aligning AI initiatives with strategic outcomes, establishing robust governance and ethical oversight, committing to test, iterate and learn, and building the organizational capacity to scale responsibly.

**Julie McQueen**

EY Global Government and Infrastructure Insights Leader

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# 01

## Identify and prioritize high-impact and transformational opportunities



Every transformative AI journey starts not with algorithms or infrastructure, but with an outcome-focused mindset. Instead of asking, “How can we use AI?” pioneering governments ask, “What’s the outcome we’re aiming for – and could AI help?”

### Start with real, high-impact problems and opportunities

The Department of Transport and Planning in Victoria, Australia, illustrates how a strategic goal can steer the development of AI use cases. Its Transport Data Platform integrates structured and unstructured data to aid in predictive modeling and real-time insights. Jason Owusu, Chief Data and Digital Officer at the Department of Transport and Planning, explained that the initiative wasn’t positioned as an AI project but as a solution to a specific challenge: how to improve transport services for citizens.

Adopting a top-down approach aligns use case identification with an organization’s overall strategy and vision, helping to prevent fragmented efforts. For example, in the state of Maryland, US, all AI use cases are evaluated against the Governor’s 10 strategic priorities to ensure they align with broader policy goals.<sup>3 4</sup>

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The most important thing with the implementation of any AI project is that it’s purpose-led ... AI is just a tool that needs to be directed to a purpose.

#### Senior public official

Economic Growth and Better Regulation  
Victoria, Australia

Bottom-up approaches that capture insights from frontline workers and service users are equally important complements to strategic alignment. As Keisuke Murakami, former Director-General of Japan’s Digital Agency, put it: “If we only impose a top-down approach without knowing the actual situation of the bottom-up, it will not work on the ground.”<sup>5</sup> The Digital Agency exemplifies this approach by digitizing child consultation records, enabling counselors to voice-record consultations, reducing burnout while creating structured data for future AI analytics. As Murakami explained, “We’re not just digitizing for efficiency. We’re building the foundation for AI to support better decisions in the future.”

### Governments that get this balance right:

- Engage citizens and employees through surveys and feedback sessions to understand their real needs and pain points.
- Use existing agency data to pinpoint areas where services are lacking or inefficiencies exist.
- Host cross-functional and cross-government workshops to brainstorm and gather use case ideas from various business units, agencies and departments.
- Focus on public value creation by ensuring every potential use case aligns with the broader organizational mission and outcomes.

This approach ensures that AI initiatives address genuine operational challenges and citizen needs, rather than pursuing technology for its own sake.

## Explore transformational opportunities across government

Pioneering governments are exploring transformational AI use cases at a whole-of-government level – across sectors, agencies and programs – by leveraging integrated data sets and shared technology platforms.

Estonia's Bürokratt, an AI assistant, will provide a single digital interface for citizens, giving them access to over 5,000 digital services across 40 agencies, and eliminating the need to navigate multiple websites or departments. It is set to go live in the beginning of 2026. It uses NLP to understand and respond to user queries, while machine learning algorithms learn from interactions. It will offer services proactively based on life events like childbirth or bereavement, without requiring applications, simplifying access and ensuring citizens get needed support.<sup>7</sup>

Allar Laaneleht, Bürokratt, Services Project Manager at the Ministry of Economic Affairs and Communications, explains: "We're not just building a chatbot. We're building a network of AI assistants that can route citizens to the right service, regardless of which agency owns it."<sup>8</sup>

### Case example

#### Easing the burden on National Highways' contact center staff

At National Highways, Head of Digital Lab Kamran Ashraf and his team identified a clear operational pain point within the business: a high volume of routine journey planning queries, such as road closures and traffic conditions, taking time away from contact center staff's ability to respond to complex customer calls. As a solution, the team developed a Chatbot powered by Natural Language Processing and customer contact agent designed topics. The chatbot was designed to handle low-priority travel journey and transactional queries - freeing up valuable time for staff to focus on higher priority incidents.

As Kamran Ashraf told us, "In situations where customers may be in distress or at risk of danger on the road, we need our experienced operators to be available as quickly as possible to resolve incidents safely."

"The role of data and AI as a sole solution can often be overstated, but what's underplayed is the core purpose of business change: designing experiences that unlock value for employees and customers in their roles and journeys. This is why we ensured our solution was created with a human-centric and iterative process throughout."<sup>6</sup>



# Create structured processes for use case development

Leading organizations don't depend on random ideas. They develop structured approaches to identify and rank AI use cases through three key steps:

## 1

### Implement idea funnels and innovation hubs.

Successful governments systematically gather and assess potential AI use cases from sources such as IT teams, frontline staff, service users and tech partners. Digital teams, AI committees and cross-agency working groups manage the funnel, screening ideas for strategic fit, feasibility and impact, advancing the most promising ones for prototyping and implementation. Vinay Singh, former Chief Financial Officer and Chief AI Officer from the U.S. Department of Housing and Urban Development, said, "We created this idea funnel and do a quick triage before analyzing how to get this technology into a use case."<sup>9</sup>

Pioneering agencies also establish AI sandboxes and innovation hubs – dedicated units within government that bring together policymakers, technologists, service designers and external partners to test ideas, prototype solutions and scale what works. They provide safe spaces for teams to experiment in controlled environments, without compromising sensitive systems. These hubs often support idea funneling, capability building and cross-agency innovation.

In France, Florian Delezenne, Head of Department, Direction Interministérielle du Numérique (DINUM), the agency driving digital transformation and AI across the government, told us: "We decided to create incubators in each ministry or agency that worked with us. Initially, we supported them, but they gained greater autonomy over time and established their own startups."<sup>10</sup>

## 2

### Establish robust prioritization criteria.

Leading organizations assess feasibility across various dimensions, including implementation costs, alignment with the organizational mission, technical complexity, resource requirements and the potential risks of high-stakes use cases where algorithmic decisions could affect citizens' lives. They compare these factors with potential benefits, using clear success criteria, to make informed investment choices. Ultimately, they need to determine whether this will make a real difference to the way they operate and the people they serve.

It's also important to set realistic expectations around proof of concepts (PoCs). EY experience suggests only 20% to 25% of AI PoCs progress to production – although they serve as valuable learning tools. Cultural acceptance of this reality is key; PoC outcomes should inform prioritization, not be seen as setbacks, helping departments refine business cases and avoid costly missteps.



### Case example

#### Identifying and prioritizing AI use cases in Région Île-de-France<sup>11</sup>

Île-de-France launched an initiative in March 2024 to develop 40 new AI use cases, with a focus on generative AI (GenAI). The IT department led the initial identification, followed by a regional consultation inviting employees to submit ideas and needs for AI solutions. A dedicated team refined submissions, some reclassified as automation or redesign. Use cases were prioritized based on return of investment (ROI), including savings, time efficiency or service quality. Business lines coinvested in AI projects to align with operational goals and prevent fragmented decisions.

Of the 40 use cases, 30 progressed to a proof of concept and 10 reached full production. Use cases span internal operations (e.g., CRM enhancement, IT incident resolution via LLM, automating HR onboarding) and citizen-facing services (e.g., grant eligibility guidance via GenAI).



Now, we are working on transparency, ethics and governance of these use cases and the new ones to come each year. We have the idea to basically launch a new wave of AI use cases each year.

#### Achille Lerpinière

Chief Information & Technology Officer,  
Région Île-de-France

### 3

#### **Create governance for oversight and decision-making.**

Successful organizations establish governance structures, with representatives from various business functions, that provide ongoing oversight and strategic direction for AI initiatives. These bodies align stakeholder interests to focus limited resources on high-impact use cases.

They define approval mechanisms for advancing concepts to pilot phases, including setting success metrics, conducting risk assessments and implementing monitoring and adjustment protocols – structured processes that enable teams to learn, adapt and change course quickly during AI implementation.

#### **Case example**

##### **Driving AI with discipline: U.S. Department of Housing and Urban Development's (HUD) oversight model<sup>12</sup>**

HUD established an AI executive governance board comprising policy, technical and operating committees that oversee AI initiatives. According to Vinay Singh, "We're not centralizing innovation – but we are coordinating it. That's how we stay agile and compliant."

HUD created a lightweight intake form to triage ideas. The board regularly reviews and approves all AI proposals before proof of concept, ensuring they align with strategic goals and workforce needs. It also assesses the safety impact of AI projects to promote innovation while ensuring safety and ethics.

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The governance board has the final say on all these ideas if it's going to move, before it even moves to a proof of concept ... [It's] now meeting twice a month. We were ad hoc for a while. [It] just wasn't working. There's a lot of moving parts to getting AI right — so I help stage and get approval from the committees and executive board — so much of the success of complex programs and projects is crisp and clear communications.

##### **Vinay Singh**

Former Chief Financial Officer and Chief AI Officer, U.S. HUD

## **Recommendations for governments**

### **1**

#### **Start with outcomes, not technology**

Ask "what outcome are we trying to achieve?" before considering AI solutions. Focus on concrete departmental and public value goals such as improving service delivery, operational efficiencies or citizen experience.

### **2**

#### **Balance top-down and bottom-up approaches**

Align with strategic priorities while capturing grassroots insights from citizens and staff to reveal practical challenges and opportunities. This dual perspective helps avoid misaligned expectations and ensures relevance and feasibility.

### **3**

#### **Use structured and transparent processes**

Replace ad hoc experimentation with systematic methods. Use structured idea funnels, prioritization frameworks and governance oversight to evaluate potential use cases.

### **4**

#### **Build cross-functional teams and shared ownership**

Form agile teams that include AI specialists, data engineers, compliance officers and domain experts. Consider coinvestment in pilots from business units to guarantee commitment and relevance. Shared ownership drives focus and ensures that solutions are designed for integration into existing workflows.

# 02

## Prepare for responsible implementation

Before piloting, organizations must confirm that their technology, data, regulations and ethics are ready to support AI solutions effectively and safely.

### Evaluate data and infrastructure readiness

Inadequate digital and data infrastructure was seen as a constraint to AI adoption in 45% of organizations we surveyed. Therefore, it is vital that organizations assess their current infrastructure's readiness before piloting AI solutions.

Effective implementers evaluate their technology architecture's processing capacity, network infrastructure, integration capabilities and potential to support growth from pilots to enterprise-wide deployment. They invest in flexible, scalable and secure technology platforms, such as Lakehouse architecture, cloud computing and robust data management systems, to prepare for AI applications.

These successful government agencies also assess data readiness before piloting. Is the data accurate, complete and accessible? Or is it trapped in siloed systems and hard to activate? Are there clear rules about who can use what and when?

A prominent European tax authority improved responsible AI deployment by consolidating data from 253 systems into a single warehouse and rigorously tracking it from its origin – ensuring that data remained accurate, unbiased and compliant before being used in AI models.

South Korea's AI strategy prioritizes data quality at its core, acknowledging that most AI-generated hallucinations and biases originate from flawed or low-quality data sets. Data sets are discarded if they lack diversity or fail to improve model performance.

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If a data set doesn't qualify for diversity, we throw away the data set, even though we invested a lot of money in it, because if your data set doesn't have diversity, it's useless, and you should not train your algorithm on those data sets.

**Yoon-Seok Ko**

Vice President, National Information Society Agency, South Korea

With

62%

of organizations citing privacy and security concerns as constraints, governments must embed robust data protection from the outset. This includes encryption, access controls, usage restrictions, risk management protocols and governance frameworks to prevent the emergence of “shadow AI” – the unauthorized use of external AI tools that could expose sensitive data without proper governance controls.

Estonia’s Bürokratt platform exemplifies this approach through its decentralized model that processes data within individual agencies rather than centralized systems. Each agency maintains control over its own data, limiting unnecessary data sharing and reducing the risk of large-scale breaches. Secure interoperability and Estonia’s state authentication service ensure that only verified users access services, while compliance with GDPR and open-source transparency further reinforce privacy protections.

Estonia obtains informed consent and allows citizens to monitor their data use and share permissions with providers. About 450,000 citizens regularly check data access via the Data Tracker. Through the portal, they can view, track, and withdraw consents anytime. In this way, agencies remain accountable for using data only for the specific purpose for which it was collected.

However, as AI becomes more embedded in public service delivery, security risks are evolving. Government departments face growing challenges in testing AI security controls, particularly as malicious actors begin using AI to exploit vulnerabilities. Threats such as deepfakes can bypass AI-driven identity verification, while adversarial attacks and model manipulation pose risks to system integrity. Leading governments address these challenges through a security-by-design approach, embedding threat modeling, adversarial testing and incident response into the AI lifecycle.

## Establish ethical governance and compliance frameworks

With

42%

of organizations citing ethical concerns and 65% reporting that AI adoption outpaces regulatory guardrails, successful governments address these challenges through early regulatory engagement and robust ethical oversight.

### Early and continuous regulatory engagement

Well-defined boundaries and guardrails help shape how AI systems are developed, tested and deployed – especially in relation to legal, ethical and operational standards – keeping AI pilots safe and compliant. Without them, projects risk drifting into legal or ethical grey areas, delaying progress, eroding executive confidence and leading to costly revisions.

Successful organizations:

- Engage regulators early in the design process to ensure compliance and agree on guardrails around the types of AI use cases that do and don’t require their input.
- Maintain continuous, transparent dialogue with regulatory bodies throughout the implementation journey as regulations evolve and apply their advice immediately.
- Create regulatory sandboxes that give agencies temporary flexibility to safely test AI solutions.
- Create cross-functional compliance teams and AI governance boards that include legal experts, ethics advisors and policy specialists.

As Sebastien Renaud, Head of Unit for HR Digital Solutions & Business Process Efficiency for the European Commission, advised: “My advice is to continuously understand the constraints you’re operating under. Maintaining close, open and transparent communication with regulators is key – because if they can advise early on what will be acceptable, you can design a solution that accounts for all necessary requirements from the start.”<sup>13</sup>



## Ethical oversight and risk management

### Organizations that lead in responsible AI build ethical considerations and compliance structures into their programs from the start.

In the US, the Department of Defense (DoD) emphasized ethical and legal constraints as foundational to responsible AI. According to Captain (Ret.) Manuel Xavier Lugo, Senior Military Advisor, Chief Digital and Artificial Intelligence Office, Office of the Secretary of Defense: "What a lot of people see as constraints are really guardrails ... to ensure decisions are ethical, moral and legal." Task Force Lima, an initiative to understand and leverage GenAI technologies, issued clear boundaries for experimentation, including prohibitions on connecting GenAI to kinetic or life-critical systems.

Pioneering organizations implement ethical governance frameworks and create oversight committees with cross-functional representation, including legal and compliance experts, ethics and policy advisors, data scientists, AI specialists, IT and cybersecurity professionals, business function leads and HR leaders. They track new or changing regulations to ensure ongoing compliance; create clear ethical guidelines for employees; provide detailed documentation of AI models' purpose, data sources, design, limitations and governance protocols for transparency; and create and continuously monitor system outputs for anomalies and potential bias to alert teams to performance issues – enabling rapid response before issues affect service delivery.

Leading governments are building robust governance systems to evaluate the risks of AI – including bias and discrimination – and are prepared to intervene or halt deployments if there is potential to cause harm.<sup>14</sup>

## Leading organizations follow these key principles for enabling trustworthy AI

### 1 Unbiased:

Is the AI system free from biased assumptions and designed to promote positive social impact?

### 2 Resilient:

Is the data feeding into the AI system secure from unauthorized access that may lead to incorrect outcomes?

### 3 Explainable:

Can a human understand, challenge and validate the AI system's inner workings and its results?

### 4 Transparent:

Do end users have knowledge and control over what data is being used?

### 5 Performance:

Are the AI systems creating the value that they were designed to deliver and are they consistently meeting stakeholder expectations

## Case example

### Adopting a whole-of-government approach to responsible AI

In August 2024, the Australian government established a whole-of-government AI Task Force that issued interim guidelines addressing the risks associated with the use of AI and GenAI.

#### This involved:

- Appointing an accountable officer in each agency and department. These officers ensure proper oversight, governance, and risk management, thereby promoting transparency and explainability in the use of AI.
- Piloting an AI assurance framework across up to 20 agencies. The pilot helped determine the best way to evaluate AI use cases and assess the risk level of those AI applications.
- Developing technical standards that cover the entire lifecycle of an AI deployment. The standard includes model selection and vector database development, helping create value chain protection.

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We have a solid foundation for establishing government as an exemplar. The level to which we will hold ourselves accountable, and the extent to which others will hold us accountable, is higher than most other entities.

#### Lucy Poole

General Manager, Strategy, Planning and Performance Division at the Digital Transformation Agency, Australia<sup>15</sup>



Embedding ethical principles and transparency into algorithmic decision-making is becoming a hallmark of responsible AI development. Training programs help every team member to understand the stakes. In Estonia, Ott Velsberg, Government Chief Data Officer, Ministry of Economic Affairs and Communications, said: "We used the pilot to roll out ethics training and test compliance protocols ... laying the groundwork for responsible scaling."<sup>16</sup>

### Case example

#### Promoting transparency of AI decision-making

Canada's federal government introduced a directive on automated decision-making in 2020, requiring departments to complete an Algorithmic Impact Assessment (AIA) before deploying AI systems. The AIA assesses potential risks of automated decision-making processes across four levels, from low-impact grants to high-impact law enforcement applications.

#### Level

- |   |   |
|---|---|
| 1 | <b>No or Minimal Impact</b><br>low-risk systems involving routine administrative tasks  |
| 2 | <b>Moderate Impact</b><br>systems that can significantly affect individuals or organizations, but not critically  |
| 3 | <b>High Impact</b><br>systems that greatly affect individuals or organizations, potentially influencing rights, privacy or financial interests, and require a comprehensive assessment and effective risk mitigation strategies |
| 4 | <b>Very High Impact</b><br>systems that greatly influence critical aspects of individuals' lives or large-scale societal functions  |

This structured approach ensures transparency, fairness and recourse for citizens affected by algorithmic decisions.



The directive was really founded on principles of algorithmic transparency, dealing with data bias and recourse ... If you're not happy with the decision, how do you address it? That's why we built the AIA tool.

**Stephen Burt**

CDO, Government of Canada

## Recommendations for governments

### 1

#### Evaluate infrastructure and data readiness

Before piloting, assess whether your technology architecture can support AI workloads. Validate completeness, accuracy and relevance of data sets. Establish robust security protections against breaches and misuse.

### 2

#### Embed privacy from the start

Adopt privacy-by-design principles, integrating safeguards into system architecture, and develop clear protocols for how data is collected, stored and used.

### 3

#### Engage regulators early and continuously

Involve regulatory bodies from the design phase onward to comply with evolving standards and avoid costly revisions later. Use regulatory sandboxes to test solutions safely and build trust through proactive collaboration.

### 4

#### Establish strong ethical oversight

Create ethical guardrails that define boundaries for acceptable AI use and technical standards to ensure ongoing compliance with evolving regulations.

### 5

#### Build trust through transparency

Implement tools to evaluate risks and impacts of AI before deployment and provide training so that all team members understand and follow responsible AI practices.

# 03

## Pilot and evaluate

The next step is turning ideas into action. Pilots are essential to test solutions in real-world or simulated conditions to learn what works and validate their value. Only the most promising pilots scale for broader implementation.

### Create SMART goals and KPIs to evaluate pilot

Leading organizations design and execute pilots that are tied to clear business needs and public value outcomes – such as improved service delivery, cost savings or risk reduction. They establish specific, measurable, achievable, relevant and time-bound (SMART) goals from the outset, with clear KPIs to measure value.

Erin Guthrie, Senior Director, Cloud and AI Strategy at Microsoft, noted: “If you just implement this tool and you haven't really set a goal of what you're trying to achieve, then it can be a little bit demoralizing for folks ... take a call center, for instance – you should be able to handle up to 20% more calls, and all your calls should be rated this level of difficulty.”<sup>17</sup>

Evaluating AI pilot results based on the pre-defined KPIs is crucial to ensure solutions provide measurable value, meet stakeholder needs and justify wider deployment. In Estonia, pilots are evaluated against four criteria: time, cost, innovation and impact. Projects must demonstrate quantifiable benefits – such as time saved or harm avoided – to move forward. As Ott Velsberg, Government Chief Data Officer, emphasized, “Cool AI ideas aren't enough. We're after numbers.”<sup>18</sup>

Pilots at the Japan Institute for Promotion of Digital Economy and Community (JIPDEC) in Japan started using GenAI for meeting summaries and slide creation. These were low-risk, high-impact MVPs that showed clear ROI. The top-down approach involved setting specific goals and using KPIs to measure staff engagement with AI.

This built accountability and momentum for expanding successful pilots and adopting additional use cases such as document audits and foreign document retrieval.

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Defining key success criteria for a proof of concept is really key. It's about the problem you are trying to solve and what's the actual metric you're trying to move. At the end, how do you know if it was successful or not?

**Senior Public Official**  
State of Maryland, US

### Create the right conditions for effective pilots

Pilots play a vital role in testing AI solutions and verifying their potential value, but governments often face unique challenges in recreating real-world conditions for testing. To address this, leading governments establish controlled environments that emulate operational settings. These include regulatory sandboxes, which provide temporary flexibility to test AI solutions under actual policy constraints and live data testbeds where anonymized or representative data sets are used to simulate real service delivery. Some agencies also create simulated service workflows – digital twins of frontline operations – to observe how AI tools perform in realistic scenarios without disrupting live systems. These setups enable safe experimentation while ensuring oversight, compliance and maintaining public trust.

## Case example

### Harnessing the experience of frontline intelligence officers

At Australia's Department of Home Affairs, AI implementation has been a collaborative journey shaped by a robust partnership between data scientists, product managers and the lived experience of frontline officers. The department's Targeting 2.0 system was developed through agile, iterative prototyping, with officers actively feeding real-time insights into continuously learning AI/ML models. "Officer expertise is deep and is always going to pick up on new patterns, behaviors or issues that a machine is not going to detect, especially as criminals continue to innovate," said Pia Andrews, Chief Data Officer.<sup>19</sup> "The intuition and experience of frontline staff is a critical and continued input into training systems."

The ABF Commissioner, Michael Outram (at the time of writing), described this capability as "Targeting 2.0," saying "Targeting 2.0 seeks to apply the extraordinary power of AI to complement and amplify the deep expertise of our people, to identify new patterns at speed and at scale, to detect and disrupt crime as it happens, and, in time, to get ahead of the perpetual evolution of criminal activities. As AI continues to evolve we're going to be able to look at an increasingly bigger picture and start addressing problems at the systems level—whether in terms of threat discovery, modeling or disruption."<sup>20</sup>

This human-machine partnership has transformed border operations. Officers' observations are combined with machine learning outputs to assess risk profiles and detect illicit goods more accurately. The result: Faster decisions, more innovative interventions, and an estimated AUD\$3b in social and economic harm avoided in Australia in one year, using computer vision, predictive analytics and other data science techniques to intercept guns, drugs, tobacco and other illicit goods. As Pia Andrews told us, "Being able to get the best of both worlds—statistical analysis and lived experience—means we're feeding intelligence into systems that can scale nationally. It's certainly not about replacing people. It's about amplifying their impact."

## Design pilots with people at the center

Incorporating human input into pilot design helps develop solutions that are more relevant and grounded in operational reality.

### The most successful organizations:

- Create cross-functional teams that include AI specialists, data engineers, product managers, business analysts, compliance officers and domain experts.
- Apply iterative development and human-centered design that integrates user data and feedback at every stage.
- Involve end users early to make sure solutions meet real needs and fit smoothly into current workflows.
- Create intuitive interfaces that showcase AI's usefulness as an assistive tool.

Spending on outreach and engagement with citizens and communities can yield high returns by ensuring AI will actually be used to deliver its intended benefits beyond the pilot stage.

## Case example

### Co-creating with the community in Amarillo, Texas

In the City of Amarillo, Texas, Rich Gagnon, Chief Information Officer, described their journey to develop a GenAI concierge, Emma, embedded in the city website to help residents access services. Amarillo invested effort upfront in co-designing with users and proving value to stakeholders.

“

We run innovation sessions where we work closely with residents to fully define the problem. From there, we launch a pilot, learn from it and iterate together until we find solutions that deliver real impact. By the time we reach production, we've already demonstrated ROI, built public engagement and secured community buy-in. This makes the transition from innovation to implementation much faster.

### Rich Gagnon

Chief Information Officer, City of Amarillo, Texas, US<sup>21</sup>

## Develop clear, affordable scaling strategies

Rather than treating scaling as an afterthought, successful organizations design pilots with scalability in mind. As the chief data officer of a tax authority observed, “We try to avoid getting stuck in the proof-of-concept stage. Everything we do must have a clear path to industrialization.”

Pioneering organizations anticipate long-term costs and scaling needs and build them into business cases that anticipate full lifecycle costs to secure the necessary funding. However, some estimates suggest organizations routinely underestimate AI project costs by 500% to 1,000% when scaling from pilot to production.<sup>22</sup> Cost estimates should account for several categories of expenses: technology and data, including network infrastructure, data preparation and storage, compute needs, software and licensing, and energy use; talent and human capital, including hiring or upskilling staff and change management; governance, security and compliance, covering cybersecurity, privacy, legal and ethical oversight; and operational integration and maintenance, covering workflow redesign, user support, model retraining, and long-term upkeep. Understanding all these elements is essential to ensure proper resource allocation and avoid costly surprises.<sup>23</sup>

Weighing AI production costs against delivered value - whether in monetary savings, enhanced mission performance, or citizen satisfaction - is also critical but challenging. As Erin Guthrie from Microsoft noted, “It’s important to be really thoughtful about which use cases you select so that you’re actually driving the ROI. If you’re trying to run a very complex query every time, that’s using a ton of computing power, that starts to become very expensive ... You want to be thoughtful ... Just having some guardrails around which things meet that bar.”

Given budget constraints, governments need to find ways to fund AI deployment that are flexible, cost-effective and clearly connected to measurable public impact. The UK government is shifting funding from traditional waterfall approaches to agile frameworks, aligning budgets with progress. Recommendations include staged funding for AI trials, based on shown progress, and performance-based funding for digital services, linked to outcomes through regular reviews, which reduces bureaucracy and speeds up decision-making.

Leading organizations prioritize quick wins in high-impact areas that generate value fast, while building the case for investment to support further expansion. They start with MVPs to build momentum before adding features. As Stephen Burt, Chief Data Officer, Government of Canada, told us: “We talk about minimum viable policy - get something usable out the door in weeks, then improve it.”<sup>24</sup>

Another way to contain costs is to build core AI infrastructure and then leverage it across multiple departments. In Estonia, Allar Laaneleht, Bürokratt Services Project Manager, Ministry of Justice and Digital Affairs, shared how the Bürokratt virtual assistant is being scaled across agencies and municipalities. The model emphasizes modularity, local ownership, and citizen-centric design: “We’re not building 16 versions of the same service. We build once and adapt.”<sup>25</sup>

In the UK, Citizens Advice balances central strategy with local experimentation to deliver scalable, high-impact solutions. Alex Butler, Executive Director for Digital Technology, explained how the Caddy AI assistant - designed to help agents answer complex queries - was developed and tested by a local team, then evaluated and scaled nationally. It’s now being rolled out across the Citizens Advice network and to other agencies such as DWP and HMRC.<sup>26</sup>

## Recommendations for governments

### 1

#### Plan for scaling from day one

Design pilots with scalability in mind rather than treating them as an afterthought. Estimate costs and resource requirements, including infrastructure, data, computer, maintenance and risk management. Use flexible funding models to reduce financial risk and support experimentation.

### 2

#### Set SMART goals for every pilot

Align pilot objectives with broader organizational priorities and public value outcomes. Define specific, measurable goals and clear KPIs upfront to determine what constitutes success and measure impact objectively.

### 3

#### Design with people at the center

Involve end users early so that solutions address real needs. Integrate pilots into existing workflows and apply human-centered design principles, using iterative development and continuous feedback that leverages user data and feedback at every stage.

### 4

#### Evaluate results rigorously

Use quantitative and qualitative criteria (e.g., time saved, cost avoided, service user experience improvement) to assess pilot outcomes and justify wider deployment. Document lessons learned and seek stakeholder feedback to refine solutions.

### 5

#### Build modular and inclusive systems

Start with MVPs and iterate. Empower local teams with tools and training, and develop solutions that can adapt to diverse needs and resource levels.

# 04

## Build organizational readiness for scaling

Scaling successful pilots across an organization requires addressing both technical and organizational challenges, such as infrastructure limitations, funding constraints and change management difficulties – while maintaining momentum from successful pilots.

### Establish appropriate operating models for AI delivery

Organizations must choose operating models that align with their strategic goals, technical capabilities, culture, risk appetite and operational realities.

#### Three primary operating models offer distinct pathways:

- **Centralized models** where AI development, deployment and governance are managed by a single authority or central team. This builds technical capacity and supports ethical and legal compliance. However, risks include misalignment between AI and domain experts, which leads to operational needs not being addressed and a lack of buy-in from staff.
- **Decentralized models** allow individual departments or agencies to manage their own AI systems independently. This model supports alignment with operational needs, quick experimentation and user buy-in. However, it can be harder to maintain consistent security and compliance and can create potential duplication of effort and fragmented governance.
- **Hybrid or federated models** combine centralized oversight with distributed execution. Central teams (sometimes referred to as the hub) provide strategic direction, shared infrastructure and standard setting, while AI specialists are integrated into departments or functions (the spokes) to develop and deploy AI solutions tailored to their needs.

Research shows that leading organizations often adopt a hybrid approach, benefiting from both technical expertise and operational alignment.<sup>27</sup>

#### Success depends on several factors:

- Clear governance frameworks that define roles, responsibilities and decision rights
- Strong collaboration between technical, operational, legal and ethical teams through mechanisms such as boundary spanners and cross-functional working groups (regular communication, shared metrics and continuous learning are essential to ensure cohesion, accountability and innovation across the system)
- AI training for managers and front-line employees to cultivate a data-driven culture
- Adaptable leadership that can navigate evolving risks and opportunities and lessons from pilot projects



## Case example

### Connecting data and AI to delivery at the Australian Taxation Office (ATO)

The ATO's Data and Analytics (D&A) hub has a team of about 1,000 managing the entire data lifecycle, including governing D&A and delivering D&A tools, solutions and expertise to other areas of the agency.

A senior public official explained, "Center of excellence (COE) setups or federated setups do not have the longevity to deliver value. What makes this setup [hub and spoke model] work is that we are in the trenches with the business... That creates intimacy in regard to understanding the client needs, but also mutual respect and trust because we're not just sitting in the ivory tower issuing decrees about data and analytics and AI. They connect with each other horizontally to avoid reinventing the wheel. We aim to leverage economies of scale and learning curves from that context."

The hub has client account managers, or translators, to connect the hub and spokes, ensuring commonality across solutions.

## Address change management and workforce concerns

With

# 31%

of the organizations we surveyed citing workforce concerns about job protection as a barrier to AI development, leading companies involve people in the process through clear communication strategies that highlight the benefits and address concerns.

Designing AI tools with humans, not just for humans, so that the tools fit into user workflows rather than disrupt them, helps foster enthusiasm. As Pia Andrews, Chief Data Officer, Department of Home Affairs, Australia, put it, "Our intention is about complementing, amplifying and augmenting the workforce ... the public sector will always have a backlog, which is exponentially larger and growing than the workforce we have."

Another challenge is the initial mistrust of the AI systems by government officials accustomed to human decision-making processes. Emphasizing the importance of technology combined with human ingenuity to deliver value is a vital message that helps employees understand the ongoing significance of their roles. It also increases employees' job satisfaction by eliminating low-value tasks and freeing up their time to work on higher-value, more fulfilling work.

The director of data and analytics at a European tax authority talked about the need to reassure staff that AI tools were intended to support not replace them: "Our caseworkers, our agents, they were like, 'Are you replacing me with this solution?' [We told them], all the information will still be fed back to you, and you have to decide whether we do X, Y, or Z with the citizen ... Initially, they were skeptical but, once results started rolling in, they could really see the value."

## Develop AI capabilities across the organization

Building internal AI skills and capabilities requires a systematic approach, starting with a skills needs analysis to assess current competencies and identify gaps relative to future AI ambitions. Organizations then need to critically evaluate their sourcing strategies around what capability they should build and what they should buy.

Governments should develop a structured roadmap for training and development. Training should be role-based, combining e-learning, workshops and practical experiences to upskill staff at all levels. Establishing an "AI ambassador" network can accelerate cultural change and foster continuous learning.

"From a workforce capability and planning perspective, we are currently working to deliver initiatives outlined by the Australian Public Service (APS) Data, Digital, and Cyber Workforce Plan 2025-30. The goal is to identify key challenges across all three disciplines and to start building stronger knowledge, literacy, and practical technical skills. This is fundamental to ensure APS talent is ready to respond the needs of today, and into the future." – Lucy Poole, General Manager, Strategy, Planning and Performance Division at the Digital Transformation Agency, Australia

Strategic hiring and partnerships with external experts or contractors help fill specialized skill gaps, while strong retention strategies – both monetary and nonmonetary – keep critical talent engaged and motivated. Promoting an AI and data-driven culture – through awareness, literacy and advocacy – ensures that best practices are integrated across the organization. By aligning these efforts with the broader AI adoption roadmap, governments can prepare their workforce to lead and maintain transformative AI initiatives.

## Modernize procurement approaches

Traditional procurement often slows AI adoption. Unlike legacy systems, AI evolves fast – making long, rigid evaluation cycles a poor fit. Agile models such as fixed-capacity and variable-outcome contracts offer a smarter alternative: Retained teams work through a backlog of use cases with predictable monthly costs, avoiding the need to contract for every idea. Risk/reward models are also gaining traction, pushing vendors to share accountability and deliver real outcomes. Modernizing AI procurement requires shifting from traditional, rigid models to agile, inclusive approaches. Evolving strategies – such as market scans, innovation challenges and flexible vendor engagement – open access to a broader ecosystem of suppliers. This includes not only SMEs and startups but also large technology firms and professional service advisors who bring deep domain expertise, integration capabilities and strategic guidance.

As Captain (Ret.) Manuel Xavier Lugo commented: “The barrier to entry is no longer there. You can be a small company that is addressing a particular challenge and you're in.”

Leading organizations also invest in internal capability to evaluate and manage AI solutions effectively. This includes training procurement teams and IT professionals to assess vendor offerings, manage risk and support ongoing capability development – not just one-off purchases. A senior public official at Economic Growth and Better Regulation Victoria, Australia said: “Governments want to enhance their expertise and to be a very informed procurer.

To foster sustainable AI adoption, government leaders are calling for deeper collaboration with technology partners – moving beyond transactional procurement toward co-development.

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We need closer, fairer relationship with tech companies and consultants. Rather than coming in and hard-selling products and services that too often don't meet the needs of the public sector, work WITH public servants to co-design and implement the right products that solve real problems for the public.

**Dr. Laura Gilbert**

Former Head of Data and AI, 10 Downing Street, UK

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## Recommendations for governments

1

### Choose appropriate operating models

Select centralized, decentralized or hybrid approaches that align with organizational culture and capabilities. Combine centralized strategic oversight with embedded departmental expertise to balance innovation and operational relevance.

2

### Prioritize workforce engagement and change management

Communicate clearly about AI's role in augmenting – not replacing – human decision-making. Design AI tools with users to ensure integration into workflows and build trust and enthusiasm.

3

### Develop specialist skills to guide AI implementation

Conduct skills gaps analyses and invest in the development of specialist teams – such as data scientists and engineers – who can design and scale AI solutions. Equip leaders with the insight needed to guide AI adoption and align AI with strategic goals.

4

### Build AI literacy across the organization

Develop targeted training programs to help the broader workforce become AI-savvy – able to understand, use and engage with AI tools confidently.

5

### Modernize procurement approaches

Shift from rigid, long-cycle procurement to agile inclusive approaches that involve a blended ecosystem of traditional vendors with domain and technology expertise, as well as innovative SMEs and startups. Build in-house expertise to co-develop solutions with vendors and ensure long-term value delivery.



# 05

## Measure, learn and share to sustain impact

Leading organizations establish systematic approaches to measure value, capture learnings and share insights to build trust and ensure continuous improvement and broader government adoption.

### Define KPIs and baseline metrics

Effective measurement starts before implementation begins. Organizations must document their current performance levels to accurately measure improvement and demonstrate ROI. It's essential to set clear objectives aligned with organizational priorities and public value. Governments should develop KPIs and baseline metrics that capture the full range of benefits – such as reductions in processing time, service improvements, employee satisfaction, fraud and error reduction, and increased compliance – rather than only focusing on cost savings.

Surveys, in-app ratings, sentiment analysis and direct engagement sessions can assist governments in monitoring experience and satisfaction with citizen-facing AI tools.

### Measure value and iterate based on feedback loops

Leading organizations use dashboards and scorecards that track performance against baseline metrics to demonstrate tangible improvements. Effective monitoring requires regular review cycles – monthly for operational metrics, quarterly for strategic impact assessment.

Stakeholder feedback systems gather insights from citizens and employees, tracking both expected and unexpected outcomes to allow for real-time improvements and quick corrections. Leading organizations focus on the story the data reveals.

What has changed for citizens? What did frontline workers experience? What surprised the team? What can be done to enhance the tool and its results? These insights often come from qualitative feedback as much as from KPIs.

#### Case study

#### Using real-time analytics to optimize AI at the Department of Home Affairs, Australia

The Department of Home Affairs started using advanced analytics to help ensure programs deliver their intended impact. Teams define program outcomes, indicators, and evaluation measures upfront and monitor both intended and unintended impacts of AI initiatives through real-time portfolio analytics.

According to Pia Andrews, this kind of capability allows the department to adjust course based on live data rather than waiting for evaluation checkpoints, creating an adaptive approach to policy management. "Adaptive policy aims to build tools, capabilities and an operating model that doesn't just measure, but actively optimizes the policy settings and program approach to best realize the intended impact over time. Our hope is that we can use new technologies like AI/ML to help us keep a finger on the pulse of both the intended and unintended patterns of impact."<sup>28</sup>

## Make impact visible – to leadership, employees and the public

Regularly reporting to leadership, employees and the public on AI implementation progress and impact promotes transparency and accountability while strengthening stakeholder confidence.

Communication should be tailored to different audiences: Political and organizational leadership reporting focuses on strategic outcomes and ROI to guide future policy decisions and investments, employee communication on workflow improvements, and public reporting on citizen value creation and ethical AI commitment to foster trust and accountability.

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Our executive director wants to better demonstrate how our work is impacting the public because that's our core purpose. Having clear insights into that impact is incredibly valuable.

### Senior Public Official

Texas Department of Licensing and Regulation, US

## Embrace a learning mindset

The real momentum for AI comes not just from isolated pilot projects, but from the stories and lessons that ripple outward. Agencies that embrace a learning mindset are better equipped to navigate uncertainty and scale what works. They celebrate iteration, reward curiosity and create safe spaces for experimentation.

This spirit of openness is taking shape in practical ways. Within individual agencies, the feedback loop is vital. Frontline employees, technical experts and end users all have a voice, sharing insights that shape future projects. Comprehensive reports and case studies are uploaded to the central repository, and teams actively participate in cross-government events, ensuring their hard-won knowledge benefits others.

At the international and cross-government level, some leading organizations are building centralized knowledge repositories – collating advice, guidance and results from every pilot. Knowledge-sharing events bring together AI leaders, experts and newcomers to share stories about successful AI implementations, challenges and opportunities. These conversations can help to reveal common, scalable AI solutions that can be rolled out across departments, amplifying the impact.

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We set up this community of practice [in the state of Maryland], which is essentially all the folks who are leveraging AI or thinking about building it in their respective agencies, forming a joint working group. We all talk to see, "What are the issues that you're facing? Can we do things to not reinvent the wheel? That's another way to bring everyone along on the same pathway.

### Senior public official

State of Maryland, US

Internationally, UNESCO's Global Forum on the Ethics of AI brings countries together to share lessons and best practices on how to implement AI ethically and responsibly, learning from each other's real-world experiences. As Gabriela Ramos, Assistant Director-General for Social and Human Sciences of UNESCO, put it: "We're not building an index – we're building a compass. Countries want to learn from each other."<sup>29</sup>

By making learning a shared journey – celebrating wins, dissecting failures and opening up the process – government leaders are turning AI pilots into launchpads for transformation. The result? A public sector that's not just experimenting with AI, but building a culture of continuous improvement, trust and collective progress.

## Recommendations for governments

### 1

#### Define KPIs and baselines before implementation

Establish measurement frameworks that capture the full range of benefits – such as service improvements, citizen satisfaction and employee experience – rather than focusing solely on cost reduction.

### 2

#### Create continuous feedback loops

Regularly monitor progress, tracking both intended and unintended consequences, and gather stakeholder input to enable real-time refinement and rapid course correction.

### 3

#### Share learnings across government

Organize cross-agency events, publish case studies and maintain knowledge management systems. Share successes, failures and lessons openly to build trust and accelerate learning and adoption across the public sector.



# Conclusion

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Organizations that succeed with AI follow structured methods that address both technical and organizational challenges. They begin with real problems, establish suitable governance frameworks, pilot strategically and expand thoughtfully.

Leaders in government AI adoption already demonstrate what is possible when AI is systematically implemented – they achieve substantial benefits in productivity, employee experience, citizen services, strategic planning, financial management and organizational resilience.

The framework outlined in this guide – from identifying high-impact opportunities to measuring and sharing results – offers a proven path forward based on lessons from leading government organizations worldwide.

The opportunity is significant, but it requires disciplined execution, ongoing commitment, and the ability to learn and adapt. For government leaders prepared to make this commitment, the chance to improve public services, enhance citizen experiences and strengthen organizational capabilities makes this effort both essential and rewarding.

As AI technologies develop rapidly, the cost of inaction rises daily. Organizations that delay adopting AI risk widening service gaps, losing public trust and falling behind in serving citizens effectively.

Those who act quickly can harness AI's transformative potential to improve outcomes for citizens, employees and society. The window for action is narrowing. As AI capabilities accelerate, so do public expectations.

For leaders ready to move from strategy to impact, the opportunity is enormous. With the right roadmap, AI can be a catalyst for a more responsive, resilient and citizen-focused public sector.

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The true test of AI in the public sector lies not in its initial implementation, but in its ability to create sustainable change across diverse governmental functions. Achieving this requires a comprehensive strategy that outlines clear objectives, quantifies expected outcomes, and fosters collaboration among stakeholders. This distinction separates fleeting initiatives from transformative solutions that genuinely enhance public service”

**Dr Thomas Erwin**

EY Global Government and Public Sector AI Co-Leader

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# How EY teams help government organizations with data-driven transformation

EY teams can assist government organizations in implementing data and insights-driven transformation through a broad approach that spans strategy development, execution and value measurement.

## 1

### Strategy development and planning

EY teams conduct a thorough assessment of the current state of AI and data capabilities within your organization. We define your destination and develop a detailed strategy and roadmap, outlining key initiatives, timelines and milestones. We provide support in prioritizing and planning the implementation of high-impact use cases that support the organization's long-term goals. We conduct stakeholder engagement to help deliver alignment and buy-in, and help to identify governance structures to oversee the AI strategy implementation. For a transportation authority, our program provided a modernization roadmap that improved safety outcomes and customer service while simplifying the technology landscape.

## 2

### Creating the foundation

EY teams help build robust digital infrastructure and scalable data platforms that form the backbone for AI initiatives. This includes data lakes, cloud platforms and integration tools. For a state transportation department, we helped to develop an enhanced open data exchange platform that improved data governance and searchability while fostering collaboration with the developer community – creating a foundation for data-driven decision-making and operational excellence.

We embed ethical and responsible AI practices from inception, including the establishment of core policies, principles and governance structures. When implementing a child welfare data platform for a state education department, our governance framework provided both enhanced collaboration and rigorous privacy protection across 2.1 million records. We put people at the center by building agile cultures, developing workforce capabilities and delivering solutions that benefit end users with sustainable adoption. For a federal defense department, we standardized data workflows that not only reduced transfer time by 66% but also empowered analysts with instantaneous impact assessments and simplified processes that reduced sprint planning time by 75%.

## 3

### Execution and value measurement

During the execution phase, EY teams design and develop AI models tailored to specific use cases. We support pilot programs to test and refine AI solutions, and the scaling of successful pilots across the organization, helping ensure integration with existing systems and processes. We build trust into every solution through robust validation processes and transparent AI models. Our strategic alliances help enable us to design the optimal solution without ecosystem constraints.

We help to quantify the benefits realized from AI initiatives, such as cost savings, efficiency gains and improved service delivery, by defining and continuously monitoring KPIs, which demonstrate value and inform decision-making.

We provided an AI-related M365 Copilot workforce pilot assessment to a government client in a joint venture with Microsoft that focused on use case refinement and performance monitoring, with estimated savings of around 5% to 9% of hours per week for employees.



# EY proprietary accelerators and tools

**Our transformation approach is powered by field-tested proprietary assets:**

- 1. EY AI Strategy Framework:**  
a set of artefacts used to evaluate an organization's current capabilities, processes and performance in AI implementation
- 2. AI Use Case Catalog and Ideation Framework:**  
rapidly identifies and prioritizes high-impact AI use cases through stakeholder engagement, workshops and feasibility evaluations
- 3. AI Governance Toolkit:**  
establishes ethical and responsible AI adoption through core policies, principles and a governance structure
- 4. AI Risk Playbook:**  
develops a comprehensive risk management framework, including a risk register, model risk tiering, and ongoing monitoring and controls
- 5. Rapid Assessment Framework:**  
evaluates technology and infrastructure readiness, identifying gaps, opportunities for improvement and future investments
- 6. Data Fabric Architecture:**  
increases efficiency with 90% reduction in manual effort
- 7. Secure Innovation Labs:**  
test AI solutions in controlled environments
- 8. EY Skills Assessment:**  
conducts skills need analysis and develops a roadmap for training and talent development, powered by the EY Skills Foundry and My Talent
- 9. EY Estimator Tool:**  
provides detailed cost and timeline estimations for AI implementation
- 10. AI Monitoring Framework:**  
tracks progress and evaluates the effectiveness of AI initiatives through defined metrics and milestones, including business outcomes and stakeholder satisfaction

By leveraging these frameworks, tools and accelerators, the EY organization provides a structured and effective approach to implementing data analytics and AI, ultimately driving innovation, operational efficiency and helped enhance service delivery for government organizations.



## Footnotes

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Sheena leads AI and digital transformation initiatives for government and public sector clients worldwide, helping them enhance citizen services and build agile digital capabilities. With over 15 years' experience across the UK, Middle East, and India, she has focused on improving public sector outcomes through technology and innovation.

Sheena is passionate about diversity, equity and inclusion, and has led Women in Technology initiatives in both India and Dubai. She holds a BA in Business Management from Nottingham University and an MSc in Information Systems from the University of Sheffield, and is based in London.



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Thomas leads EY's EMEA AI and Data practice, supporting government departments and public sector agencies to harness data and AI for transformation, improved decision-making, and better outcomes for citizens. He brings over 25 years' experience across 30+ countries, specializing in strategy, execution, and building innovation-led cultures.

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