# Generative AI in Government

November 2023

## apolitical

## Quarterly
# Global Insights

Sharing trends, data and research from Apolitical's global community of more than 200,000 public servants

# At a glance

↗ More and more public servants are using generative AI tools at work. The proportion of respondents who said they use these tools 'often' in our community polls more than doubled between March and July.

↗ Practical guidelines from governments on generative AI are increasingly common, with notable similarities but differing emphases.

↗ Individual public servants have driven the adoption of generative AI, mostly using these tools to enhance their research and writing.

↗ Customised-for-government generative AI applications with greater security have become a focus for governments in the last six months.

# Welcome to the AI edition

# 56% ↗

### Of Apolitical members say they are hopeful and excited about AI

↗

Apolitical is a unique community where public servants from over 160 countries learn and connect with their peers.

Our diverse community ranges from senior leaders navigating the complexities of digital transformation and climate policy to new public servants improving their project management skills.

Through courses, articles, events, discussion boards, interviews, polls and more, we have countless touch-points with the global public service. In this quarterly report, we synthesise insights from those interactions— alongside wider research and the invaluable perspective of our **Advisory Council** of distinguished government leaders and innovators — to provide a snapshot of what's driving government.

# A snapshot of generative AI in government

**Artificial intelligence has been the single most important topic in our global community over recent months. Public servants are curious about this technology and what it could mean for their work in government.**

November 2023 marks 12 months since ChatGPT was released. It hit 100 million users in January—record-breaking growth in the history of digital applications.

Apolitical launched the **Government AI Campus** in July. Since then, thousands of our community members have been getting to grips with the age of AI by reading articles, attending events and taking courses. These actions taken by our community provide valuable insight into how they are experimenting with and feeling about AI.

## 13,000+

Public servant interactions with Apolitical's AI learning content in 2023

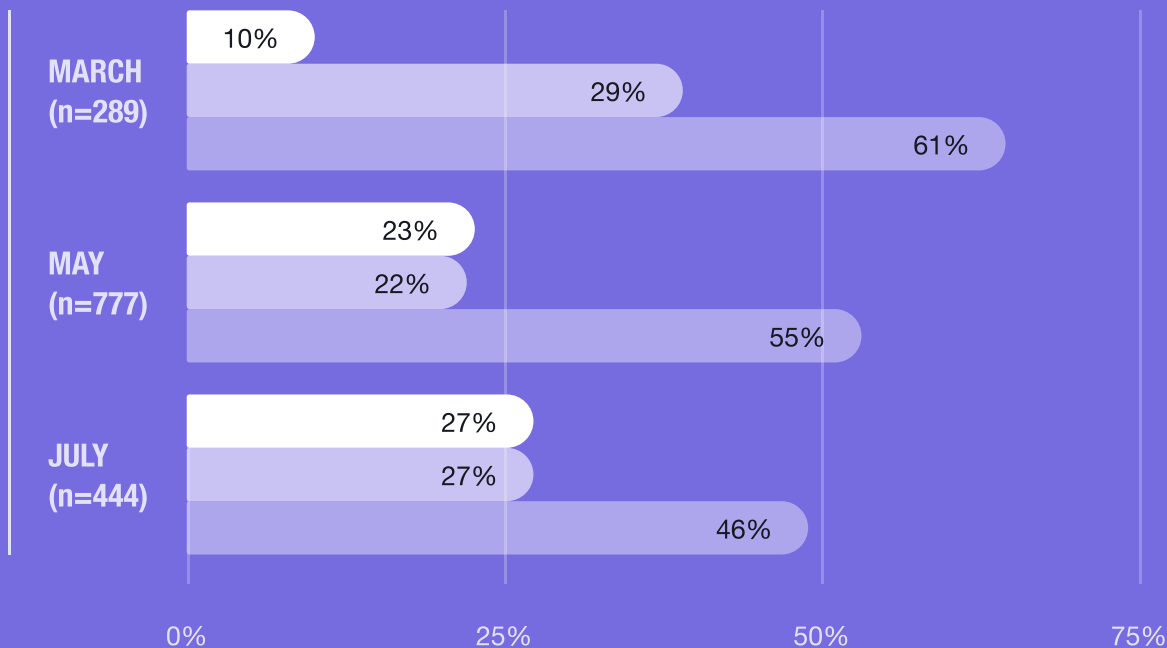# More and more public servants are using generative AI tools

We've been polling our community about their use of generative AI tools in government. The proportion of members who self-report using AI often has been rising — from 10% in March to 27% in July.

Across our three polls, on average, around half of the public servants (54%) we polled said they are not using AI tools.

## How often are public servants using AI like ChatGPT at work?

Apolitical
community polls

Often
Occasionally
Not using it

**MARCH (n=289)**
- 10%
- 29%
- 61%

**MAY (n=777)**
- 23%
- 22%
- 55%

**JULY (n=444)**
- 27%
- 27%
- 46%

0%          25%          50%          75%

Wider evidence suggests that there are similar levels of adoption by private sector workers. A widely cited survey of ChatGPT workplace use by Fishbowl, a U.S. networking app, **found that 43%** of employees at companies like Amazon and Google are using it. This challenges the narrative of a 'digital divide' between the public and private sectors.

# Public servants' attitudes to adopting AI

For the most part, our community members are more hopeful and excited about AI than fearful and nervous — the split was 56% to 35% in our May poll.

As part of Apolitical's new interactive course on the Government AI Campus, ***Understand How AI Impacts You and Your Government***, we ask public servants about their attitudes to AI in more detail. Here's what we've learned to date and the broad categories of AI users we're seeing.
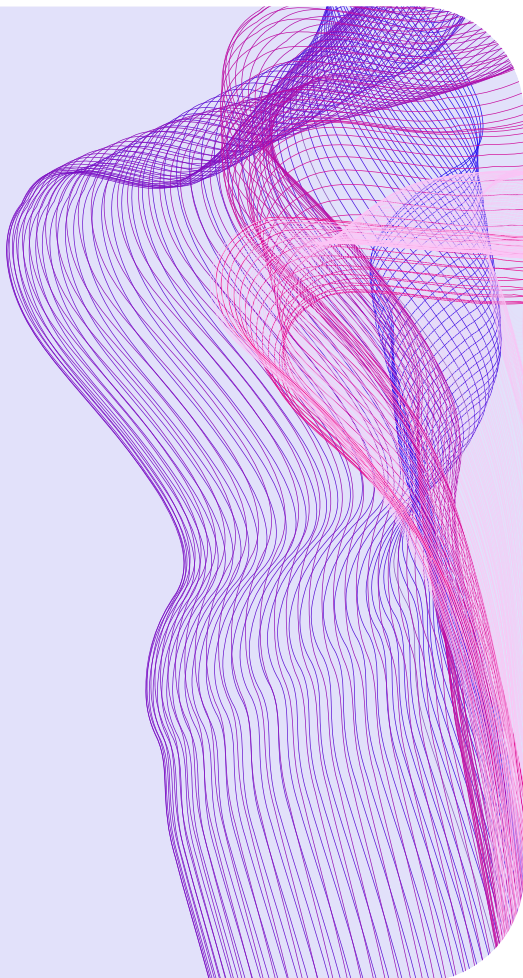
## Enthusiastic adopters

There are groups (around 15% and 9% respectively) of 'enthusiastic adopters' and 'eager testers' — the types of people likely to show initiative using AI tools.
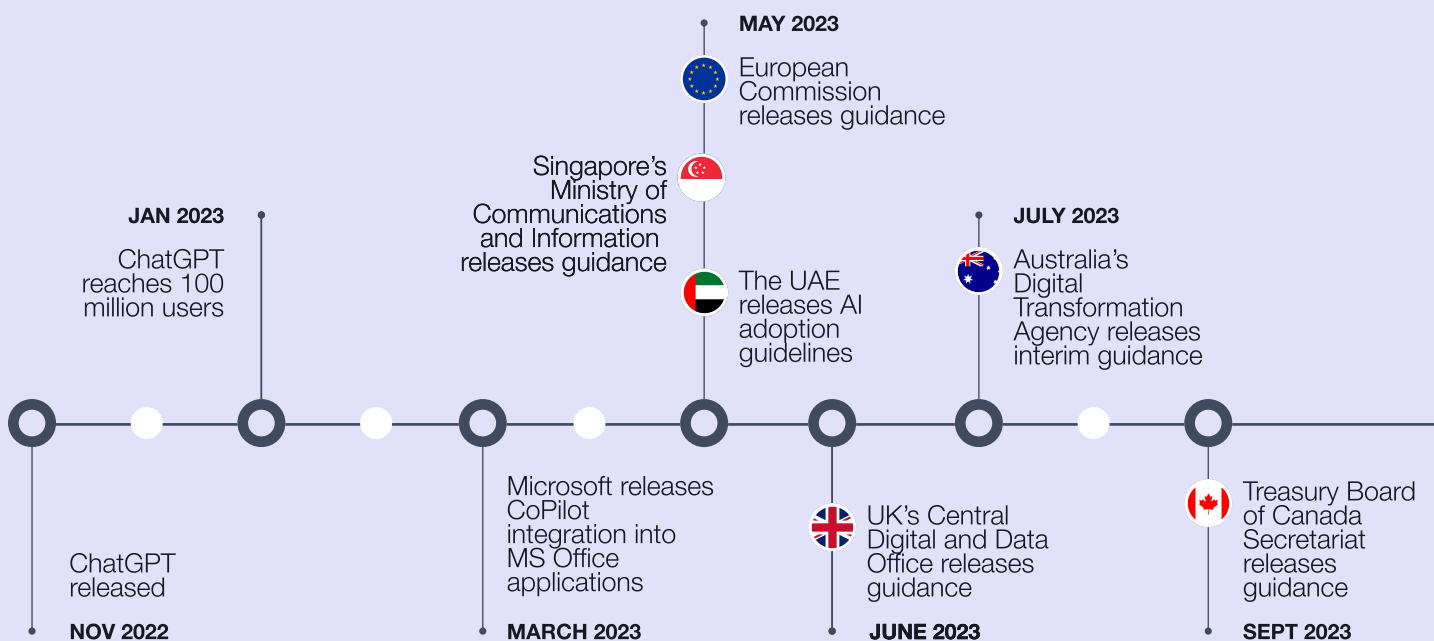
## Keen explorers

A larger group (35%) identify as 'keen explorers', perhaps following the lead of the enthusiastic adopters.

## Tentative testers

A smaller proportion are neutral (22%). And another group (19%) are open to testing AI but tentative about it.

# Governments are already publishing generative AI guidance

In early 2023 there were concerns that governments weren't responding to the explosion of generative AI quickly enough. While strategic policies are still in development, some governments have rapidly released operational policies to manage how public servants and organisations should use these new tools. The timeline below shows the steady publication of guidance by a selection of governments, and the table on the next page summarises key points from these policies.



**JAN 2023**
ChatGPT reaches 100 million users

ChatGPT released
**NOV 2022**

Microsoft releases CoPilot integration into MS Office applications
**MARCH 2023**

Singapore's Ministry of Communications and Information releases guidance

**MAY 2023**
European Commission releases guidance

The UAE releases AI adoption guidelines

UK's Central Digital and Data Office releases guidance
**JUNE 2023**

**JULY 2023**
Australia's Digital Transformation Agency releases interim guidance

Treasury Board of Canada Secretariat releases guidance
**SEPT 2023**

## Apolitical compared government guidance from six countries and noted some common features:

- Most explicitly prohibit the processing of non-public information.
- Guidance documents emphasise public servants' individual responsibility for AI outputs.

- Some countries explicitly require public servants to cite usage of generative AI in the work.

- Half provide public servants with practical and relevant use cases. The UAE's State Ministry for Artificial Intelligence has developed a **comprehensive cross-sector resource** with specific commands to use on ChatGPT, Midjourney and other platforms.

| | UAE | EUROPEAN COMMISSION | SINGAPORE* | UK | AUSTRALIA | CANADA |
|---|---|---|---|---|---|---|
| **FOCUS** | Practical use cases<br><br>Adoption models and assessment tools for agencies | Rules for individual use | Rules for individual use | Rules for individual use<br><br>Example use cases | Principles for individual and agency best-practice<br><br>Examples use cases | Guidance for federal agencies |
| **RESTRICTIONS** | Refers to wider national data and privacy regulations | Non-public information<br><br>Using AI outputs in official text or publications | Non-public information | Non-public information | Non-public information<br><br>Refers to wider national data and privacy regulations | Refers to wider national data and privacy regulations |
| **ACCOUNTABILITY** | Refers to wider national AI regulations | Individual is responsible for AI outputs | Individual is responsible for AI outputs<br><br>3rd party suppliers to government | Individual is responsible for AI outputs | Generative AI must not be final decision-maker in advice or services | Individual is responsible for AI outputs |
| **ETHICS AND TRANSPARENCY** | Encourages agencies to track the data being used to train models so outputs are explainable | Assess whether AI outputs violate IP rights | Not specified in reporting | Must acknowledge usage | Must acknowledge usage | Emphasises fairness in recommend approach, particularly around mitigating bias |
| **SKILLS AND EDUCATION** | Includes practical advice on agency adoption | Not specified | Third party apps must educate public servants on usage | Emphasises public servants' adopting critical mindset | Not specified | Public servants encouraged to learn how to use tools critically |

Singapore is taking a notably proactive approach to educating its public servants on using generative AI tools. Part of this is ensuring internal tools built by third-party developers for the Singaporean government include educational elements.

The Office of Management and Budget is expected to release federal guidance in the coming months. An August survey of agency leaders suggests that plans are well-underway to roll out new generative AI applications.

India has embarked on an ambitious agenda for adopting AI into government. In October, the Ministry of Electronics and IT published a **major national report** outlining the key strands of its IndiaAI programme. That includes prioritising the development of AI for use in government and taking a proactive approach to skills development, with recommendations for membership and AI training schemes for civil servants.

# So, how are public servants using AI right now?

Overwhelmingly, public servants in our community want to use AI tools to help them work more efficiently — it was the priority learning topic when we polled attendees at our **Government AI Campus** launch event in July.

When we asked public servants how they were using or involved with AI, there was a fairly even split between research, writing and a slightly smaller group working on AI in policymaking and service design.

## How are public servants using or involved with AI?
Apolitical commiunity poll | July 2023
(n=437)

| | |
|---|---|
| Not using it | 42% |
| Research | 22% |
| Writing | 19% |
| Appliying to policy and services | 17% |

0%   10%   20%   30%   40%   50%
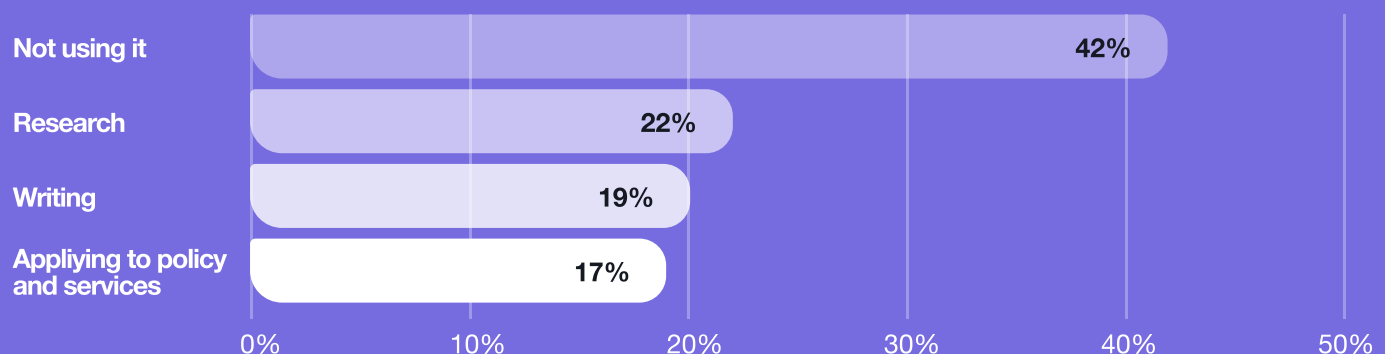
# Two things stand out from this data:

## 1. The focus on writing skills

Good writing skills are vital for getting ahead in the public service. We see and hear this often from the governments we work with closely. Public servants frequently post questions to the Apolitical community seeking advice on writing personal statements and policy briefings. Spaces on our flagship writing course ('*Advance Your Writing in Government')* are often oversubscribed.

The need for writing support varies significantly across the public service. AI tools like Grammarly are helpful for editing — but generative AI can produce first drafts of entire texts. It's a much more powerful tool that could help level the writing playing field. For the less confident writers in government, that assistance will provide a big boost. Apolitical has already started to explore how to adapt our writing courses to reflect this new reality and support public servants to work confidently and responsibly with generative AI as a writing aide.

## 2. Individual initiative drives adoption

**The initiative of individual public servants has helped bring generative AI into government.**

In our March poll, nearly 40% of our community members said they were using generative AI tools for work at least some of the time. At that point, Microsoft had only just begun to release Office CoPilot. It was also well before official guidance policies were published or departments started building customised generative AI applications.

This is "bottom-up" government innovation — individuals being empowered to bring a powerful new technology into the government stack at little or no cost, and it's an extraordinary development. The next wave will be more top-down, with more strategic integration into services and organisational machinery.

## "The opportunity for bottom-up innovation is huge."[1]

1. Tim Gorton, *'Let a thousand flowers bloom'*, Sep 2023

# Generative AI and public sector productivity

**Generative AI could be a powerful force for enhancing public servants' capability and productivity, but there are pitfalls if it's not used critically. Public servants need to understand the technology and its applications.**

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Several studies published in 2023 have shown that generative AI can significantly boost the productivity of workers across a range of roles with direct equivalents in the public sector, such as software engineers and call centre operators.[2]
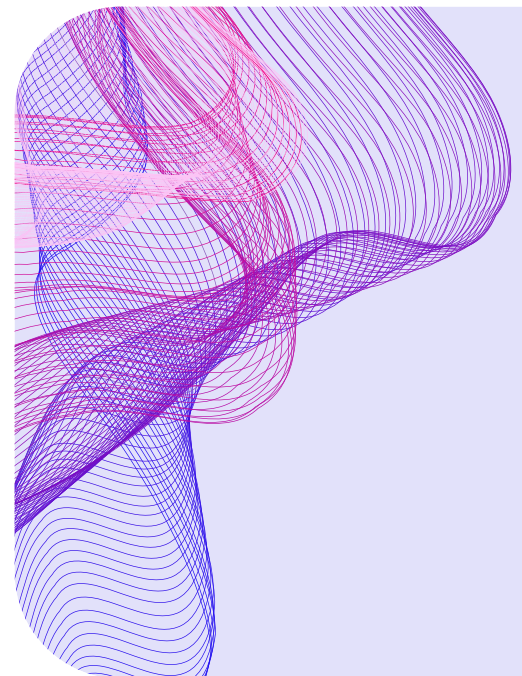
A recent study by researchers at Harvard Business School, conducted with 750 consultants at Boston Consulting Group (BCG), echoed these findings. When the participants used ChatGPT to help them with a series of tasks which tested their creativity, analytical skills, persuasiveness and writing ability, they excelled. They worked 25% faster than the non-GPT group and delivered work which was of a significantly (40%) higher quality standard.

**But the research also revealed a fundamental weakness with generative AI when knowledge workers use it uncritically.**

2. Steven Strauss, *Some emerging hypotheses about using generative AI in public sector operations,* Aug 2023

Another cohort of consultants tried to use ChatGPT to help with a classic consultancy case study, which involved problem-solving through analysing financial data and finding insights in interview transcripts. Again, the group using ChatGPT worked faster (20%) and they produced higher quality work (22%), including detailed plans and projections.

**But their analysis and recommendations were also less accurate (19%).**

Producing highly detailed work quickly is not efficient if it's also wrong. The negative implications for policy development and decision-making, operational planning or programme design, for example, could be significant. This evidence should inform government's approach to educating public servants about AI.

## Flying or falling?
## The impact of relying on ChatGPT for complex tasks

SPEED        20%
QUALITY      22%
ACCURACY    -19%

-30%  -20%  -10%  0%  10%  20%  30%
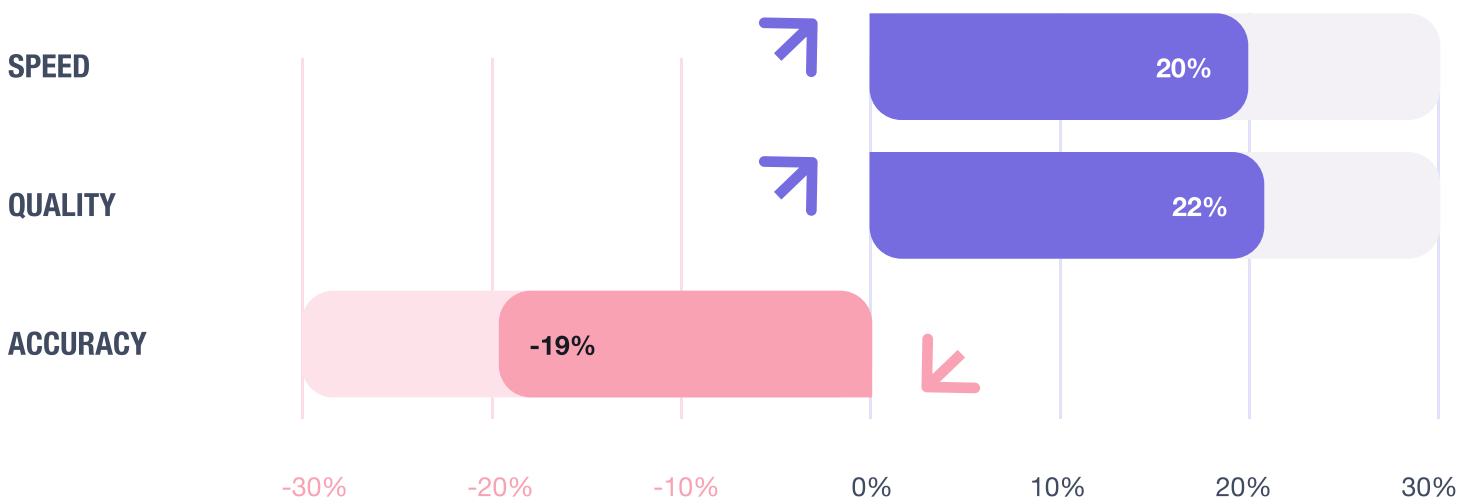
(Dell'Aqua, et al., 2023)[3]

If public servants don't learn to use generative AI tools critically and for appropriate tasks, they have the potential to create confusion and even require additional layers of assurance work. Singapore's skills-first approach demonstrates that governments can focus on building public servants' confidence and capability to use these tools alongside building the tools themselves.

3. Dell'Aqua, et al., *Navigating the jagged technological frontier,* Sep 2023

# There's a risk of uneven adoption across government

**Uneven adoption of generative AI across professions and groups of people in government could create gaps in performance.**

Generative AI can help close performance gaps between colleagues in an organisation. Among the BCG consultants in the Harvard study, for example, using ChatGPT helped close the gap between the highest and lowest-performing consultants by 81%.

**But what happens if higher-performing members of a team learn how to maximise generative AI and their colleagues don't?**

Government leaders in our community have spoken about the risk that generative AI could amplify wider social inequalities, particularly in relation to digital inclusion, which is separately related to education level and age. It's a risk for both the public and private sectors but two considerations for government stand out.
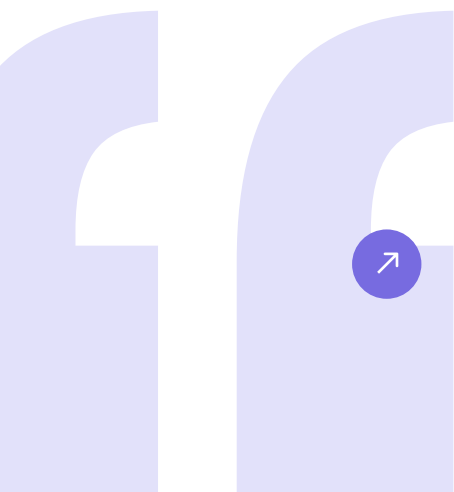
"Some colleagues are more willing and able to adapt than others. Some of our team members just out of college are adapting to it very quickly and are using it to help them be more productive… No one is required to use the technology — unlike Word or Excel — so it is all really down to individual initiative."

**Yoshi Manale**
**City Manager, New Hampshire, U.S.A and Apolitical member**

## Making knowledge work more exclusive

**Early analysis suggests** that generative AI will have the greatest impact on knowledge-based work, like policy or data analysis in government. If that proves true, it could erode entry-level jobs in these fields and negatively impact career pathways for underrepresented groups.[4]

## Creating an oversight gap

Senior government leaders will need to get to grips with this technology quickly and stay up to date. They are often responsible for leading work in areas that they don't have a deep technical background. While they don't need specialist skills, they need a strong grasp of key concepts and processes to ask probing questions.

As the applications of generative AI move beyond drafting letters and memos, the stakes for senior leaders being able to challenge the way their junior colleagues are using it will be increasingly important.

Earlier this year, 300 UK government leaders enrolled on our Digital Excellence Programme. Throughout the programme, we saw participants **talk about the importance** of "confidence" for public servants embracing and leading change when it comes to new technology and ways of working.

4. Ada Lovelace Institute, *Foundation models in the public sector*, Oct 2023

# Privacy and bias are big concerns for public servants

**While our community members are optimistic about generative AI, they are also cautious about the risks.**
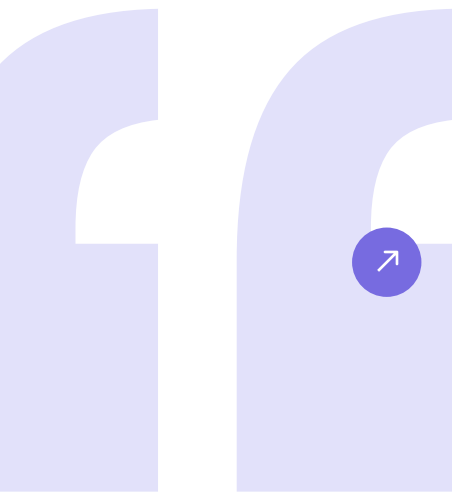
## Privacy and security

Concerns centre around the processing and storing of sensitive government data on third-party applications.

Apolitical hosted an AI event with over 1,000 policy professionals from the UK government in September. Privacy came up as a major issue in questions and comments throughout.

Operational guidance for generative AI in several countries refers to wider data and privacy laws. Improving public servants' awareness of data privacy laws could help build confidence to use generative AI tools and enjoy potential productivity gains, rather than unnecessarily avoiding them due to legal concerns.

Another intervention which will also address these concerns is the emerging trend for governments to build more secure, customised applications on top of foundational models from external providers (such as OpenAI's GPT3 and 4).

"How can we trust third parties who create AI products with the kind of data that many government departments handle, sensitive as it is?"

**Policy professional, United Kingdom**

# Fears of bias

Concerns around the potential of AI to amplify pre-existing biases are frequently raised by our community members.
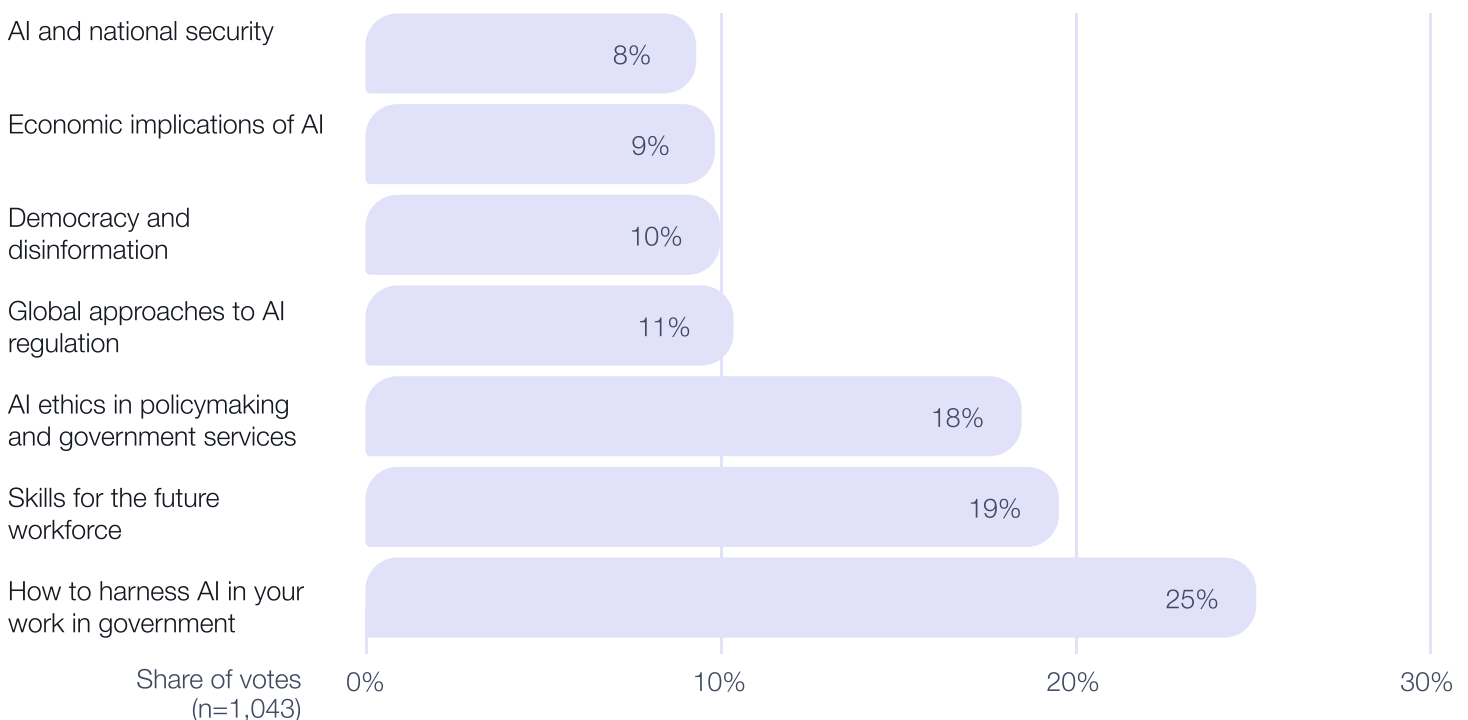
It's a valid concern as there are high-profile examples of algorithmic bias wreaking havoc for citizens. The Robodebt scandal, for example, profoundly affected the Australian Public Service.

Civic organisations recommend that leaders interrogate underlying training data when procuring foundational models (like GPT3 or 4) to build customised applications for government.[5]

On the other hand, not all AI use cases present a meaningful risk for bias. In our conversations with AI practitioners, we've heard examples of an overly cautious approach constraining innovation in low-risk use cases, such as reviewing internal procedures. Caution is absolutely the right approach for government, but it needs to be grounded in a robust understanding of the technology.

## Which AI topics do public servants want to learn about?

Apolitical community poll | July 2023

| Topic | Share |
|---|---|
| AI and national security | 8% |
| Economic implications of AI | 9% |
| Democracy and disinformation | 10% |
| Global approaches to AI regulation | 11% |
| AI ethics in policymaking and government services | 18% |
| Skills for the future workforce | 19% |
| How to harness AI in your work in government | 25% |

Share of votes (n=1,043)
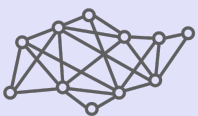
0%          10%          20%          30%

5. Ada Lovelace Institute, *Foundation models in the public sector,* Oct 2023

# Case studies: integrating AI

We are seeing the adoption of generative AI widening from individuals using it informally, to integration with generic tools like MS Word, and now department-level strategic initiatives.

**SMART NATION** & **DIGITAL GOVERNMENT OFFICE**

## Singapore builds generative AI productivity tools for its workforce

Singapore's Smart Nation and Digital Government Office was an early adopter of generative AI. Since February, it has been building 'Pair', a suite of productivity tools using OpenAI's foundation model. Pair will help civil servants with writing, coding and ideation. Around 3% of civil servants are using the tool (as of June). There is a data protection agreement in place with Microsoft's cloud service.

Department for Education

## United Kingdom tests ChatGPT to analyse documents and inform skills policy

The UK's Department for Education ran a productivity trial mid 2023 to see how ChatGPT could help assess local skills plans. The study compared ChatGPT's output with a real civil servant's work. ChatGPT was also prompted to spot trends and predict future skills needs. That moves generative AI beyond just summarising and into informing policy. Results have not been published.

# Final thoughts from Robyn Scott
# Apolitical CEO

**Reflecting on the last few months, I can't recall a single dinner party or conversation with a leader in government where AI didn't feature somewhere – often hijacking an unrelated topic. I know I'm not alone.**

Amidst the pervasive chatter and coverage since ChatGPT3 made AI everyone's business, it's hard to believe that anything is under-hyped or under-reported. But in my view, when it comes to the impacts on governments, some key parts of the story are still insufficiently told.

The regulatory aspects of AI are, of course, well-covered. Less talked about is how we integrate AI into the machinery of government and our public services – and across its workforce (one of the world's largest).

Take tax. Despite squeezed public finances everywhere, only in the last couple of months has the potentially massive implications of AI for helping governments detect fraud and improve tax takes started to become a mainstream conversation in governments. In the United States, the Inland Revenue Service will start using AI to detect complex frauds. Several other governments are exploring it and jaws drop when its potential becomes clear. This is just one example of many.

Even less discussed – indeed I have not heard anyone make this point – are the indirect benefits of AI on how governments operate. Increasingly, I think these could be as important as the direct impacts. In 2020, in the early months of Covid-19, we polled public servants around the world about their greatest concerns.

Top was protecting vulnerable people. The second highest was preserving the positive changes from Covid-19, which were forcing governments to work faster, more flexibly, more collaboratively and more digitally. But as the pandemic tide ran out, many teams in government reverted to old habits.

The tide of AI, by contrast, is not going out. Quite the opposite. And this inexorable pressure is going to force governments to modernise, systemically, in a way that the Covid-19 response teased.

Considering the tensions and opportunities of these trends, the two quotes shared below have stuck with me in recent months. The first from a UK senior civil servant speaking at CogX in September; the other from a member of our community **replying to a discussion** thread about government best practices for AI.

Both share the same core insight: **what we need now, in this period of change and uncertainty, is not static positions but adaptability.** This requires a new operating system in governments, which in turn means confronting a difficult tension: sometimes (though certainly not always) stability is a positive in governments.

To navigate this tension, and its inherent trade-offs, it's critical that government leaders and their teams rapidly develop a deeper understanding of AI — what it is, how it works and what it can and, critically, can't do.

They must continuously brush up on these skills (the half-life of many AI skills is months) and they must learn, constantly, from the approaches and experiences of others. Important examples abound already, from Australia's citizen-centred public consultations on AI to India and Singapore's strategies for rapidly developing skills, to Canada's focus on fairness and Estonia's rapid experimentation and adoption. There are valuable lessons for every government.

Our **Government AI Campus** is designed to address these twin needs: providing regularly and rapidly updated online training from world-class experts, taken in cohorts of local and global peers, and complemented by insights from experts around the world and online and in person conversations.

We're excited to be able to offer this training for free to the first 10,000 public servants thanks to generous support from the Rockefeller Foundation and Google.org. I hope you and your teams will join us.

*Robyn*

> **"A good policy is often stable, but a stable policy won't do in a fast-moving technology environment."**

Sarah Munby, Head of the UK Department for Science, Innovation and Technology

> **"Best practices are for a simple world; good practices for a complicated world. For a complex world, [we need] emerging practices. And, for sure, we live in a complex world."**

Apolitical community member

# Talk to us

**Apolitical provides a range of world class, customisable learning programmes exclusively for the public sector — from climate, digital and AI to leadership and inclusion.**

**Get in touch with our Director of Partnerships, Katherine Webber to hear how we could support your organisation.**
**katherine.weber@apolitical.co**

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