

# AI IN GOVERNMENT: OPPORTUNITIES, RISKS AND RECOMMENDATIONS



## INTRODUCTION

The Policy Innovation Lab at Stellenbosch University, in collaboration with the Policy and Research Services branch in The Presidency of South Africa, convened a Digital Dialogue in March 2025 to explore the use of artificial intelligence (AI) in government. The event brought together the global experts Andrew Cooke, global policy lead for Microsoft's public sector organisation, Thabo Makenete, head of public policy for Southern Africa at Meta, Shimon Shmooely, head of public affairs and AI policy for emerging markets at Google and Rachel Adams, CEO and founder of the Global Centre on AI Governance.

The Digital Dialogue formed part of a series that addresses topics related to digital transformation in government. It also seeks to contribute to South Africa's G20 priorities, particularly those linked to the digital economy, and to this end brought together experts from industry and academia to discuss the practical application, regulatory frameworks and ethical dimensions of Al adoption in the public sector.





Al presents numerous opportunities for governments. The discussion identified several areas where Al can enhance public sector efficiency and effectiveness.

**Enhancing operational efficiency** was highlighted as a significant benefit. All has the potential to streamline administrative tasks, allowing public servants to focus on solving complex problems and strategic decision making. Governments can automate routine processes such as form processing and responding to standard queries, significantly reducing workload and improving service delivery speed. Al-powered systems that manage large volumes of data can help cut operational costs while improving accuracy and efficiency.

Improving public service delivery was another important theme. Al-driven chatbots and digital assistants, for example, offer round-the-clock support, guiding citizens through complex procedures like applying for agricultural payments or accessing human resources updates. These tools reduce bureaucracy, making government services more accessible and responsive. Enhanced digital interfaces ensure that citizens receive timely and relevant information without unnecessary delays.

**Driving economic growth** through AI adoption was a further point of discussion. By optimising processes and reducing inefficiencies, AI can drive productivity gains across the public sector. Investments in AI infrastructure, such as local cloud services and data centres, can stimulate economic activity, create jobs and contribute to GDP growth. Research cited during the dialogue suggests that improvements in procurement practices and data management could generate significant financial benefits, reinforcing the case for AI-driven modernisation in government.

Strengthening government resilience was another opportunity discussed. Al-powered tools can enhance governments' ability to respond rapidly to crises. In areas such as healthcare and law enforcement, real-time data analysis can help detect patterns, anomalies and emerging threats. Whether managing a public health crisis or identifying security risks, Al enables more effective and timely responses. By integrating it into critical services, governments can build more resilient and adaptive institutions, ensuring continuity and stability in times of uncertainty.





Despite the numerous opportunities, the adoption of AI in government comes with risks. The discussion highlighted several key risks that must be addressed to ensure responsible and effective AI implementation.

**Regulatory and ethical concerns** are a key risk. The lack of clear regulatory frameworks governing AI creates risks around transparency, accountability and ethical use. Without appropriate policies, AI systems may operate in ways that are not fully beneficial to society. The discussion stressed the need for governance frameworks that evolve alongside AI advancements, ensuring that ethical standards are embedded at every stage of AI development and deployment.

**Data protection and privacy concerns** are another critical issue. Al relies on large amounts of personal and sensitive data, raising serious questions about security and compliance with data protection laws. Governments must ensure that Al applications protect citizens' privacy while managing risks related to data breaches and misuse.

Procurement challenges were also highlighted. Governments, often less experienced than the private sector in AI procurement, face difficulties in making informed decisions about AI solutions. Many departments are still experimenting with AI, and a lack of technical expertise can lead to sub-optimal procurement choices. Challenges typically include understanding cost implications, ensuring that procurement processes align with rapidly evolving technologies and avoiding rigid frameworks that could stifle innovation. Governments must also balance short-term costs with long-term strategic benefits when investing in AI.

Job displacement and skills mismatch pose another risk. As Al automates routine tasks, some government roles may become obsolete, potentially leading to workforce disruptions. Without proactive reskilling and retraining efforts, employees may struggle to transition into new roles, resulting in a skills gap that could slow Al adoption. The discussion emphasised the need for forward-thinking skills development strategies to prepare workers for an Al-driven public sector.

**Exacerbation of inequalities** was another major concern. If AI technologies are only accessible to well-resourced groups, government departments or certain regions, the benefits may not be evenly distributed. This could lead to a widening digital divide, where marginalised populations are left behind. Additionally, without strong oversight, AI could reinforce existing biases in public service delivery, deepening social and economic disparities. The discussion stressed the importance of inclusive AI policies to prevent technology from becoming a tool for further marginalisation.





Recommendations emanating from the discussion are outlined below, clustered in terms of three sets of imperatives.

# **Policy imperatives**

#### Develop comprehensive regulatory frameworks

Governments should prioritise the development of regulatory frameworks that ensure responsible and ethical use of AI. Regulatory measures must be flexible enough to accommodate rapid technological change while safeguarding fundamental rights. By drawing on international good practices and adapting them to local contexts, policymakers can create standards that support innovation while protecting citizens.

#### Modernise procurement processes

There is a pressing need to modernise procurement policies to better accommodate Al technologies. Governments could, for example, move towards outcome-based procurement, drawing lessons from their experiences with cloud computing and other digital initiatives. Flexible framework agreements can enable the adoption of innovative solutions that may not be the cheapest option in the short term but offer greater long-term value.

# Societal imperatives

### Enhance public engagement and build trust

Public trust is critical to the successful adoption of AI in government. Policymakers must ensure that the public is well informed about the benefits and risks of AI. This requires transparent communication and active engagement with communities to explain how AI systems work, how decisions are made and what safeguards are in place. Public perception surveys and consultation processes can help identify areas of concern and ensure that policies are aligned with the needs of citizens.

#### Build digital skills and capacity

A well-trained workforce is essential for the successful adoption of Al. Governments must invest in training programmes for public servants, procurement teams and other stakeholders to build the necessary technical expertise. This should include initiatives to enhance digital literacy across all levels of government as well as targeted programmes for communities most likely to be affected by automation. Capacity building could also extend to collaborating with academic institutions and private sector partners to foster continuous learning and skills development.



#### Ensure inclusivity and mitigate inequality

It is essential to design AI systems that are inclusive and that actively work to reduce social and economic disparities. Policymakers should focus on enabling AI applications that cater to underserved communities and support services in local languages. Measures should be put in place to monitor the impact of AI on different segments of society and to address any unintended biases. This might include targeted programmes for women and other marginalised groups to ensure that the benefits of AI are equitably distributed.

## Innovation imperatives

#### Invest in data infrastructure

Governments should classify, organise and prepare their data so that it can be effectively used in AI systems. This involves developing protocols for data sharing between departments and ensuring that data is stored and processed in a secure manner. Investment in local cloud infrastructure remains critical. By ensuring that data is managed in a transparent and secure way, governments can support innovation while safeguarding privacy and security.

#### Encourage innovation through experimental sandboxes

Creating regulatory sandboxes or innovation hubs can provide a controlled environment for testing new Al applications. Such experimental spaces allow governments to pilot projects without the risk of wide-scale disruption. They also offer a platform for stakeholders to collaborate on developing innovative solutions that are both effective and compliant with regulatory frameworks. Sandboxes can serve as a proving ground for ideas, enabling policymakers to refine strategies before broader implementation.

#### Foster public-private partnerships

Collaborative partnerships between government, industry and academia are vital for driving AI innovation. Governments should actively seek to engage with technology providers, research institutions and civil society organisations to co-develop AI solutions tailored to local needs. Such partnerships can enable pilot projects and innovation hubs that test AI applications in controlled environments before scaling them up.



# CONCLUSION

The dialogue highlighted both significant opportunities and considerable risks in adopting AI in government. AI promises to streamline operations, enhance public service delivery and drive economic growth, but challenges remain – including regulatory gaps, data protection issues, bias and the risk of deepening inequalities.

Governments must invest in infrastructure and skills, modernise procurement practices and implement flexible regulatory frameworks. Strong partnerships across public agencies, industry and academia, along with continuous monitoring and public engagement, are key to deploying AI responsibly and inclusively.