



REPORT

Workshop 4

Skilling and Upskilling the Public Sector Workforce –
What's Next after GenAI?

23-24 June 2025

Focus and Aim of the Workshop

The rapid advancement of artificial intelligence (AI) technologies, including both traditional and generative AI (GenAI), has created unprecedented opportunities for public sector innovation and transformation. As highlighted in the UN Global Digital Compact, digital technologies are fundamentally reshaping how governments deliver services, engage with citizens, and address complex societal challenges. The adoption of the Pact for the Future at the UN Summit of the Future on September 22, 2024, further underscores the international community's commitment to harnessing digital technologies to advance sustainable development, peace, and security. However, the integration of AI technologies into public administration has also widened the skills gap faced by many public sector workforces. The evolving AI landscape raises challenges for the future of work, including in the public sector, such as increasing skills gaps and job displacement. This necessitates proactive measures, including workforce retraining, to mitigate the risk of deepening digital disparities. The rapid pace of technological change, particularly in the field of AI, calls for a proactive and coordinated approach to workforce development. As governments transition from exploring GenAI applications to preparing for the next wave of AI innovation, particularly agentic AI systems that can autonomously execute complex tasks, there is an urgent need to invest in targeted skilling and upskilling initiatives. To build strong institutions, the public sector entities must invest in targeted skilling and upskilling initiatives to ensure effective and efficient service delivery. These efforts are not only essential to align with the aspirations of the Pact for the Future and its Global Digital Compact but also to build strong public institutions capable of effectively and efficiently delivering service.

This workshop aimed to equip the public sector workforce with the knowledge, skills, and practical tools needed to navigate and lead in the era of AI transformation, while also exploring what comes next. Participants will examine how to identify and address evolving skills gaps, strengthen digital and data literacy, and understand the transformative potential of emerging technologies such as generative AI and agentic AI. Through forward-looking discussions, the workshop supported the development of an AI-ready public workforce capable of leveraging frontier technologies to enhance public service delivery and advance the Sustainable Development Goals.

Organizer: United Nations Project Office on Governance (UNPOG)/Division for Public Institutions and Digital Government (DPIDG)/ United Nations Department of Economic and Social Affairs (UN DESA)

Session 1: Next-Generation Public Servants: Building Skills for Future Government Delivery

Summary and Main Outcomes

Focus of session: *The aim of this session was to explore practical tools, approaches and training resources for building essential digital and AI competencies among the public workforce for future delivery. The session examined methodologies for identifying skills gaps, evaluating AI readiness, and implementing successful digital transformation initiatives. By addressing these interconnected aspects, the session sought to provide participants with actionable insights for developing a future-ready public workforce capable of leveraging emerging technologies while maintaining human-centered governance.*

Facilitator/moderator: **Mr. Luke Cavanaugh**, Associate at the Tony Blair Institute for Global Change

Presenters:

- **Mr. David Fulford**, Chief Executive Officer, Director General, The Institute of Public Administration of Canada (IPAC), Canada. *AI Resources and Tools for Public Services*
- **Ms. Anita Palcich**, Senior Manager Advisory Services, KPMG Canada, Leader Skills Development Centre - KPMG x Microsoft. *Deep Dive on AI Practical Tools to Improve Service Delivery*

Summary of Presentations

- AI Resources and Tools for Public Services

The presentation began with an overview of Canada's nationwide initiative to support public servants in understanding and applying AI in their work. With strong demand evident from the outset—1,000 participants joining the first session—efforts were made to develop a practical, inclusive, and scalable training program. The result was a four-part, 90-minute training series supported by a dedicated online platform, live Q&A sessions, and curated learning materials. Key themes guiding the design included trust, collaboration, inclusiveness, governance, and sustainability, with a strong emphasis on fostering curiosity, confidence, and ethical experimentation in a safe learning environment.

Insights from consultations shaped the training structure, which covered foundational AI knowledge, productivity tools, prompt engineering, and global use cases across sectors like health, transport, and emergency response. Certification became a key motivator for participants, with thousands earning recognition for completing the course. Leaving chat functions open during large online sessions enabled active dialogue and peer exchange, revealing both enthusiasm and constraints in workplace AI usage. Participants valued interactivity, flexibility, and team-based learning approaches, which helped overcome fear and enabled immediate application of knowledge in the workplace.

Building on this momentum, the next step is more advanced, certificate-based training, tailored to specific sectors such as justice and transportation. Establishing communities of practice and facilitating peer learning will further embed AI into public sector work. Emphasis was placed on updating job descriptions, creating sustainable strategies, and cultivating a resilient and adaptive workforce that embraces change. A cultural shift, grounded in trust and continuous support, was identified as essential to help staff transition from resistance to active engagement.

Key Takeaways: AI capacity-building in public service requires a structured, inclusive, and adaptive approach. Practical training, trusted partnerships, peer engagement, and ethical experimentation are vital for building confidence and resilience. Strategies must be people-centered, supported by strong governance, and aligned with organizational culture to ensure long-term impact and readiness for AI integration in public administration.

- **Deep Dive on AI Practical Tools to Improve Service Delivery**

The presentation provided a comprehensive overview of a four-part training series designed to equip public sector professionals with foundational and practical knowledge on generative AI. It began by contextualizing the emergence and accelerating pace of AI, particularly large language models (LLMs), and highlighted the shift in participants' readiness across multiple cohorts. Core discussions addressed the increasing need to manage vast volumes of data, demonstrated live AI tools for content generation, and introduced evolving governance concerns such as data residency, algorithmic bias, intellectual property, and transparency—particularly within the Canadian public service context.

The second segment focused on AI tools that enhance productivity, including text-based assistants, translation tools, text-to-image and text-to-video platforms, and Microsoft Copilot. These tools were demonstrated in action with multilingual outputs and public sector use cases, helping participants understand not only how they function but how they can be applied in real-world government scenarios. Specific attention was given to tool-agnostic guidance while also addressing common concerns, such as data security and organizational integration. A persona-based approach showed how these tools can assist public servants in their day-to-day tasks, encouraging individualized uptake and contextualized usage.

In the third and fourth parts of the series, the spotlight shifted to prompt engineering and actual public sector case studies. Participants were introduced to structured techniques like role play, chain-of-thought, and few-shot prompting to improve AI output. The use cases section showcased AI implementation across municipal, provincial, and federal levels, from grant processing and multilingual virtual agents to digital twins for urban planning. These cases illustrated not only benefits such as time saved and enhanced service delivery but also the skills, challenges, and institutional changes required for successful adoption.

Key Takeaways: The presentation underscored the rapid evolution of generative AI and its increasing relevance to public service delivery. It stressed the importance of upskilling, ethical deployment, and practical experimentation. Success hinges on starting small, fostering collaboration, and integrating AI as a cross-functional business initiative rather than an isolated IT project. The evolving landscape demands continuous updates to training and policies to keep pace with technological advancements.

Summary of Discussion

Ethical and Inclusive Use of AI in Government: The discussion emphasized the importance of integrating AI in the public sector with a strong foundation in ethics, trust, and integrity. Speakers reflected on past missteps such as Australia's "robo-debt" scandal to illustrate the risks of deploying automated systems

without safeguards. The conversation highlighted the delicate balance between harnessing AI's potential and ensuring it is implemented responsibly. Inconsistencies in AI usage across jurisdictions and concerns over public trust were recurring themes, prompting calls for greater transparency, human-centered design, and cross-border equity in AI access and governance.

Change Management and Human-Centered Adoption: The discussion focused on how public sector leaders can guide their teams through digital transformation. Effective change management was identified as crucial, with emphasis on building internal champions, offering tailored skilling opportunities, and creating a culture that supports experimentation without fear. Leaders were advised to communicate proactively, build trust, and focus on real-life use cases that demonstrate how AI can improve day-to-day work. Both speakers advocated for starting training even before perfect policies are in place, arguing that practical engagement can accelerate policy development and foster more informed governance.

Generational Gaps, Education, and the Need for Digital Literacy: The conversation also touched on the generational divide in AI adoption, particularly within education systems and among civil servants. Concerns were raised about younger generations becoming overly reliant on AI tools at the expense of critical thinking. Speakers stressed the need for rebalancing tech skills with interpersonal competencies such as strategic thinking and collaboration. They advocated for a dual-track approach: advancing digital literacy while reinforcing essential human skills. On data governance, participants underscored the urgency of implementing trusted AI frameworks and cybersecurity safeguards, recognizing that even as AI offers new possibilities, it must not come at the cost of privacy and accountability.

Key Outcomes:

- **Invest in Structured, Inclusive, and Sector-Specific AI Training:** Governments should develop practical, scalable AI training programs that are inclusive and tailored to the evolving needs of public servants. Foundational and advanced courses—designed around themes like trust, ethics, and collaboration—should be supported by interactive platforms, peer learning opportunities, and sector-specific content to ensure relevance and applicability.
- **Foster a People-Centered Culture of Ethical Innovation and Resilience:** To ensure sustainable AI integration, public sector institutions must promote a cultural shift that emphasizes trust, curiosity, and continuous learning. This includes updating job roles, supporting communities of practice, and empowering staff through certification, experimentation, and cross-team collaboration, thereby enhancing institutional readiness and adaptability in the face of technological change.
- **Prioritize Practical, Tool-Agnostic Training to Build AI Readiness:** Public sector institutions should implement hands-on, modular training that emphasizes real-world use cases, tool-agnostic guidance, and safe experimentation. This includes introducing practical AI tools like Microsoft Copilot and text-to-image generators through live demonstrations, while addressing data governance, security, and ethical considerations. A persona-based approach ensures relevance and encourages individual uptake.
- **Integrate AI Strategically Across Government Functions:** To maximize impact, AI should be embedded as a cross-functional enabler rather than treated as an isolated IT project. This requires coordinated efforts to update institutional policies, strengthen collaboration across departments, and cultivate adaptive skills such as prompt engineering. Pilot programs and incremental

implementation—supported by ongoing policy refinement—can drive sustainable, responsible adoption across municipal to federal levels.

- **Ethical and Transparent AI Implementation:** Governments must prioritize ethics, trust, and integrity when adopting AI, learning from past mistakes like Australia’s robo-debt scandal. This includes ensuring transparency, applying human-centered design principles, and striving for equitable AI governance across jurisdictions to maintain public trust and mitigate risks.
- **Proactive Change Management and Leadership:** Effective AI adoption depends on strong leadership that fosters a culture of experimentation and trust. Public sector leaders should build internal champions, communicate openly, and initiate skilling early—even before policies are perfect—to accelerate practical engagement and support informed governance.
- **Balanced Digital Literacy and Human Skills Development:** Addressing generational gaps requires a dual approach that advances digital literacy while reinforcing critical interpersonal skills such as strategic thinking and collaboration. Alongside this, robust data governance and cybersecurity measures are essential to protect privacy and ensure accountability in AI use within the public sector.

Session 2: Digital and Data Literacy for Public Sector Excellence

Summary and Main Outcomes

Focus of session *The objective of this session was to equip participants with the necessary digital and data literacy skills to enhance governance, service delivery, and decision-making. This session aimed to strengthen the digital know-how of public sector workforce by fostering competencies in key areas such as artificial intelligence, cloud computing, and data security. Additionally, it emphasized the importance of data literacy across all levels of governance, ensuring that public workforce can effectively access, interpret, and utilize data for evidence-based policymaking. By promoting a digitally skilled workforce and an inclusive approach to digital transformation, the session sought to empower government institutions to bridge the digital divide, enhance connectivity, and implement responsible, data-driven solutions that improve public service delivery.*

Facilitator/moderator: Ms. Ana Thorlund, Governance and Public Administration Expert, UNPOG, DPIDG, UN DESA

Presenters:

- **Ms. Piret Tõnurist**, Innovation Lead, Directorate for Public Governance, Organisation for Economic Co-operation and Development (OECD). *Role of Governments in Ensuring Transparency and Accountability of Artificial Intelligence Systems in Public Administration*
- **Mr. Jayarethanam Pillai**, Global Practice Professor, UN Futures AI Consultant, Chief Artificial Intelligence Officer (CAIO), Blue Silicon Info Tech. *Global Trends and Future of AI - What to Expect Moving Forward?*
- **Mr. Hyun Joon Kim**, Professor of the Department of Public Administration, Republic of Korea University. *Data-Driven Governance: Why Literacy and Skills Matter for the Public Sector*

Summary of Presentations

- **Role of Governments in Ensuring Transparency and Accountability of Artificial Intelligence Systems in Public Administration**

The role of governments in ensuring transparency and accountability of AI systems in public administration was explored through a deep dive into current practices, barriers to scale, and necessary institutional capacities. A review of over 200 government AI cases across 11 public functions revealed that while AI adoption is growing—particularly in justice, financial management, and service delivery—its deployment remains fragmented and largely confined to pilot initiatives. Automation, forecasting, and personalization were among the main use cases, yet many implementations remain siloed due to a lack of systematic evaluation, uneven data quality, and limited organizational readiness. The speaker emphasized that although the potential of AI to enhance service delivery and decision-making is widely recognized, true transformation is hindered by scalability challenges and insufficient integration into broader governance structures.

The presentation highlighted concrete examples from countries such as the UK, France, Germany, and Canada, where AI is used for tasks ranging from budget monitoring to predictive risk modeling in

domestic violence cases. Despite these successes, progress is often undermined by gaps in regulatory clarity, low interoperability of IT systems, and a lack of cross-sector coordination. Ethical concerns—such as algorithmic bias, transparency, and privacy—continue to surface, especially when governments fail to include citizens and frontline civil servants in the design and implementation of AI projects. Public trust, inclusive design, and ongoing risk evaluation were underscored as key elements in mitigating these concerns and fostering legitimacy.

A central insight concerned the mismatch between the enthusiastic, often isolated innovation teams and executive-level leadership, resulting in limited institutional commitment to scaling successful pilots. To address this, a skills framework tailored to different roles in the public sector is emerging. Leaders must possess high-level understanding of AI architecture and change management, while practitioners need adaptive methodologies, procurement agility, and strong data literacy. Governments are encouraged to build enabling environments that support experimentation, inter-agency collaboration, and policy-aligned scaling mechanisms.

Key Takeaways: AI offers transformative potential for public administration, but impact remains limited without scalable frameworks, robust data governance, and systemic policy alignment. Ethical deployment, continuous monitoring, and inclusive skill-building—particularly in data literacy and collaborative innovation—are essential to build public trust and ensure AI serves both institutional goals and citizens' needs.

- **Global Trends and Future of AI - What to Expect Moving Forward?**

Artificial intelligence is evolving rapidly from a specialized innovation to a ubiquitous driver of economic and social transformation. The global AI market is projected to surge from \$136 billion in 2022 to \$1.81 trillion by 2030, largely fueled by cloud-based services and the expansion of generative AI. This explosive growth is reshaping both public and private sectors, with governments increasingly recognizing the strategic necessity of investing in AI infrastructure and services. Within this context, generative AI alone is expected to generate \$1.3 trillion in value over the next decade, signaling a new era where AI-as-a-service becomes a foundational tool for governance and economic development.

Government applications of AI are expanding across critical domains such as public safety, digital services, healthcare, infrastructure, and environmental management. As AI matures from narrow, task-specific systems to more general and autonomous intelligence, public agencies are under pressure to integrate these technologies responsibly and effectively. Emerging capabilities include automated regulatory compliance, real-time service delivery optimization, and predictive modeling for crisis response. However, a persistent talent gap, competition from the private sector, and concerns around data ethics and representativeness continue to hinder full-scale deployment. To unlock AI's public value, governments must adopt a whole-of-government approach that prioritizes scalability, ethical design, and citizen-centric services.

The foundation of successful AI integration lies in high-quality, inclusive, and ethically managed data. With the rise of synthetic data, federated learning, and decentralized data ownership models, public agencies are exploring new ways to balance innovation with privacy and security. The development

of AI-ready public services will also depend on building a skilled workforce capable of system thinking, human-centered design, and cross-sector collaboration. Rather than solely focusing on technical proficiency, public officials need to cultivate competencies in policy design, stakeholder engagement, data interpretation, and agile problem-solving. This holistic capacity-building effort is vital to ensure that AI adoption strengthens democratic governance and public trust.

Key Takeaways: Artificial intelligence is transitioning from a disruptive force to a core component of daily governance, with generative AI leading exponential growth in both market size and functionality. For governments, this represents both a strategic imperative and a policy challenge. Scaling AI in the public sector will require robust data governance, a shift toward integrated system design, and substantial investment in multidisciplinary skill development. Building trust, ensuring equitable data representation, and fostering ethical, human-centric innovation are essential to realizing AI's full potential in enhancing public service delivery and social outcomes.

- **Data-Driven Governance: Why Literacy and Skills Matter for the Public Sector**

The presentation emphasized that data in public administration must move beyond a supplementary role and be applied strategically to enhance public value. Data-driven governance enables more efficient, effective, and responsive government operations. A case from Republic of Korea's water management system illustrated how integrating AI for flood prediction led to significantly improved outcomes, demonstrating the tangible benefits of embedding data into policy and service delivery. Legal and institutional foundations, such as Republic of Korea's Framework Act on Intelligent Informatization, are important starting points, but implementation gaps persist. Cultural shifts, including open data sharing and active public engagement, remain critical to realizing the full potential of data-driven governance.

To support this transformation, targeted investments in digital literacy and skills are required across three key groups: public officials, citizens, and professionals. Public sector employees must be equipped with competencies in data management, citizen engagement, and technological innovation. Citizens need skills to manage digital identities and engage meaningfully in digital governance, while professionals must collaborate across sectors and drive problem-solving using advanced technologies. Republic of Korea's multi-pronged strategy includes training programs for officials, customized digital literacy initiatives for citizens, and partnerships between academia, industry, and government. These efforts aim to build a digitally literate ecosystem capable of leveraging data for smarter, more participatory governance.

Key Takeaways: Data-driven governance is not merely about technology deployment but about cultivating the human capacity to use data meaningfully. Strategic use of data can improve public services, strengthen trust, and drive innovation. Investing in digital literacy across institutions and society is essential for governments to unlock the benefits of data-centric administration.

Summary of Discussion

- **Data Quality as a Prerequisite for Scalable AI in Government:** The discussion emphasized the critical importance of addressing data quality as a foundational requirement for effective AI deployment in

the public sector. Poor data has already led to significant failures, including high-profile scandals, such as the “robo-debt” case in Australia. While AI has the potential to identify and mitigate data quality issues, this will require governments to invest intentionally in open, transparent, and human-supervised data management systems. The group acknowledged that improving data quality is often overlooked by decision-makers, despite its direct connection to public trust and institutional performance.

- **Rethinking Digital Leadership: Beyond Technical Skills:** Equally significant was the discussion on leadership and the need to expand digital competencies beyond technical skills. Participants argued that soft skills, especially those related to collaboration, cross-sector engagement, and trust-building—are often undervalued but essential for managing AI transformation. True digital leadership requires the ability to measure and reflect on performance, embrace interdisciplinary dialogue, and support behavioral change within institutions. Strengthening these relational and evaluative capacities will be just as crucial as improving data literacy to ensure responsible, inclusive, and successful AI adoption in public administration.
- **Data Quality and the Future Role of AI:** The conversation emphasized the critical importance of high-quality data in shaping AI outcomes. While synthetic and engineered data offer benefits like enhanced security and scalability, they raise questions about accuracy and contextual relevance. As AI increasingly supports policymaking and decision processes, the quality, representativeness, and planning behind data collection become essential. Rather than relying on large volumes of generalized data, targeted datasets—such as those from unbiased, purpose-driven surveys—enable more effective and equitable AI applications. The discussion reinforced the principle of “quality over quantity,” particularly when data is used to understand complex social issues like poverty.
- **Proactive Governance and Maximizing AI’s Public Value:** Governments are encouraged to transition from reactive to proactive public services through strategic investments in AI and human capital. Lessons from the COVID-19 pandemic highlighted how AI can transform healthcare and public service delivery. Moving forward, governments should focus on three key areas: improving health and security systems, expanding inclusive digital public services, and promoting citizen participation through AI-driven identification and engagement platforms. To maximize the potential of advanced AI—especially systems approaching superhuman intelligence—public officials must be equipped with foresight-based planning skills and engage in public-private partnerships that foster innovation and adaptive policymaking.

Key Outcomes

Institutionalize Scalable and Ethical AI Governance: To unlock AI’s full potential in public administration, governments must move beyond isolated pilot projects and embed AI into broader institutional frameworks. This requires developing regulatory clarity, strengthening inter-agency coordination, and creating mechanisms for ethical oversight and continuous risk evaluation. Establishing system-wide standards for data quality, transparency, and interoperability will ensure AI deployment aligns with public values and legal norms.

Build Public Sector Capacity for Inclusive and Accountable AI: Effective and transparent use of AI in government demands investment in role-specific skills, from leadership to frontline practitioners. A tailored competency framework—including data literacy, adaptive procurement, and ethical AI design—should be integrated into public workforce development. Governments should actively engage citizens and civil servants in AI co-creation processes to enhance legitimacy, trust, and service relevance.

Adopt a Whole-of-Government Strategy for Scalable and Ethical AI Integration: Governments must move beyond fragmented pilot initiatives and develop cohesive national strategies that embed AI into core public sector functions. This includes investing in infrastructure for cloud-based and generative AI services, creating interoperable systems, and aligning innovation with legal and ethical safeguards. Emphasizing responsible design, cross-sector collaboration, and proactive governance will enable scalable, trustworthy AI implementation that addresses public needs across domains such as safety, healthcare, and digital services.

Build Multidisciplinary Public Sector Capabilities to Drive Human-Centered Innovation: To harness AI's transformative potential, governments must invest in cultivating a future-ready workforce equipped with both technical fluency and policy-oriented competencies. Beyond data literacy, public officials need skills in systems thinking, stakeholder engagement, agile governance, and ethical decision-making. Holistic capacity-building—grounded in inclusive, privacy-preserving data practices and synthetic data innovations—will be key to developing AI-ready institutions and maintaining public trust in an era of rapid digital transformation.

Foster a Digitally Literate Ecosystem to Realize Strategic Data-Driven Governance: To fully unlock the value of data in public administration, governments must invest in widespread digital literacy across public institutions, civil society, and professional sectors. Equipping public officials with competencies in data management and citizen engagement, empowering citizens to navigate and participate in digital systems, and enabling professionals to drive cross-sector collaboration are foundational steps. A coordinated, multi-stakeholder effort—anchored by legal frameworks and supported by a culture of open data sharing—will ensure data is not just collected, but meaningfully applied to improve policy, services, and trust in governance.

Prioritize Data Quality as the Cornerstone of Scalable and Trustworthy AI in Governance: Effective AI deployment in public administration depends on the integrity, relevance, and transparency of the underlying data. Governments must move beyond reactive fixes and invest systematically in open, supervised, and well-managed data ecosystems. As seen in failures like Australia's "robo-debt" scandal, poor data quality can erode public trust and lead to serious policy missteps. Strategic focus on high-quality, purpose-driven, and representative datasets—rather than large volumes of unfiltered data—ensures AI systems are contextually accurate and socially responsible. A renewed commitment to data quality will not only enhance AI outcomes but also improve institutional accountability and equity.

Redefine Digital Leadership to Drive Ethical and Inclusive AI Transformation: The success of AI in the public sector hinges not only on technical capacity but on visionary, human-centered leadership. Digital leaders must cultivate soft skills such as trust-building, interdisciplinary collaboration, and institutional

change management. These relational and reflective abilities are essential to guiding complex AI transitions and aligning technology with public values. Governments should embed performance measurement, behavioral insight, and cross-sector dialogue into leadership development programs. Strengthening these competencies will ensure that AI adoption remains ethical, inclusive, and capable of delivering long-term public value.

Session 3: Generative AI in Government: The Next Frontier of Public Services

Summary and Main Outcomes

Focus of session: *This session was grounded in the understanding that GenAI will only be transformative in the public sector if civil servants are empowered with the skills and knowledge to understand, evaluate, and apply these tools. Skilling and upskilling the public workforce on GenAI is therefore a key pillar of digital government transformation. This involves more than technical training; it requires critical thinking around data ethics, algorithmic transparency, human oversight, and the alignment of AI use with public values and policy priorities. The session explored how GenAI is being applied across different government contexts and how it can be harnessed to build more adaptive and future-ready institutions. Drawing from national GenAI policy developments and use cases from countries such as the Republic of Korea, the discussion emphasized the importance of public-private partnerships, ongoing learning, and leadership that promotes innovation while safeguarding the public interest.*

Facilitator/moderator: **Dr. David Green**, Director for S&T Innovation, Transition & Integration Systems, Green Resilience Insights.

Presenters:

- **Mr. Ng Shangru**, Senior AI Engineer, Government Technology Agency, Singapore. *Scaling Generative AI in Government: Navigating Challenges, Unlocking Benefits, and Strategizing for Sustainable Adoption*
- **Mr. Woolim Jang**, Principal Manager, Department of Digital Platform Government/DPG Policy Planning Team. National Information Society Agency (NIA), Republic of Korea. *Republic of Korea: Government Generative AI Policies and Practical Application*

Summary of Presentations

- **Scaling Generative AI in Government: Navigating Challenges, Unlocking Benefits, and Strategizing for Sustainable Adoption**

The presentation explored the challenges and opportunities of scaling generative AI in government, emphasizing the need for a holistic approach that integrates technology, workforce empowerment, and policy alignment. Generative AI, distinct from traditional AI, excels in creating new content, such as summarization, drafting, and image generation, making it valuable for government use cases like document processing and citizen-centric services. Key methodologies like retrieval-augmented generation and fine-tuning were highlighted as ways to enhance model performance with domain-specific knowledge. The presentation underscored that successful scaling requires more than just technology—it demands robust infrastructure, AI literacy, and adaptable policies to foster trust and innovation.

Sustainable adoption was framed as balancing speed and accuracy, with iterative improvements and democratized access driving long-term value. Initiatives like Singapore's Pair chatbot demonstrated rapid experimentation and user engagement, while custom data pipelines and feedback loops ensured relevance. The evolving nature of GenAI—from basic chatbots to multimodal, agentic systems—necessitated adaptability and continuous learning. Scalability alone was deemed

insufficient without policies that encourage innovation, standardized blueprints, and centralized platforms to reduce redundancy. The discussion concluded by positioning GenAI as one component of broader AI integration, requiring ongoing collaboration and ethical vigilance to deliver public good.

Key takeaways: Scaling generative AI in government requires balancing technological innovation with workforce readiness and policy frameworks. Sustainable adoption depends on empowering users through accessible tools, fostering trust via responsible practices, and iterating based on real-world feedback. Leaders must prioritize education and agile deployment, while practitioners should focus on communicating technical needs and ethical considerations. Ultimately, generative AI's potential lies in augmenting human capabilities—not replacing them—when implemented with clear governance and a focus on tangible benefits.

- **Republic of Korea: Government Generative AI Policies and Practical Application**

Republic of Korea is actively advancing the integration of generative AI in the public sector, driven by its strong national AI capacity, high public interest, and robust legal foundations. Despite Republic of Korea's high ranking in global AI indices and enthusiastic private-sector investment, public sector AI usage remains limited, prompting the government to set ambitious goals. The National AI Strategy aims to introduce AI in 95% of public institutions by 2030, supported by a comprehensive policy framework and key legislation such as the AI Framework Act and revised Personal Information Protection Act. These laws define “high-impact AI,” mandate transparency in automated decision-making, and establish guidelines for responsible AI use, such as protecting sensitive data and verifying output accuracy.

Practical implementation is being pursued through early-stage pilot projects and a national platform initiative. Examples include generative AI chatbots for employee training, patent review assistance tools, agriculture support for young farmers, and a labor law advisory platform. Most of these services remain at the Proof-of-Concept stage due to security concerns around internal government data. To address this, Republic of Korea is developing the Government Generative AI Common Foundation, a secure, sovereign infrastructure enabling safe and scalable use of AI across ministries. This shared platform—built on private-sector cloud partnerships and flexible LLM integration—seeks to ensure broad access while maintaining national data control and compliance. The long-term vision includes full-scale deployment to local governments and sustained expansion through 2031.

Key Takeaways: Republic of Korea's approach to generative AI in government combines strategic ambition with legal safeguards and cautious implementation. The country is establishing an AI-ready public sector by setting clear policy goals, crafting enabling legislation, and investing in a secure, shared AI infrastructure. While current applications are largely exploratory, they showcase the diverse potential of generative AI in public services and highlight the need for continued cross-sector collaboration, ethical oversight, and risk mitigation.

Summary of Discussion

- **Learning & Upskilling** – A major focus was on how national AI strategies translate into actionable training for civil servants. Singapore's approach includes mandatory AI literacy programs, ensuring all

public officers—regardless of technical background—understand generative AI’s basics. Incentivization (e.g., SkillsFuture credits) encourages continuous learning, while tiered training (leadership vs. technical) ensures relevance. Challenges remain in bridging generational gaps, as younger workers adapt faster than senior staff accustomed to traditional workflows.

- **Public-Private Partnerships & Collaboration** – Successful scaling requires breaking silos through cross-sector collaboration. Examples include Singapore’s co-working spaces where government and startups exchange ideas, and hackathons that foster problem-solving. A recurring theme was the need for trust-building skills—technical teams must communicate AI’s value to non-technical leaders, while policymakers must create frameworks that enable experimentation without excessive risk.
- **Inclusivity & Bias Mitigation** – Generative AI’s potential to mirror societal biases (e.g., gender stereotypes in training data) demands proactive measures. Participants highlighted initiatives like women-centric AI hackathons and diversifying datasets to ensure equitable outcomes. The discussion underscored that inclusive AI adoption requires intentional design—from policy to implementation—to avoid exacerbating existing disparities.
- **Prioritizing continuous learning, fostering collaboration across sectors, and embedding inclusivity** are critical to sustainable adoption. Leaders must balance agility with responsibility, ensuring AI augments—rather than replaces—human judgment, while practitioners must communicate needs clearly to align technology with public service goals.

Key Outcomes:

- **Empower the Workforce and Build Infrastructure for Scalable GenAI:** To scale generative AI in government effectively, it is essential to invest in robust digital infrastructure, strengthen AI literacy, and empower the workforce through accessible tools and iterative learning, ensuring alignment between technology, people, and policy.
- **Ensure Responsible and Adaptive GenAI Deployment through Policy and Collaboration:** Sustainable adoption of generative AI requires a balanced approach that integrates ethical governance, real-world feedback loops, and cross-sector collaboration—framing GenAI not as a replacement for human decision-making, but as a powerful enabler of inclusive, citizen-centric services.
- **Build a Secure, Scalable AI Infrastructure for Public Sector Integration:** Republic of Korea’s development of the Government Generative AI Common Foundation illustrates the importance of investing in sovereign, secure infrastructure to enable scalable, cross-ministerial AI adoption while safeguarding sensitive public data.
- **Align Ambitious AI Deployment with Strong Legal and Ethical Safeguards:** Republic of Korea demonstrates that successful generative AI integration in government depends on combining bold national strategies with robust legislation—such as the AI Framework Act—to ensure transparency, trust, and responsible innovation throughout the public sector.

- **Institutionalize Continuous, Inclusive AI Upskilling Across All Levels of Government:** Singapore's tiered AI training model—combining mandatory literacy programs with incentives like SkillsFuture credits—shows that scalable AI integration requires lifelong learning pathways tailored to both technical and leadership roles, with special attention to generational gaps and equitable access.
- **Leverage Cross-Sector Collaboration and Inclusive Design to Build Responsible AI Ecosystems:** Sustainable adoption of generative AI depends on public-private partnerships that encourage experimentation and trust-building, while inclusive design practices—such as diversifying datasets and addressing bias—are essential to ensure fair, accountable, and human-centered innovation.

Session 4: Understanding Agentic AI: Streamlining Public Sector Workflows

Summary and Main Outcomes

Focus of session: *This session explored the transformative role of agentic AI in improving public sector workflows and highlighted the importance of building a workforce equipped to manage and collaborate with such technologies. The session aimed to help public institutions think critically and strategically about deploying agentic AI in ways that enhance service delivery while maintaining transparency, accountability, and trust.*

Facilitator/moderator: **Mr. Luke Cavanaugh**, Associate at the Tony Blair Institute for Global Change

Presenters:

- **Mr. Watson Chua**, Lead Data Scientist, Government Technology Agency, Singapore. *Agentic AI – The New Frontier in GenAI*
- **Ms. Anita Palcich**, Senior Manager Advisory Services, KPMG Canada, Leader Skills Development Centre - KPMG x Microsoft. *Navigating AI in Public Service*

Summary of Presentations

- **Agentic AI – The New Frontier in GenAI**

Agentic AI is framed as a transformative approach where intelligent systems act with a degree of autonomy, making decisions and executing tasks without constant human direction. These agents differ from conventional AI workflows by dynamically controlling their operations based on real-time context and iterative feedback, rather than relying on fixed code paths. The concept emphasizes attributes like memory, planning, tool use, adaptability, and self-correction. Applications span both private and public sectors, including chatbot fact-checking, case resolution, and personalized citizen services, each scenario benefiting from the agents' capacity to manage complex, multi-step interactions with evolving inputs.

Use of agentic systems is advised when flexibility, adaptation, and decision-making based on intermediate outputs are essential. However, the presentation underscores that agentic workflows come with higher latency, complexity, and security challenges. Suggested solutions include phased rollouts, task decomposition, use-case analysis, and layered evaluation frameworks to mitigate risks.

The importance of using agents only when necessary is stressed, particularly when simpler AI approaches may suffice. Techniques such as sandboxing, dynamic permissions, and human oversight are highlighted as safeguards for secure deployment.

Key takeaways: Agentic AI enables autonomous task execution, but its adoption should be justified by use-case complexity. It introduces performance and security trade-offs, requiring structured implementation strategies. While growing in importance across sectors, agent use is best reserved for contexts demanding real-time, adaptive intelligence.

- **Agentic AI: Embracing a hybrid workforce**

Agentic AI is transforming the nature of work, calling for a fundamental rethinking of workforce dynamics, skill development, and role design. Instead of replacing humans, AI agents are increasingly becoming digital colleagues in a hybrid environment where collaboration is central. While many organizations see clear productivity gains, concerns persist about displacement and skills gaps. Findings from a recent survey of Canadian businesses revealed that although there is optimism about AI's potential, significant anxiety exists around workforce preparedness. To navigate this shift, roles must be analyzed and restructured based on task-level complexity, identifying those that AI can perform and those where human strengths—such as empathy, decision-making, and strategic thinking—remain indispensable.

Practical strategies for integrating agentic AI include building future-proof skills, personalizing the adoption journey, and prioritizing experiential learning. KPMG's Skill Development Centre in Canada offers a model, emphasizing executive-level education, self-paced learning, and live workshops tailored to specific functions. Role deconstruction, scenario-based demonstrations, and on-demand support have proven effective in driving engagement and uptake. The Centre's evolving methodology highlights the importance of modular, hands-on, and feedback-driven learning to keep pace with rapidly changing AI tools. These approaches enable organizations to humanize AI adoption, ensuring workers understand the technology and feel empowered to co-create value alongside it.

Key Takeaways: Integrating agentic AI into the workforce requires a human-centered approach that focuses on reskilling, ethical oversight, and personalized adoption pathways. Success depends on developing critical competencies like AI literacy, ethical reasoning, communication, adaptability, and change management. Organizations must offer experiential, modular, and interactive learning opportunities to prepare employees for collaboration with AI agents, thereby creating a truly hybrid and future-ready workforce.

Summary of Discussion

The discussion primarily revolved around the emerging role of AI agents in service industries such as tourism and government services. Participants highlighted the potential of AI systems to serve as personal assistants—akin to fictional systems like Ironman's Jarvis—capable of handling tasks such as planning travel, booking tickets, and recommending experiences by accessing APIs and integrating with existing platforms like Amadeus. However, despite this promise, current implementations are largely in

prototyping phases due to limitations in accuracy, contextual relevance, and concerns over system reliability and safety in live production environments.

Another key theme was the challenge of integrating AI agents within regulated or sensitive environments, such as state-owned enterprises and public agencies. Questions were raised about data privacy, restricted access to APIs due to security policies, and concerns around who controls and prompts the AI systems. The discussion acknowledged the need for robust evaluation frameworks, test cases, and secure architecture to ensure AI agents align with compliance, business logic, and national legal frameworks. There was consensus that while AI can improve efficiency, it must be embedded cautiously and with accountability.

Finally, philosophical and societal concerns were explored, including fears that dependency on AI could erode critical thinking and creativity. Panelists argued that when used correctly, AI accelerate human creativity, productivity, and decision-making rather than replacing it. They also emphasized the importance of human traits like empathy in governance and service delivery, and suggested that future success in AI deployment depends not just on technology, but on collaborative leadership, bridging technical and organizational knowledge to leapfrog traditional constraints and foster inclusive innovation.

Key Outcomes:

- **Adopt Agentic AI Strategically Based on Use-Case Complexity:** Agentic AI holds immense potential for managing complex, multi-step tasks through autonomous decision-making and adaptive operations. However, its implementation should be guided by careful analysis of use-case demands. Organizations are encouraged to deploy agentic systems only when the task at hand requires real-time adaptation, memory, and planning capabilities where conventional AI may fall short. A structured approach to use-case assessment will help ensure resources are allocated efficiently and technology is matched appropriately to operational needs.
- **Mitigate Risks Through Phased and Secure Implementation Frameworks:** Given agentic AI's inherent complexity and potential security vulnerabilities, deployment must be accompanied by robust risk mitigation strategies. These include phased rollouts, decomposing tasks into manageable components, applying layered evaluation, and enforcing security controls such as sandboxing, dynamic permissions, and human oversight. Such safeguards not only ensure responsible innovation but also build organizational readiness to manage autonomous systems effectively in both public and private sector environments.
- **Redesign Work for Human-Agent Collaboration:** Organizations should proactively assess and restructure roles to reflect the realities of a hybrid workforce, where humans and AI agents work side by side. Task-level analysis is essential to identify which responsibilities can be delegated to AI and which require uniquely human skills such as empathy, strategic thinking, and ethical judgment. This intentional redesign will not only safeguard human value in the workplace but also maximize the complementary strengths of AI and human collaboration.
- **Invest in Future-Proof Skills Through Human-Centered Learning:** To ensure readiness for agentic AI integration, organizations must prioritize human-centered upskilling strategies. Programs should be experiential, modular, and tailored to specific roles, enabling workers to build competencies in AI literacy, critical thinking, ethical reasoning, and change management. By fostering continuous, personalized learning—through methods like live workshops, scenario-based demos, and self-paced

content—institutions can empower employees to thrive in the evolving landscape of digital collaboration.

Main Outcomes for Forum Rapporteur Report

Over the past two days, the workshop provided an in-depth exploration of how artificial intelligence—particularly generative and agentic AI—is reshaping the public sector. Participants engaged in dynamic sessions that covered essential themes such as future-oriented skilling, digital and data literacy, and the practical application of emerging technologies to improve public service delivery. Emphasis was placed on structured and inclusive training models, such as Canada’s scalable AI literacy programmes and Singapore’s tiered skilling strategies, which demonstrate the importance of equipping all levels of government with future-proof competencies. Discussions also highlighted global AI governance trends, the role of data in decision-making, and how countries like Republic of Korea are aligning ambitious national AI strategies with legislative safeguards and early pilot initiatives to responsibly advance public sector innovation.

The workshop further explored the transformative potential of generative and agentic AI, emphasizing that sustainable adoption depends on more than just technical deployment. Participants examined how to balance speed, accuracy, and ethics while fostering public trust through responsible governance, cross-sector collaboration, and inclusive design. Case studies from across regions illustrated the value of practical tools, adaptive infrastructure, and a hybrid workforce model where human expertise and AI capabilities complement each other. Forward-looking discussions on agentic AI revealed its potential to automate complex workflows, while also underscoring the importance of safeguards, workforce readiness, and ethical oversight. Ultimately, the workshop affirmed that achieving an AI-ready public sector requires continuous learning, institutional agility, and strong leadership to navigate this rapidly evolving landscape.

KEY MESSAGES/outcomes

Session 1: Next-Generation Public Servants: Building Skills for Future Government Delivery

1. **Equip Public Servants with Structured, Inclusive, and Practical AI Training:** Governments must invest in scalable, interactive training programs tailored to various sectors and roles, emphasizing real-world use, ethical experimentation, and peer learning to build AI readiness and institutional resilience.
2. **A people-centered approach is essential when integrating AI systems.** As technology advances rapidly, building and maintaining trust is key throughout the implementation, integration, and ongoing use of AI.

Session 2: Digital and Data Literacy for Public Sector Excellence

1. **Make Data Literacy a Core Competency to Realize Value-Driven Governance:** Governments should promote ecosystem-wide digital literacy, across public institutions, citizens, and professionals, to transform data into actionable insights and enable responsive, transparent, and participatory governance.
2. **Institutionalize Ethical, Scalable AI Governance through Capacity-Building:** A whole-of-government approach is needed to embed AI into core public functions, supported by legal clarity, ethical oversight, and role-specific competencies that ensure inclusive and accountable implementation.

Session 3: Generative AI in Government: The Next Frontier of Public Services

3. **Scale Generative AI by Aligning Technology, Policy, and Workforce Readiness:** Empowering public servants with GenAI literacy, iterative training, and access to secure infrastructure is critical to realizing GenAI's potential as a catalyst for innovation and citizen-centric public services.
4. **Anchor AI Deployment in Strong Legal Frameworks and Inclusive Design:** Effective GenAI adoption requires policies that ensure transparency, equity, and trust, supported by public-private collaboration and intentional strategies to mitigate bias and widen participation.

Session 4: Understanding Agentic AI: Streamlining Public Sector Workflows

1. **Prepare for Human-Agent Collaboration by Redesigning Roles and Upskilling Public Workforce:** Organizations must rethink job structures and provide experiential, role-specific learning to ensure public servants are equipped to collaborate effectively with AI agents in dynamic, hybrid workflows.
2. **Deploy Agentic AI Selectively and Safely Based on Use-Case Complexity:** Agentic AI should be applied where adaptive decision-making adds clear value, with risk-mitigating measures such as phased rollouts, layered evaluation, and human oversight to ensure secure and ethical deployment.