OECD Digital Government Studies

Digital Government Review of Korea

Harnessing Digital and Data to Transform Government

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HARNESSING DIGITAL AND DATA TO TRANSFORM GOVERNMENT

OECD
BETTER POLICIES FOR BETTER LIVES

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Throughout this Review, the names of Korean government institutions and organisations are presented in English. Where available, official English names have been used. In cases where no official English name exists, the OECD has provided a translation for the purposes of this publication.

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Foreword

The digital transformation of governments is essential to address the multi-faceted and complex challenges that countries face, from rapid technological advancement and shifting economic landscapes, to global health emergencies and growing societal needs and expectations. The OECD Digital Government Reviews aim to support governments' digital transformation by assessing their policies and practices to address such challenges and benefit from emerging opportunities.

The Government of Korea has achieved significant progress in digital transformation of the public sector, placing digital government at the centre of its administrative reforms and public services over the past decades. Korea continues to advance digital transformation in the public sector in alignment with the priorities of the OECD Public Governance Committee and the Working Party of Senior Digital Government Officials (E-Leaders), including the Recommendation of the Council on Digital Government Strategies (2014), Enhancing Access to and Sharing of Data (2021), the Governance of Digital Identity (2023), and Human-centred Public Administrative Services (2024). To support this commitment, the Digital Government Review of Korea focuses on four areas:

- Strengthening governance, investment, and skills for digital government
- Improving data governance, sharing, and use
- Leveraging artificial intelligence (AI) for government transformation
- Delivering human-centred and proactive public services

Conducted at the request of the Korean government, with engagement of the Ministry of the Interior and Safety (MOIS) and peers from New Zealand and the United Kingdom, this Digital Government Review uses the four OECD recommendations mentioned above and the OECD Digital Government Policy Framework to structure its assessment. The review is informed by the 2023 Digital Government Index, the OECD Survey on Digital Government 3.0, a survey of 13 public sector institutions, fact-finding interviews, as well as desk research.

The review will help the Government of Korea fully leverage the benefits of digital technologies, including AI and data to support an agile, citizen-centred transformation of the public sector that can improve social well-being and unleash the productivity of the Korean economy. The OECD remains ready to support digital transformation in Korea through the implementation of the recommendations elaborated in this review.

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The review was written by Seong Ju Park (Chapters 2 and 3), Cecilia Emilsson (Chapters 4 and 5) and Julian Olsen (Chapters 3 and 6), and co-ordinated by Seong Ju Park. All chapters benefitted from the strategic orientation and revisions of Acting Deputy Head of Division Marianna Karttunen.

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Executive summary

Korea is a global leader in digital government, demonstrating long-standing commitment to innovation, efficiency, and citizen-centred public services. Decades of strategic investment, institutional reform, and policy foresight have laid a strong foundation for Korea's digital transformation. This OECD Digital Government Review, developed in collaboration with the Ministry of the Interior and Safety (MOIS) and international peers, assesses Korea's achievements and identifies opportunities for continued progress. The review focuses on four pillars – (1) governance, (2) data, (3) artificial intelligence (AI), (4) human-centred services – and Korea's role on the global stage.

Korea's digital transformation is driven by strong political leadership, centralised governance, and a co-ordinated institutional model led by MOIS. National strategies, cross-government collaboration, and high-performing digital infrastructure support consistent, long-term progress. Investments in digital government, guided by structured planning, central oversight, and standardised procurement processes ensure that initiatives are aligned with national priorities and deliver value for money. In parallel, Korea is working to build a digitally capable public workforce through targeted training, AI competency development, and data-literacy programmes. While these efforts are well advanced, challenges persist around talent retention, continuity in technical roles, and the need for greater agility and inclusiveness in regulatory and institutional co-ordination.

Korea leads globally in the strategic use of data in the public sector. It ranks first among OECD countries in government data and open-data maturity, due to its strong legal foundations and sustained investment in data policy and infrastructure. Frameworks such as the Act on Data-Based Administration enable secure sharing and re-use of data across institutions, while initiatives like MyData enhance individuals' control over their personal data. However, practical barriers remain around data discoverability, support for legal compliance with data access and sharing, outdated laws hindering data sharing, and consistent use of data for service improvement and policy monitoring. While recent reforms in data protection may reinforce public confidence in public sector use of personal data, transparency around the use of data and algorithms in public decision-making could be strengthened.

Korea also sets international benchmarks in AI in government. It performs high in the government AI maturity component of the OECD Digital Government Index (DGI), reflecting a well-developed enabling environment, supported by strategic governance, frameworks for trustworthy AI, and digital infrastructure. Various areas of government use AI to improve operational efficiency and service responsiveness. For example, labour-inspection tools, patent-examination assistance, and flood-prediction systems have delivered measurable benefits. Nevertheless, adoption remains limited in important functions such as public procurement and public integrity to help identify fraud and strengthen public-sector accountability. Korea introduced guardrails to address potential risks, including national AI standards for trustworthy AI, the AI Safety Institute, and the Basic AI Act that will come into effect in 2026. Looking ahead, enhanced stakeholder-engagement and transparency mechanisms, such as public registries of government AI use, will be key to maintaining trust and supporting responsible, scaled deployment of AI across the public sector.

Finally, Korea's approach to the design and delivery of digital public services is increasingly human-centred, integrated, accessible, and proactive. Flagship initiatives such as Digital Platform Government (DPG) and Government24 streamline more than 1,500 government services into centralised, digital platforms, improving accessibility and personalisation across public and private channels. The Electronic Government Act (2001) and national service-design standards drive service consistency and quality. Participatory mechanisms such as the Citizen Participatory Design Group embed public perspectives, though more investment in co-design and usability testing would strengthen user involvement throughout the service lifecycle. Korea promotes transparency and ethical service delivery through informed consent, performance monitoring, and digital rights protections. However, ensuring alignment between central and local government service delivery, and enhancing real-time user feedback mechanisms will be key to achieving inclusive, intuitive, and impactful services for all.

Summary of the policy recommendations

Strengthening governance, investment, and skills for digital government

- Safeguard the agility and continuity of Korea's governance of digital government while ensuring its inclusiveness and responsiveness to evolving national objectives.
- Improve the coherence and impact of digital transformation strategies by aligning, simplifying and co-ordinating the development of strategic documents to ensure sustainability and consistency.
- Strengthen the legal and regulatory framework to keep pace with evolving societal needs and technological advancements through inclusive stakeholder engagement.
- Enhance strategic management of digital government investments, promoting agility by introducing multi-year funding options, funding for innovation teams rather than fixed projects, conditional overspend allowances with strong business cases, and dedicated funds for digital technologies like AI.
- Promote the development of digital skills and talent through stability in digital and technical roles by limiting mandatory rotation for these positions, including aligning staff tenure with the lifecycle of key projects, to enhance institutional knowledge, continuity, and project success.

Improving data governance, sharing, and use

- Modernise laws and regulations by reviewing those that require physical documents or signatures, and speeding up reforms that enable paperless, automated data access and sharing.
- Develop and share practical guidelines to help institutions meet changing data-protection requirements, focusing on lawful dataset combination and risk-based data integration.
- Improve data discoverability by encouraging public sector organisations to create, maintain and share internal catalogues that list all their data assets, not just those available as open data.
- Encourage public institutions to further embed data use and analysis into service-lifecycle management, including user-research, design iteration, and feedback to improve citizen experience.

Leveraging AI for government transformation

- Advance the use of AI in government by promoting systematic and continuous assessment of AI initiatives, using standardised frameworks to measure public value, inclusiveness, and operational performance, to inform investment and scale-up decisions.
- Further strengthen enablers for trustworthy AI in government by developing shared service models and funding mechanisms to support access to AI computing capacity ("compute"), data, and cloud

infrastructure for local and smaller-scale public institutions, promoting inclusive digital transformation.

- Secure guardrails and engagement for trustworthy AI through a mandatory, regularly updated public inventory of AI systems used in the government, to support risk-monitoring and management, public trust, and knowledge-sharing, building on international good practices.

Delivering human-centred and proactive public services

- Strengthen the design and delivery of human-centred services by embedding user participation throughout the entire service design lifecycle through implementing structured co-design practices and usability testing to ensure that digital services are intuitive and inclusive to meet the diverse needs of all users.
- Expand the provision of proactive and seamless services by introducing flexible budget structures that allow for rapid experimentation and innovation, particularly in adopting new technologies like AI, while ensuring sustainable funding for critical digital infrastructure.

1 Assessment and recommendations

This chapter presents the assessment of the state of digital government in Korea, based on the analysis undertaken as part of this review. It includes recommendations which aim to support the country in harnessing digital and data to transform government. The assessment and recommendations are structured around four areas: (1) strengthening governance, investment, and skills for digital government; (2) improving data governance, sharing, and use; (3) leveraging AI for government transformation; and (4) delivering human-centred and proactive public services.

Strengthening governance, investment, and skills for digital government

Contextual factors

Overall administrative culture

Korea has consistently maintained its commitment at the highest levels of government to advance digital transformation, with strong executive leadership and policy dedication across administrations. This centralised approach enables Korea to pursue ambitious digital initiatives, including early government computerisation and strategic investments in national information and communication technology (ICT) infrastructure. Its focus on digital transformation as central to administrative reform has yielded notable advancements, underpinned by a merit-based public service and investments in digital workforce development. However, Korea faced challenges related to institutional fragmentation due to historically siloed approaches in ministry-specific ICT systems, which have created interoperability issues. The country has sought to resolve these through inter-ministerial co-ordination and collaboration.

Socio-economic environment

Korea benefits from a highly connected, digitally savvy and innovation-driven society. Robust ICT infrastructure facilitates rapid adoption and user uptake of digital public services, including high levels of internet penetration and mobile connectivity, as evidenced by the nationwide use of the government artificial intelligence (AI) chatbot, *Guppy*. Nevertheless, shifts in demographics and socio-economic disparities present risks of digital exclusion. In response to these challenges, Korea has implemented initiatives such as the Digital Inclusion Action Plan to mitigate disparities in access to digitally enabled services across demographic groups, including by age, region, and income bracket.

Technological context

The country's advanced ICT infrastructure, tech industry, and sustained investment in emerging technologies substantially enhance the country's capacity to drive digital transformation. Korea's technological advancements – reflected in nationwide network connectivity and shared ICT infrastructure – enable the rapid deployment, scaling and integration of digitally enabled public services. This also contributes to creating a strong foundation for innovation, resilience, and responsiveness across the public sector.

Environmental and geographical factors

Korea's environmental and geographical context has influenced the rapid deployment and resilience of digital government initiatives. The predominance of an urbanised population, especially within the Seoul metropolitan area, enables the implementation of advanced digital infrastructure and services. Furthermore, the repeated exposure of the Korean peninsula to natural disasters and security threats creates the need for robust and resilient digital government. Korea's use of digital tools during crises such as the COVID-19 pandemic underscores its agility and preparedness to sustain public service delivery in difficult times. Nevertheless, increased reliance on digital and data-intensive public services requires the government to continuously strengthen its disaster-recovery strategies.

Institutional model

Korea's institutional model demonstrates its mature and cohesive approach to digital transformation of the public sector, underpinned by strong leadership, long-term institutional capacity, and central co-ordination, complemented by cross-government committees and supporting agencies.

The Ministry of the Interior and Safety (MOIS) is entrusted with steering Korea's digital transformation within and co-ordinating implementation across the public sector. This mandate is firmly established by the Government Organization Act, enacted in 1948, and the Electronic Government Act, enacted in 2001. MOIS's strategic positioning – the management of the resident register, government innovation and efficiency, local government administration, and government organisation management, including prescribed numbers of public officials – enables Korea to embed digital-by-design and data-driven principles into the core functions of government. Furthermore, several technical agencies, which offer domain-specific expertise and implementation support, provide a solid foundation for the government's digital transformation efforts without adding bureaucratic layers.

Korea also has a multi-layer leadership model, with political commitment, an empowered leading institution (MOIS), and a network of Chief Intelligent Information Officers (CIOs) from each public sector institution, including local governments. Formal co-ordination bodies, such as the Presidential Committee on Digital Platform Government and the CIO Council, facilitate co-ordination and collaboration across ministries and levels of government, as well as with academia and the private sector. Additionally, Korea seeks to reinforce co-ordination efforts through shared platforms and systems, and legal obligations, minimising duplication of efforts.

Nevertheless, it is imperative that Korea enhances the agility and inclusiveness of its institutional mechanisms. There is scope to streamline co-ordination among bodies with overlapping mandates, ensuring the continuity of initiatives and avoiding bureaucratic complexity. This is crucial to preventing the formation of silos as new committees are established to implement new national objectives, particularly in the context of government transitions. Furthermore, greater efforts are required to ensure that all stakeholders, including central ministries and agencies, local governments, citizens, and business can voice their needs and contribute to and direct the development of digital government.

Policy levers

Korea demonstrates continued commitment to digital transformation, underpinned by robust policy levers to enable strategic planning, implementation, and adaptation. These levers comprise a combination of strategic frameworks, legislative instruments, and financial mechanisms that translate high-level ambitions into operational change across the public sector.

Successive national strategies, including the Digital New Deal (2020) and the Digital Platform Government Roadmap (2023), establish digital transformation as a national priority. These are accompanied by five-year master plans prepared under the Electronic Government Act, which require institutional alignment and set measurable objectives. The 2021-2025 master plan outlines Korea's vision of "A Better World Opened by Digital" and is operationalised through strategic pillars and detailed activities with assigned responsibilities. Such discipline ensures continuity and coherence across political cycles.

Nevertheless, frequent changes in overarching political agendas risk disrupting key initiatives and reducing their return on investment. Korea should continue to take stock of past achievements in its future strategies and build on ongoing initiatives to yield results. Additionally, in today's rapidly evolving environment characterised by technological disruption, the country's strategic agility and adaptability remain critical.

The legal and regulatory framework of Korea evolved to accommodate emerging societal needs and technological advancements. The Electronic Government Act is the foundational legislation for digital government, while complementary legislation – such as the Act on the Promotion of Data-Based Administration and the Framework Act on Intelligent Informatization – establish the foundations for data-driven administration, and the use of AI and other emerging technologies. Regulatory innovation has been facilitated by mechanisms such as sandboxes, which permit real-world testing and iterative rulemaking. However, as innovation continues to outpace regulation, it is important to strengthen inclusive engagement

with private sector, academic, and civil-society actors to ensure that legal and regulatory frameworks remain relevant, well-understood and implementable.

Digital government investments

Management of investments in digital government should ensure that public funding delivers value for money, supports service quality, and meets citizens' growing expectations. As governments accelerate digital transformation efforts, public sector spending on digital technologies globally is projected to have increased by 8.4% per year from 2024 to 2027. This trend takes place in a context of fiscal pressure, where public administrations are expected to do more with less.

An end-to-end approach to public investment in digital government is essential for ensuring that digital initiatives are cost-effective, well-executed, and strategically aligned. Korea serves as an example of this, supported by centralised oversight, structured processes, and clear performance incentives. This approach to managing investments aligns with the three pillars of the OECD's Digital Government Investment Framework: (1) Strategic Planning; (2) Coherent Implementation; and (3) Comprehensive Oversight. However, there are additional measures that could be undertaken to further strengthen risk management and to introduce practices that could enhance investment outcomes.

Under the Strategic Planning pillar, Korea demonstrates strong institutional leadership and inter-ministerial co-ordination to prioritise and approve digital projects. Its use of mandatory feasibility studies and reviews for major initiatives ensures efficient resource allocation, alignment with national priorities, and solid risk management. However, there is opportunity to put a greater focus on user needs, rights protections, environmental sustainability, and more agile funding mechanisms.

In terms of Coherent Implementation, Korea institutionalised a standardised project-management methodology and a centralised procurement model. These are delivered via structured planning and oversight processes and supported by the Korea ON-line E-Procurement System (KONEPS), which is being modernised with AI and blockchain capabilities. However, there is opportunity to enhance the responsiveness and innovation in the public administration, which could be promoted by integrating more agile methodologies and pursue new procurement models, such as outcome-based contracts and public-private GovTech partnerships.

Finally, Korea's approach to Comprehensive Oversight includes thorough annual performance reviews and digital financial systems. These ensure accountability but could benefit from increased project transparency and environmental impact evaluation, in line with global good practices.

Digital talent and skills

The digital transformation of society means that users have high expectations when it comes to their interactions with government and how it delivers for them. Governments must equip themselves with the digital skills and profiles to lead, navigate and implement digital transformation. Many countries have adapted their work environments to foster higher-level digital competencies, creating the necessary professions, introducing essential digital skills, and offering retention plans to support their digital transformation goals.

The OECD Framework for Digital Talent and Skills in the Public Sector outlines a comprehensive approach to building and sustaining a digitally capable workforce. It emphasises three pillars: (1) creating an enabling environment for digital work; (2) developing digital skills across all public servants; and (3) establishing a strategic, future-ready workforce.

Korea demonstrates leadership in advancing these goals. The Comprehensive Plan for Civil Servant Talent Development (2024) commits to strengthening digital and AI competencies, supporting self-directed

learning, and aligning talent development with national priorities. This includes role-based training, foundational education for new hires, and continuous learning opportunities through digital platforms.

To promote a data-driven culture, the government introduced the Guideline for Building Data Competency, which supports improved data governance, the creation of specialised roles, and inter-agency collaboration. These measures embed data-informed decision-making across institutions.

However, challenges remain. Korea can face challenges in carrying out long-term complex projects especially in technical domains like digital transformation due to the rapid pace of technological change and frequent personnel movement. Addressing this requires greater flexibility in career paths, increased support for role-specific training, and targeted retention strategies – especially in high-demand areas like cloud computing, AI, and data analytics.

The government also leverages partnerships with the private sector and academia to address skill gaps and ensure public institutions remain aligned with evolving technological trends. Continued investment in talent development, institutional culture, and workforce planning would maintain an agile, innovative, and citizen-responsive public sector.

Proposals for action

In view of the assessment elaborated above, which draws on the findings and analysis in Chapter 3 of this review, the Korean government could consider the following policy recommendations and actions.

1. **To safeguard Korea's agility and continuity of governance arrangements in digital government while ensuring its inclusiveness and responsiveness to evolving national objectives**:
    a. Review, streamline, and clarify the objectives and roles of co-ordination bodies to avoid duplication and institutional fragmentation.
    b. Expand the channels for stakeholder participation, focusing on local governments, citizens, civil society, and the private sector to encourage a sense of shared ownership of digital transformation priorities.
2. **To reinforce the sustainability and coherence of Korea's digital transformation strategy**:
    a. Strengthen the coherence and impact of the strategic documents through alignment, simplification, and co-ordination.
    b. Build new national strategies and master plans upon past achievements and maintain continuity across political cycles to ensure strategic investments in digital government initiatives.
    c. Maintain the legal obligation to develop five-year master plans under the Electronic Government Act while allowing flexibility to adjust to external shocks or technological disruptions.
3. **To reinforce the legal and regulatory framework to keep pace with evolving societal needs and technological advancements**:
    a. Systematically engage with a wider set of stakeholders from the private sector, academia, and civil society in the development and revision of laws and regulations.
    b. Ensure that regulatory updates are well-communicated and supported by guidance to promote uptake and compliance across public sector institutions.
    c. Build public sector capacity to support implementation of regulatory and strategic instruments.
4. **To enhance the strategic management of digital government investments**:
    a. Strengthen the budget approval and evaluation processes by requiring public institutions to assess and demonstrate how their digital initiatives address user needs, environmental impacts, and individual rights.
    b. Enhance agility by introducing multi-year funding options, funding for innovation teams rather than fixed projects, conditional overspend allowances with strong business cases, and dedicated funds for digital technologies such as AI.

c. Expand the risk management framework to systematically include environmental risks – such as energy use, sustainability, and climate impacts – in the planning and delivery of digital government projects.
d. Modernise public procurement by incorporating GovTech collaborations via design contests, pre-commercial procurements, innovation partnerships, competitive dialogue, and outcome-based contracting.
e. Promote agile practices that support iterative design, user-testing, and continuous improvement and that equip public institutions with the principles, tools, and governance needed to work in an agile way.
f. Improve public accountability and performance with an online dashboard publishing regular, publicly accessible updates on digital and ICT projects.
g. Monitor and assess the environmental effects of digital projects during and after implementation.

5. **To promote the development of digital skills and talent**:
   a. Enhance stability in digital and technical roles by encouraging long-term service in digital areas, offering targeted retention incentives, and professionalising its digital workforce
   b. Expand performance-based rewards, career-development pathways, and flexible work arrangements to retain top digital talent.
   c. Consider structured exchange or secondment programs between the public and private sectors to expose civil servants to private-sector innovation and practices and to shift the digital mindset of the civil service.
   d. Develop a strategic approach to ensure the consistent implementation of Korea's training initiatives across national and local governments.

Improving data governance, sharing, and use

Data is a foundational asset for 21st-century government – essential for driving better policies, services, and outcomes. As data and digital technologies transform economies and societies, governments face increasing pressure to meet growing citizen expectations, manage complex policy challenges, and operate with greater efficiency and transparency. Data access and sharing are central to this transformation: public sector data alone is estimated to generate social and economic benefits worth 0.1% to 1.5% of GDP, rising to as much as 4% when private-sector data is included. The extent of these benefits depends heavily on how open, accessible, and well-governed the data is.

Data governance in the public sector

Korea has a comprehensive and forward-looking framework for public-sector data governance. This is underpinned by strong political will and top-down leadership from the MOIS), supported by the National Information Society Agency (NIA), and a clear strategic vision codified in dedicated legislation. As evidenced by the 2023 OURdata and Digital Government Indexes, Korea stands out among OECD countries for the breadth and coherence of its legal, institutional, and policy frameworks aimed at enabling a data-driven public sector.

One strength of Korea's approach is the dual legislative backbone provided by the Act on the Promotion of Data-Based Administration and the Act on the Promotion of the Provision and Use of Public Data. These establish long-term, systematised mechanisms for advancing internal use and external sharing of data. They mandate the development of national three-year master plans, guide agency-level implementation, and embed data-related responsibilities across government institutions. These efforts are complemented by strategic initiatives such as the National MyData Innovation Promotion Strategy, which promotes safe, cross-sector data portability and public-private collaboration.

Importantly, Korea has a multi-layered governance structure that ensures consistent implementation of data policies. Under the Open Data Strategy Council – supported by MOIS – Korea co-ordinates cross-government action, resolves disputes, and oversees progress. These bodies include external experts and enable inclusive, evidence-informed decision-making. The requirement to submit annual implementation plans reinforces accountability and creates opportunities to monitor and improve performance.

Nevertheless, the implementation of Korea's data strategy faces several challenges. Despite widespread recognition of the value of data among public officials, and significant investment in training programmes, nearly half of surveyed public institutions report insufficient skills or financial resources to fully operationalise data policies. While Korea has made progress in developing frameworks such as the Digital Civil Servant Competency Framework and the Guideline for Building Data Capability, efforts to embed data-informed decision-making at all levels of government continue. Strengthening hands-on skills, especially around data sharing, legal compliance, and privacy-enhancing technologies, remains an important step to realise the potential of Korea's data-governance ecosystem.

While legal and regulatory enablers are well developed, legacy provisions continue to impede seamless data exchange and integrated service delivery. For example, requirements for physical documents or handwritten signatures in outdated laws introduce friction to otherwise digital workflows. While reforms aim to remove these bottlenecks – including changes to the Seal Certificate Law and planned amendments enabling electronic verification of bank account information – faster legislative updates are needed to unlock more value from sharing data across the public sector.

At the infrastructure and architecture level, Korea invested heavily in an enabling environment for a data-driven public sector. Cloud-native strategies such as the Government-Wide Cloud (G-Cloud), the Public Information Sharing System, and a base registry framework contribute to secure and scalable data flows across agencies. However, a more structured approach to data discoverability – such as creating and sharing comprehensive internal data catalogue of all data assets – could help address one key barrier reported by public institutions: lack of awareness of what datasets exist and how they can be accessed or reused. Better visibility of data assets would strengthen the use of data for policy and service delivery.

Government data access and sharing in practice

Korea has a robust and multi-faceted approach to data access and sharing in the public sector, anchored in a legal mandate and supported by purpose-built infrastructure. The Electronic Government Act provides the framework for internal data sharing, requiring public institutions to exchange administrative data unless justified otherwise. This is operationalised through the Public Information Sharing System managed by MOIS, which facilitates secure, efficient, and rules-based data flows between agencies. These arrangements are central to Korea's implementation of the 'once-only' principle to reduce administrative burden by ensuring that data collected by one government agency can be reused by others.

Korea's internal data-sharing ecosystem is strengthened by widespread access to base registries and use of organisational data. Public institutions report high levels of data reuse, with the majority relying on data from their own operations, administrative registries, or peer organisations within the same policy area. However, the use of external or cross-sector data often remains constrained by regulatory complexity, siloed governance structures, and technical interoperability challenges.

The MyData initiative is an innovation in Korea's data sharing landscape that empowers individuals to control the use and portability of their personal data. Originally introduced in the public sector, then expanded to finance and other domains, MyData allows individuals to authorise the transfer of personal data such as family records or taxation certificates between government agencies and essential-service providers beyond the public sector. This is enabled through application programming interfaces (APIs) and supported by the amended Personal Information Protection Act (PIPA), which establishes the legal basis for cross-sector implementation.

Practical barriers to seamless data sharing persist despite these advances. While regulatory reforms strengthened data protection safeguards, particularly for sensitive data, they also introduced new challenges. Stricter rules for the use of the Resident Registration Number (RRN) and enhanced requirements for anonymisation or pseudonymisation make it more difficult for public institutions to combine datasets for policy or service-design purposes. While these changes are well intentioned and reflect global best practices, they underscore the urgent need for practical guidance, legal clarity, and capacity-building around privacy-enhancing technologies (PETs) and responsible data integration.

Korea also performs strongly in making public-sector data available to the broader ecosystem. Open data plays a central role in this strategy, supported by dedicated initiatives such as the National Priority Data Releasing Project. As a result, Korea makes 81% of its high-value datasets available – well above the OECD average – available as open data and especially for those datasets on public finances, geospatial information, education, and the environment. These datasets directly support the development of hundreds of mobile applications, private services, and civic technology tools.

Where open access is not feasible, Korea has clear procedures for controlled data sharing with external actors. Under the Electronic Government Act, public institutions can request data from private organisations or individuals through formal agreements. Once acquired, the data may only be used for the agreed purpose and must be securely destroyed afterwards. These safeguards are supported by strong institutional oversight and operational protocols to prevent unauthorised access, ensure legal compliance, and maintain public trust.

Using data to unlock value for citizens and businesses

Korea is embedding data use across public sector institutions, particularly to support evidence-based policy-making. All 13 institutions surveyed for this review reported using data for policy-making purposes, reflecting widespread recognition of the strategic value of data. However, the use of data to inform public service design or understand citizen needs remains less common, with fewer than half of institutions reporting activity in these areas. Similarly, data for predictive analytics and forecasting is underused.

This uneven picture is also reflected in the public-service improvements pursued using data. While data is used widely to enhance service delivery, fewer institutions apply it to increase efficiency or support crisis-response and public engagement. A notable exception is the Public Disaster and Safety Portal run by MOIS, which enables real-time access and analysis of disaster-related data and supports the development of predictive models for risk-management.

Monitoring and evaluation represent other areas where data is not yet used to its potential. Most institutions use data to track operational performance, but only a minority use it to evaluate policy outcomes or demonstrate return on investment. No institution in the survey reported using data to support accountability via audit trails. This highlights a gap in outcome-oriented data use and suggests the need for clearer focus on results-based management and transparency mechanisms.

Many of the perceived barriers to using data relate to practical and operational issues rather than legal or strategic constraints. The most frequently cited challenge is a lack of information about available datasets, followed by procedural hurdles to access, and issues with data interoperability and standardisation. In contrast, few institutions report legal frameworks or data governance as primary obstacles. While Korea's enabling environment is considered broadly fit for purpose, this suggests that more needs to be done to support data discoverability and reduce friction in data access across government.

Data and trust

Korea's commitment to strengthening trust in how data is managed and used by the public sector is evident in recent institutional and legislative reforms. As the use of personal data becomes more embedded in government operations and service delivery, fostering public confidence in that use is essential. In Korea,

43% of the population believe that public agencies would use their personal data for legitimate purposes. These trust levels represent both a challenge and a strategic opportunity for government to build confidence through transparent, ethical, and secure data practices.

In recent years, Korea introduced meaningful reforms to its data protection regime. Amendments to PIPA and stricter rules for the use of the national identification number reflect an intent to enhance alignment with international standards and to safeguard individual rights. Notable changes include stronger conditions for cross-government data matching, expanded requirements for anonymisation and pseudonymisation, and the reinforcement of individual rights such as data portability. These changes are underpinned by the growing authority and oversight capacity of the Personal Information Protection Commission (PIPC), which plays a central role in ensuring compliance. Fact-finding interviews indicated that these reforms have created a need for greater support to public sector organisations in developing data access and sharing practices that are compliant with regulations.

Korea's approach to digital security in the public sector is similarly advanced. The 2024 National Cybersecurity Strategy focuses on building technical capabilities, improving inter-agency co-ordination, and reinforcing critical infrastructure. The National Intelligence Service (NIS) plays a central role in managing public-sector cybersecurity, including co-ordinating Cyber Security Centers and overseeing a well-structured framework of national guidelines and legal instruments. This strategic clarity strengthens Korea's ability to prevent, respond to, and recover from cybersecurity threats.

These efforts are reinforced by Korea's performance in government transparency, particularly in open government data. The wide availability of public-sector data improves access to information and supports accountability. However, room for improvement remains in areas such as the transparency of algorithmic systems used in the public sector. While AI and machine learning are increasingly used to support public decision-making, there is limited information about how these systems function, the datasets they train on, or the safeguards in place to ensure fairness, accuracy and accountability.

Proposals for action

In view of the assessment elaborated above, which draws on the findings and analysis in Chapter 4 of this review, the Korean government could consider the following policy recommendations and actions.

6. **To improve data governance in the public sector:**
   a. Strengthen the capacity to implement the data strategy by ensuring public institutions have the people and funding needed, and by providing extra support to those with limited resources.
   b. Build data skills by continuing the rollout of the Digital Civil Servant Competency Framework, focusing on data sharing, legal compliance and privacy-enhancing technologies.
   c. Modernise laws and regulations by reviewing those that require physical documents or signatures, and speeding up reforms that enable paperless, automated data access and sharing.
   d. Improve data discoverability by encouraging public sector organisations to create, maintain and share internal catalogues that list all their data assets, not just those available as open data.
7. **To strengthen the approach to data access, sharing and use in government**:
   a. Develop and share practical guidelines to help institutions meet changing data-protection requirements, focusing on lawful dataset combination and risk-based data integration.
   b. Build capacity for the use of privacy-enhancing technologies (such as anonymisation and pseudonymisation) through training, guidance and pilot projects.
   c. Promote consistent metadata standards and shared practices across public institutions to improve the usability and discoverability of internal data assets.
   d. Expand cross-sector interoperability frameworks by building on MyData to develop governance models and technical standards that enable secure, privacy-compliant data sharing between the public sector and other essential service providers, when there is a public interest.
8. **To accelerate the use of data in the public sector that brings value to citizens and businesses:**
   a. Encourage public institutions to further embed data use and analysis into service-lifecycle management, including user-research, design iteration, and feedback to improve citizen experience.
   b. Promote the use of data to evaluate policy outcomes and service impact beyond operational performance.

9. **To increase public trust in the management and use of data by the public sector**:
   a. Maintain a record and publish information about the use of algorithmic systems in the public sector, including datasets used, decision-making logic, and safeguards to ensure fairness and accountability.
   b. Foster public dialogue on data rights and digital services by engaging citizens through awareness campaigns and participatory processes to build understanding of and trust in how their data is used in public services.

Leveraging AI for government transformation

Artificial Intelligence is one of the most transformative forces of the 21st century, integral to digital government worldwide. AI use in the public sector can enhance the efficiency of internal operations, the effectiveness of policy-making, the responsiveness of public services, and the transparency and accountability of government. However, governments face unique contexts and challenges that can hinder the uptake of AI, including skills shortages, risk aversion, legacy systems, data availability, and difficulty measuring and prioritising investments in AI within a fiscally constrained environment.

Use of AI in Government

Korea's public sector institutions increasingly explore the potential of AI to improve policy development, service delivery, and internal operations. Among the 13 institutions surveyed for this review, eight reported using AI to enhance internal processes and the same number indicated applications in public service delivery and policy-making.

Several initiatives demonstrate how Korea applies AI to increase the productivity of public servants and improve operational efficiency and effectiveness. A prominent example is the AI Support System for Work Supervisors, which combines generative AI, predictive analytics, and interaction-support tools to assist labour inspectors. The system analyses statements from employers and employees in labour complaints, summarising issues to support decision-making. This both enhances the productivity and accountability of supervisors and strengthens the enforcement of labour laws, improving protection for vulnerable workers. Another initiative is an AI-based patent examination-support system, developed to manage growing volumes of patent applications. This tool uses a large language model (LLM)-based generative AI system to support patent examiners with legal guidance, identification of grounds for acceptance or rejection, and searches of prior material. It includes an interactive chatbot and process-tracking capabilities, enabling higher-quality, more efficient examinations.

Korea also leverages AI to design more proactive and inclusive services and policies. The AI-driven Flood Safety Network developed jointly by the Ministry of Environment and the Ministry of Science and ICT (MSIT) applies AI to analyse real-time data from over 670 monitoring stations for flood prediction. It integrates with navigation apps to issue alerts to drivers in flood-prone areas and expanded its reach to 223 locations, including urban areas such as Gwangju, Pohang, and Changwon. The system uses long short-term memory models to improve predictive accuracy and was awarded Korea's Best Government Innovation award in 2024.

Korea also invests in AI-driven policy-intelligence tools. One example is an AI-based system that supports policymakers to formulate and validate fiscal and social policies using large-scale socioeconomic data. This tool, developed in collaboration with the International Institute for Applied Systems Analysis (IIASA), incorporates machine learning, data visualisation, and virtual simulation to model social and economic interactions using multi-agent-based modelling (MABM). The platform has international recognition, including the adoption of its data-management interface as a global standard.

At the intersection of public-service and regulatory design and delivery, Korea introduced a *Generative AI Co-Pilot* Service to enhance access to legal and administrative information, particularly in complex areas

such as architectural regulations and military construction. The LLM-based tool includes AI modules for handling permits and approvals, providing regulatory guidance, and addressing public complaints.

Although AI is not yet used widely in Korea's public sector for audit, fraud detection, or impact evaluation, promising use cases are emerging. The e-RFP Assistance System, developed as part of a KRW 1.7 billion digital transformation initiative, applies natural language processing, generative AI, and machine learning diagnostics to streamline public procurement. The system analyses large volumes of procurement data, reducing document preparation time by 70% while achieving 99.9% accuracy in regulatory compliance. It also contributes to identifying anomalies and potential risks in procurement processes, demonstrating AI's potential to strengthen administrative accountability.

Enablers of trustworthy AI in government

Korea established a strong foundation of enablers to support the strategic and trustworthy use of AI in government. These include clear institutional responsibilities for public sector AI, sustained investments in digital infrastructure and data, emerging legal and regulatory instruments, and growing efforts to build AI-ready skills and procurement mechanisms across government. Together, they reflect Korea's ambition to position the public sector as both a testbed and beneficiary of advanced AI capabilities. However, while Korea's enabling environment for trustworthy AI in government is among the most advanced across OECD countries, continued effort is needed to translate this progress into consistent and trustworthy adoption of AI across all levels of government.

At the policy and governance level, Korea benefits from a broad institutional ecosystem supporting AI use in government, with significant contributions through bodies like the Ministry of Interior and Safety (MOIS), MSIT, and PIPC. The main policy instrument for AI in government in Korea is the *National AI Strategy Policy Direction*, released in 2024. Its goal is to position Korea among the world's top-three AI leaders. In June 2025, the new government designated AI as the top national priority and adopted the country's first AI Future Planning Chief in the Presidential Office. The government also announced a new economic growth strategy that set a target of 3% potential growth by applying AI across all sectors. Korea's AI policies recognise the public sector's dual role as innovator and end-user, signalling political commitment. However, co-ordination across the institutions involved remains complex and would benefit from clearer delineation of mandates and stronger mechanisms for cross-agency alignment, particularly to ensure coherent guidance and avoid duplication.

Investment in digital infrastructure for public sector AI adoption is accelerating, including in shared data-centres and national AI computing capacity ("compute") that support the training and deployment of large-scale AI systems and models. Yet, as AI adoption expands, ensuring equitable access to infrastructure across levels of government and public institutions – especially smaller, local governments – remains an important area for improvement. Similarly, while Korea's cloud strategies promote flexibility and scalability, ensuring that cloud adoption aligns with AI-development needs across the public sector could require further guidance and technical support.

Data governance and readiness is a clear strength, supported by initiatives like the Korean AI Hub, national quality standards for training data, and improved data interoperability tools. Korea's proactive development of guidance on personal-data use in AI model training is noteworthy. PIPC's principles-based approach addresses critical gaps and sets a forward-looking standard to balance innovation with privacy. Nevertheless, continued attention should ensure that public institutions have the capacity and confidence to implement these guidelines, especially in relation to high-risk or emerging use cases such as generative AI and synthetic data.

Efforts to build AI capabilities in the public sector are advancing, including through training programmes, guidance materials, and support for researchers. The publication of practical resources such as the civil servants' guide to ChatGPT shows a commitment to responsible use. However, like in many countries,

public institutions face challenges in attracting and retaining AI talent due to competition with the private sector. Targeted strategies and concrete actions to strengthen internal capabilities and reduce dependency on external providers will be critical to sustaining in-house expertise.

Finally, Korea's funding and procurement mechanisms support agile and strategic AI investment. Platforms like the Digital Service Marketplace and the Participatory Budgeting system channel resources toward high-impact projects. AI-specific procurement guidance could further support risk-assessment, promote ethical standards, and ensure explainability and accountability throughout the AI lifecycle.

Guardrails and engagement for trustworthy AI in government

Korea has robust policy, institutional and normative frameworks to support trustworthy use of AI in government. This includes a growing set of guidelines, legal instruments, oversight bodies, and cross-sector co-ordination mechanisms to manage AI-related risks while enabling innovation.

The country's commitment to trustworthy AI development, in the public sector and beyond, is reflected in its early adoption of high-level normative frameworks such as the National AI Ethics Standards (2020), and its subsequent AI Ethics Guidebook for Generative AI (2023). These both articulate and help implement principles such as human dignity, public interest, and ethical purposefulness, and are key in shaping Korea's evolving approach to public sector AI governance. Korea's AI guardrails allow for a flexible framework that fosters sector-specific adaptation and multi-stakeholder dialogue. While this supports agility, it might present challenges to achieving consistent implementation across diverse institutions and levels of government.

From a risk-management perspective, Korea has a comprehensive oversight landscape, including institutions such as the NIS, Board of Audit and Inspection (BAI), and the newly formed AI Safety Institute (AISI). The NIS has taken on a particularly active role, publishing tailored guidelines for generative AI tools and initiating a multi-year survey to monitor AI-related projects across government. These efforts reflect growing recognition of the strategic and security dimensions of AI, particularly regarding data protection, model provenance, and systemic risks posed by large-scale foreign AI systems. However, the effectiveness of these initiatives will depend on the ability to translate insights into updated, enforceable guidance and to support capacity-building across all levels of the public sector. Korea's Basic AI Act (2025) is expected to help close some of these gaps.

The adoption of the Act marks a significant step toward embedding legally binding safeguards into Korea's public sector AI ecosystem. With risk-based classification and provisions for transparency, human oversight, and impact assessments, the Act aligns with emerging international best practices and creates a legal foundation for future implementation. The provisions targeting high-compute systems and generative AI systems are particularly timely. As the law has not yet taken effect (scheduled for 2026), much will depend on how regulatory authorities operationalise its requirements and support public sector institutions translating legal obligations into practical action.

Korea also made important strides building technical and institutional tools. Tools such as the AI Ethics Impact Assessment Framework developed by the Korea Information Society Development Institute (KISDI), technology impact evaluations by the Korea Institute of Science & Technology Evaluation and Planning (KISTEP), and measures in the Digital Order Implementation Plan, including mandatory watermarking of AI-generated content, promise to anticipate and address ethical, societal, and security risks. Complementing the investment reviews undertaken earlier in the project lifecycle (discussed in Chapter 3), the efforts toward continuous and ex-post monitoring and evaluation, foresight research and standards development will be important as use cases evolve.

Despite these advances, a notable gap remains in AI transparency and accountability at the system level. Unlike several OECD countries, Korea lacks a comprehensive, publicly accessible registry of AI systems and algorithms used in the public sector. While the AI Hub offers a valuable repository of use cases, it is

not mandatory for agencies to report or regularly update their AI deployments. This limits public oversight and hinders efforts to identify systemic risks, promote learning across institutions, and build citizen trust in government AI. The international trend toward mandatory public algorithm inventories, such as in Chile, the United Kingdom, and the Netherlands, suggests an opportunity for Korea to enhance openness and accountability in AI use.

Korea's multi-stakeholder approach to AI governance is a clear strength. Cross-government co-ordination, inter-agency strategy development, and engagement through platforms like the AI Strategy Summits and the AI Legal and Regulatory Reform Task Force ensure that policies reflect diverse expertise and public-interest concerns. These forums support inclusive dialogue by involving stakeholders from academia, civil society, and industry, including SMEs and startups. Sustaining and institutionalising these channels will maintain legitimacy and responsiveness in a fast-evolving technological and regulatory landscape. In addition, as discussed in the following chapter, broader engagement with internal and external users at all stages of the design and development of AI systems would help ensure that they are fit-for-purpose and build trust with those that will need to use them.

Proposals for action

In view of the assessment elaborated above, which draws on the findings and analysis in Chapter 5 of this review, the Korean government could consider the following policy recommendations and actions.

10. **To advance the use of AI in government**:
    a. Encourage application of AI in core government functions such as promoting public integrity (e.g. audit and oversight)— by identifying priority use cases, and providing pilot funding and targeted technical support.
    b. Promote systematic assessment of AI initiatives before, during, and after deployment by developing standardised frameworks to measure public value, inclusiveness, and performance, helping inform investment and scale-up decisions.
    c. Establish mechanisms to test, evaluate, and replicate high-performing AI tools across government, focusing on applications with demonstrable public-interest benefits.
11. **To create the enablers for trustworthy AI in government**:
    a. Enhance co-ordination across agencies and levels of government by clarifying roles, responsibilities, and lines of accountability for AI governance supported by a central mechanism to align strategies, guidance, and investments.
    b. Develop shared service models and funding mechanisms to support access to AI compute, data, and cloud infrastructure for local and smaller-scale public institutions, promoting inclusive digital transformation.
    c. Invest in public sector AI talent pipelines and expand AI-specific procurement guidance to reinforce ethical safeguards, risk assessment, and lifecycle accountability across projects and suppliers.
12. **To secure guardrails and engagement for trustworthy AI in government**:
    a. Develop practical tools, training, and oversight mechanisms to help public institutions comply with the requirements of the Basic AI Act and other level and normative frameworks, especially for high-risk AI applications.
    b. Create a mandatory, regularly updated public inventory of AI systems used in the public sector to support risk monitoring, public trust, and knowledge sharing, building on international good practices.
    c. Formalise ongoing engagement mechanisms that include civil society, academia, and private sector actors and the general public - ensuring broad-based input into AI governance and responsiveness to emerging societal concerns.

Delivering human-centred and proactive public services

The OECD's Recommendation of the Council on Human-centred Public Administrative Services guides countries on how to put people's needs at the centre of policy design and delivery. Complementing the last two pillars of the framework – Seamless and accessible services; and Measurement, engagement,

improvement – the OECD's Good Practice Principles for Public Service Design and Delivery in the Digital Age have been used as a policy tool to understand Korea's approach to delivering human-centred and proactive public services, as well as its progress towards the effective implementation of the pillars of the recommendation.

Korea demonstrated strong commitment to delivering human-centred, ethical, and inclusive digital public services in line with the OECD's Recommendation on Human-centred Public Administrative Services. Its approach is guided by robust legislative and governance frameworks, such as the Electronic Government Act, and strategic policies like the 2nd Master Plan for Electronic Government. These underpin an omni-channel service delivery model and the implementation of the 'once-only' principle, enabling seamless data sharing and reducing administrative burdens on citizens. The government ensures consistency through mandated service design standards and user-centred user-interface (UI) and user-experience (UX), including the Korea-wide UI/UX Design System. Participatory initiatives, such as the Citizen Participatory Design Group, embed user voices throughout the policy and service lifecycle. However, while early engagement is strong, interviews highlighted that there is less direct user involvement during the design and build phases, with limited usability testing or co-design practices. Addressing these gaps and improving service performance monitoring would further strengthen Korea's digital service delivery and ensure that services are intuitive, accessible, and meet the evolving needs of all users.

Similarly, Korea is making progress in delivering public services with impact, scale, and speed by advancing digital infrastructure, streamlining service design, and integrating private sector channels. A cornerstone of this transformation is the DPG initiative, which consolidates over 1,500 public services into a single digital platform. This platform personalises service delivery based on user profiles and enables seamless access through government and popular private platforms like Naver and Kakao. Korea also implemented a nationally mandated project management methodology and user engagement standards to ensure consistency, transparency, and quality across agencies. Digital identity is strengthened through secure, portable solutions, aligning with OECD recommendations to enable more secure and integrated access to public services. While national efforts are robust, integration challenges remain at the local level where service delivery varies. Collaboration with sub-national entities and continued infrastructure upgrades, including secure, government-run data centres, are essential to unified, citizen-centric digital government.

Finally, Korea has accountability and transparency embedded at the core of its digital service delivery, reinforcing public trust through governance, ethical standards, and citizen protections. The Government24 platform acts as a central access point for all public services, facilitating transparency, ethical data use, and a lifecycle-based service approach. Its operation is mandated under the Electronic Government Act and supported by systems like the Integrated Information Disclosure System and the Information Resource Management System, which promote efficiency, interoperability, and secure data handling. Informed consent practices further enhance trust, with users actively agreeing to the use of personal data for service delivery. Performance reporting is another key mechanism, including regular surveys and the publication of digital project outcomes. Korea champions ethical governance through the Digital Bill of Rights and AI standards, establishing global norms for digital rights and responsibilities. Moving forward, more flexible budget allocations would accelerate digital transformation of the Korean public sector, particularly for the digital platforms and use of AI systems that would continue to transform the way Korea' delivers public services.

Proposals for action

In view of the assessment elaborated above, which draws on the findings and analysis in Chapter 6 of this review, the Korean government could consider the following policy recommendations and actions.

13. To strengthen the design and delivery of user-centred services:

a. Embed user participation throughout the service design lifecycle, implementing structured co-design practices and usability testing to ensure digital services are intuitive, inclusive, and meet the needs of all users.

b. Expand real-time performance tracking and public reporting mechanisms, including user-satisfaction metrics and open service dashboards, to drive continuous improvement and foster greater accountability.

14. To expand the provision of proactive and seamless services:

a. Maintain and scale investments in shared digital infrastructure such as secure data centres and interoperable digital platforms, including digital identity, to enable seamless, consistent, and secure digital service delivery across government entities.

b. Introduce more flexible budget structures to allow rapid experimentation and innovation, particularly in adopting new technologies like AI, while ensuring sustainable funding for critical digital infrastructure.

c. Strengthen collaboration with local governments by providing targeted technical support, capacity-building, and resources to integrate national digital platforms and ensure consistency in service delivery across levels.

2 Korea's journey to becoming a global leader in digital government

This chapter provides an overview of Korea's long-term trajectory in public sector digital transformation, from early computerisation efforts in 1967 to comprehensive digital government initiatives in the 2020s. It highlights how sustained policy commitment, strategic investments, and continuous innovation enable Korea to adapt to emerging digital technologies and meet growing demand for modernised public services. It also presents how Korea has promoted international co-operation in digital government to share its experience and practices.

Introduction

Digital technologies evolve and transform all aspects of society, with enormous impacts on the ways governments interact with citizens and businesses. These evolutions drive demand for governments to transform and deliver more relevant, effective, and personalised services to citizens and businesses. To meet this demand, governments reform their policy and regulatory frameworks to innovate government services. This transformation reshapes the public governance landscape while technological advancements trigger further evolution of public administrations.

Korea's digital government transformation exemplifies a proactive and ambitious journey, with early experiments in computerising government tasks dating back more than half a century (Ministry of the Interior and Safety, 2017[1]). Since then, the country has built strong foundations for digital transformation of the public sector by maintaining its policy dedication, strategic investment and government innovation. This chapter provides an overview of Korea's trajectory from 1967 to 2020, categorised into four thematic stages. The first stage encompassed initial policy and institutional development. The second stage focused on the establishment of national information and communication technology (ICT) infrastructure. The third stage addressed Korea's transition to a whole-of-government digital governance structures and leadership. The final stage focused on the shift from e-Government to digital government through government innovation, a data-driven public sector, and user-centred services. The chapter also presents Korea's international co-operation efforts to share its experience and practices.

Early policy and institutional development (1970s-1980s)

The Korean government started building a strategic informatisation policy by the late 1970s. The initial Five-Year Basic Plan for Administrative Computerisation (1978-1982) was developed in 1978 to systematically digitise pivotal public administration processes. Spearheaded by the Ministry of Government Administration at the time, the plan aimed to automate 99 priority administrative tasks across 32 agencies and build shared data-processing networks for public sector institutions. To provide the enabling legal foundation, the government established an Administrative Computerisation Promotion Committee and enacted a Prime Minister's decree on promoting administrative computerisation in 1979 (Ministry of the Interior and Safety, 2017[2]). This early central co-ordination mechanism, in which the Ministry of Government Administration was entrusted to formulate five-year plans, provided a critical institutional foundation. These efforts ensured a high level of commitment and a comprehensive, government-wide perspective – characteristics that would subsequently define Korea's digital government development.

Even during this nascent period, the government demonstrated a commitment to investing in ICT despite economic constraints. This decision reflected a conviction that the computerisation of administration was imperative for governance and economic development. By the early 1980s, the seeds of e-Government had been planted in Korea with basic computing capacity in government institutions, an institutional mandate for ICT planning, and awareness of the transformative potential of ICT across the government (Cheong, 2024[3]).

Building a national ICT infrastructure (1980s-1990s)

During the 1980s and 1990s, Korea prioritised the development of a national digital infrastructure, which laid the cornerstone for its expansion of e-Government and then digital government initiatives. This effort started with the decision to construct the National Backbone Computer Network to connect government institutions and facilitate large-scale electronic information sharing. The decision was reinforced by the new Act on Establishment and Utilization of Network (1986), complemented by other legislation, including

the Software Development Promotion Act (1987), contributing to the cultivation of an ICT-enabling environment in the country (Karippacheril et al., 2016[4]).

Building on this strategic and legal basis, Korea implemented five primary national information networks (public administration, finance, education and research, defence, and public security) in 1987. Each network was overseen by the respective ministry, supplemented by a central co-ordination mechanism. In parallel, Korea allocated substantial resources to developing telecommunications and internet infrastructure for its society. The Korea Information Infrastructure project started in 1995 to expand high-speed networks across the country (Ministry of the Interior and Safety, 2017[2]).

This strategic approach to building government-only networks for critical administrative data complemented by a nationwide internet infrastructure positioned Korea to implement a wide range of digital public services in subsequent years.

Whole-of-government strategy and governance (1990s-2000s)

As Korea transitioned from informatisation to e-Government, the government built robust governance mechanisms to drive this transformation at the whole-of-government level. The transition thus benefited from several factors. First, it enjoyed significant presidential support, which provided considerable political capital. Furthermore, the Administrative Computerisation Promotion Committee engaged a wide range of stakeholders, fostering collaboration and ensuring the implementation of planned initiatives. Most importantly, Korea emphasised administrative innovation over mere technological upgrades, demonstrating a commitment to addressing systemic issues.

Following the unprecedented economic crisis of 1997, the newly elected government initiated a series of comprehensive government reforms in 1998 to enhance efficiency and integrate market principles into public administration. A fundamental element of this reform was the formation of the Ministry of Government Administration and Home Affairs (MOGAHA), now known as the Ministry of the Interior and Safety (MOIS), integrating the Ministry of Home Affairs and the Ministry of Government Administration. MOGAHA was entrusted with spearheading the Korean government's digital transformation and facilitating the dissemination of digital services across central public institutions and local governments (Ministry of the Interior and Safety, 2017[2]).

MOGAHA prioritised leveraging digital technologies and data to reform administrative processes, enhance service delivery for citizens and businesses, and improve government productivity. With its Vision and Strategy for e-Government developed in March 1998, the government implemented initiatives to achieve three strategic objectives: (1) provision of seamless, accessible, online government services; (2) establishment of a paperless, highly efficient administrative environment; and (3) implementation of transparent communication channels between citizens and public officials (Ministry of the Interior and Safety, 2017[2]).

Additionally, the government established the Special Committee on e-Government to facilitate inter-ministerial co-ordination, comprising senior officials from relevant ministries, local government representatives, and private-sector experts. The committee identified eleven priority initiatives to achieve comprehensive digital transformation by 2002. These projects were grouped into four categories, covering citizen-centric services (G4C), government-to-business services (G2B), internal governmental processes (G2G), and information infrastructure (Ministry of the Interior and Safety, 2017[2]).

In contrast to previous, single-ministry initiatives, the government focused on ministerial co-operation, legislative updates (Box 2.1) and technological advancements, establishing a solid foundation for Korea's subsequent digital transformation efforts.

Box 2.1. Korea's Electronic Government Act (2001)

Context

In the late 1990s, as e-Government gained prominence on policy agendas, academics and policymakers in Korea noted the need for comprehensive legal frameworks. The existing framework governing the promotion of informatisation had proven inadequate to support specific e-Government policies and initiatives. Acknowledging this gap, Korea enacted the world's first comprehensive Electronic Government Act in July 2001, placing a emphasising digital transformation as a pivotal component of its national agenda.

Purpose, structure, and provisions

The Act established principles for digital government implementation, digital administrative management, digital public services, and promotion of digital government initiatives across the Korean public sector. As of June 2025, the Act comprises seven chapters – (I) General provisions; (II) Provision and utilization of electronic government services; (III) Electronic administrative management; (IV) Administrative data matching; (V) Strengthening operational basis for electronic government; (VI) Promotion of policies, etc. for realization of electronic government; and (VII) Penalty provisions – containing 78 articles.

Legislative evolution and key amendments

The Act has undergone several amendments since its enactment, to enhance policy effectiveness and administrative efficiency in line with digital advancements. Notable amendments include the introduction of electronic administrative signatures and inter-agency data-sharing system (2003), the introduction of project management oversight for key government initiatives (2013), and reinforced infrastructure for citizen services and data use (2014).

Most-recent amendments

Amendments made in 2023 enhance administrative efficiency and address issues related to redundant or underused digital government services. These reinforce the efficacy of recommendations issued by central ministries, mandating a greater degree of compliance from local governments in implementing recommended improvements. This adjustment enhances the efficiency of digital services, mitigates redundancy, and allows citizens to enjoy more coherent and cost-effective digital government services.

Amendments enforced from July 2025 fortify incident prevention, monitoring, and recovery mechanisms for government information systems. The amendments cover a mandatory triannual incident management plan, the introduction of tiered system classification, mandatory annual audit and inspection of systems, and the implementation of centralised monitoring and post-incident oversight.

Policy implications and impact

The Act's continuous evolution reflects the public's needs and technological advancements. It helps establish a robust, coherent framework for digital government, reducing bureaucratic requirements, improving service efficiency and addressing regulatory barriers through legislative improvements.

Source: (Ministry of the Interior and Safety, 2017[2]), (Government of Korea, 2022[5])

Shifting from e-Government to digital government (2010s)

As Korea's e-Government matured, the 2010s witnessed a strategic shift towards digital government: a more comprehensive digital transformation of the public sector, embracing data as a strategic asset, adopting emerging technologies and ensuring government innovations to keep pace with industrial and societal change.

In 2013, the government announced the Government 3.0 Strategy, prioritising transparency, data sharing, collaboration, and tailored government services. The strategy promoted inter-agency data sharing to facilitate "life-cycle services", defined as service packages tailored to address specific life events such as birth, death, education, employment, and retirement. Furthermore, the strategy led to the Act on Promotion of the Provision and Use of Public Data, which obliges public institutions to open datasets to the public and the private sector. With the establishment of a national open data portal, the government started to proactively disseminate high-value datasets, including those on transportation, health, and finance. This development fostered the growth of an open data ecosystem (Ministry of the Interior and Safety, 2017[2]).

In 2016, Korea initiated the integration of government service platforms to streamline access to services and reduce the complexity of interacting with public sector institutions, consolidating government services under the GOV24 platform. This facilitated access to, requests for, and tracking of government services through a unified portal, streamlining processes for citizens. In 2017, the effort expanded to integrating sector-specific services through new government portals such as *Bokjiro*, a social security services portal, and Work24, an employment services portal (Ministry of the Interior and Safety, 2017[2]).

Complementing the integrated service platforms, the government introduced proactive services to anticipate and pre-emptively fulfil citizens' needs. For example, the National Tax Service's enhanced year-end tax settlement service was inaugurated in 2015 through collaboration with the Government 3.0 Committee. This service incorporated features such as pre-notification, which enabled taxpayers to anticipate their potential tax outcomes, identify deduction limits, and access visual aids for tax optimisation strategies. Furthermore, this pre-fulfilled service facilitated automated generation of tax documents through simplified year-end settlement data, significantly reducing paperwork and enhancing accuracy. It demonstrated a shift from reactive to proactive administration, resulting in substantially improved citizen satisfaction and administrative efficiency (Ministry of the Interior and Safety, 2017[2]).

During this period, the government continued harnessing emerging technologies to innovate public administration. Beginning in 2014, various pilot programmes were initiated under the Government 3.0 Strategy to use cloud computing and big data analytics to improve the government's operational efficiency. The Ministry of the Interior (formerly MOGAHA, currently MOIS) led a cloud initiative to enhance interoperability and reduce public spending. By 2017, numerous public sector institutions migrated their core systems to the cloud and an integrated government data centre was established to facilitate the transition. Furthermore, the government implemented big-data analytics in policymaking, leveraging population and transportation data to determine facility locations and proactively address social concerns.

In 2018, the Korean government officially adopted the term "digital government" in place of "e-Government" to ensure that digital government contributes directly to citizens' quality of life and fosters their trust in government, and anticipating the need for other paradigm changes in the next eras (Cheong, 2024[3]). The government outlined a vision to use next-generation technologies, such as artificial intelligence (AI) and the Internet of Things (IoT), to provide more anticipatory and tailored services. In 2019, MOIS announced a Digital Government Master Plan, followed by a Digital Government Innovation Initiative, focused on data-driven public administration, user-centred services and smart government infrastructure.

Advancing together with the international community

As digital transformation becomes increasingly transnational in nature – shaped by common opportunities and challenges such as AI governance, cybersecurity, and cross-border services and data flows – Korea has taken a multi-faceted approach to its international co-operation. Under the co-ordination of the Ministry of Foreign Affairs, it has institutionalised knowledge sharing mechanisms, invested in regional development partnerships, and assumed active roles in major multi-lateral forums. These efforts reflect Korea's recognition that a mature digital government not only serves its citizens and businesses but also contributes to building a more inclusive and interoperable global digital ecosystem. This section presents how Korea has facilitated bilateral and regional co-operation and contributed to multi-lateral co-operation through international organisations.

Bilateral co-operation: sharing experience and technical expertise

Korea has pursued numerous bilateral partnerships, with the aim of sharing its digital government know-how and systems to other countries. A cornerstone of this effort is the establishment of Digital Government Cooperation Centres in partner countries. At the centres, Korean experts are dispatched to work within the hosting country's leading digital institution, providing consulting on its digital government strategy, implementing pilot projects, and training government officials (Ministry of the Interior and Safety, 2025[6]). Such bilateral engagements have resulted in tangible outcomes, for instance, the Cambodian Ministry of Labour adopted a Korean-developed employment information system, which Korean experts later inspected and discussed expanding to meet new needs of Cambodia (Ministry of the Interior and Safety, 2022[7]). These endeavours demonstrate Korea's commitment to sharing its expertise and technology with its partner countries, tailoring support to meet each partner's specific need with disseminating Korean expertise.

Furthermore, Korea's official development assistance (ODA) programmes also priorities the digital transformation of the public sector as a key priority area. The Korean International Cooperation Agency (KOICA) offers a Digital Transition Programme, allocating a significant share of bilateral aid to digital transformation initiatives. An internal assessment of 29 KOICA digital projects found 52% were "successful" and 38% "very successful" in achieving their objectives. For instance, a project funded by KOICA to modernise the traffic management system in Asunción, Paraguay, resulted in a significant improvement in efficiency and road safety (OECD, 2021[8]).

Regional co-operation: driving regional digital integration

Korea complements bilateral efforts with regional engagement, particularly with the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC) and the Inter-American Network on Digital Government (Red GEALC) to establish an interoperable and inclusive digital community, and to raise shared standards in the regions.

In 2025, the Korea-ASEAN Digital Innovation Flagship (KADIF) initiative was launched, with the backing of a five-year, USD 30 million investment from the Korea-ASEAN Cooperation Fund. The initiative supports five major projects – from developing joint data ecosystem to AI solutions – aimed at enhancing regional digital capacity and shared prosperity (Ministry of Science and ICT, 2025[9]).

Korea is also committed to the digital integration of the region through policy co-ordination and knowledge exchange at ministerial level. The invitation to Korea as co-chair to the 2025 ASEAN Digital Ministers' Meeting is a reflection of its role as a key partner in the ASEAN digital agenda. On these occasions, Korean government officials work with ASEAN counterparts to review current co-operation activities and plan future initiatives in areas including digital government, data governance and emerging technologies (Ministry of Science and ICT, 2025[9]).

Furthermore, Korea is assuming leadership roles in forums such as APEC to influence digital policies beyond its immediate neighbours. In 2023, Korea secured key positions in APEC's Telecommunications and Information Working Group (TELWG), including a co-chair role. This enabled Korea to steer discussions on digital connectivity and standards for the 21 APEC member economies, advocating for a "new digital order in the Asia-Pacific region" (Ministry of Science and ICT, 2024[10]). Korea also plans to use its 2025 presidency to advance regional discussions on cross-border data flows, AI ethics, and inclusive digital economies (Preparatory Office for APEC 2025, 2025[11]).

Multilateral engagement: shaping international standards and practices

Korea also has assumed an active role in shaping global standards and contributing to cross-border knowledge sharing, acknowledging the importance of adherence to international standards and shared principles for the country's effective digital transformation.

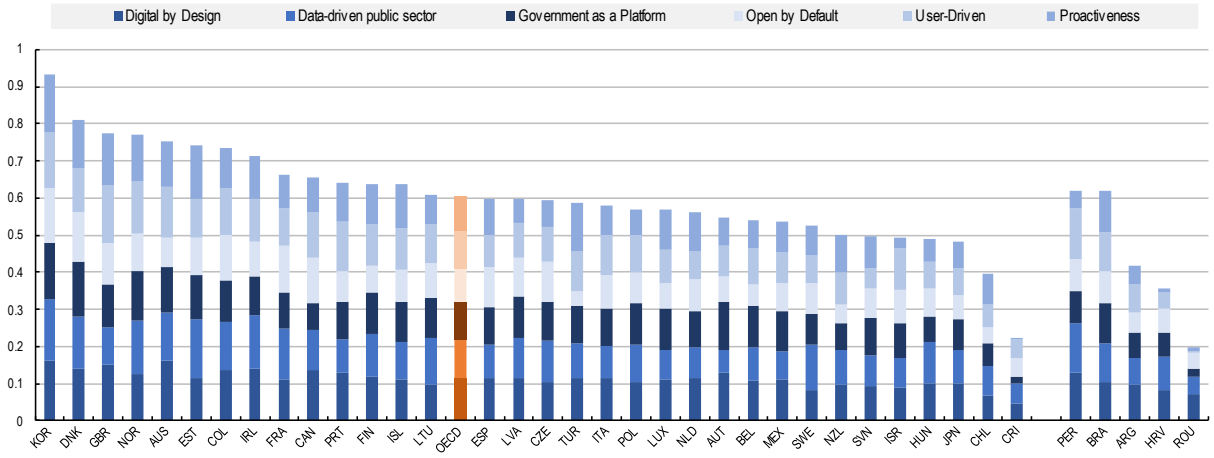
Within the OECD, Korea has been a leading contributor the development and dissemination of digital government principles and practices. Its high performance in the OECD Digital Government Index (DGI) and the OURdata Index, has firmly established Korea as a leading example for member and partner countries to benchmark (OECD, 2024[12]) (OECD, 2023[13]). The country also plays a visible role as a bureau member of the OECD Working Party of Senior Digital Government Officials (E-Leaders). Korea hosted the 2018 Meeting of the E-Leaders and has supported peer learning on evolving digital government challenges including data-driven public sector and the use of AI in government.

Additionally, Korea has contributed to knowledge transfer with broader group of countries through the United Nations and the World Bank. Since 2016, Korea has hosted the UN Project Office on Governance (UNPOG), a regional hub for innovation in digital government through peer-to-peer learning and knowledge transfer (UNDESA, 2016[14]). In addition, in 2024, the government and the WB announced the plan for a joint Digital Knowledge Centre, a new platform designed to share Korea's digital government expertise on infrastructure, interoperability, and service design and delivery with low- and middle-income countries (World Bank, 2024[15]).

Conclusion

By 2020, the impact of Korea's half-century journey towards digital government was clear. Most government transactions could be conducted digitally and public administration had become significantly more data-driven, transparent, and responsive. The 2020 e-Government Service Usage Survey showed that 98.1% of respondents were satisfied with the quality of government services (Ministry of the Interior and Safety, 2020[16]). Korea's efforts were also recognised at the international level. In the United Nations (UN) e-Government Survey, Korea ranked in the top three countries from 2010 to 2020 (United Nations, 2025[17]). The OECD Digital Government Index (DGI): Pilot and 2023 editions ranked Korea first among OECD countries (Figure 2.1.) The digital government infrastructure of Korea also demonstrated its efficacy during the onset of the COVID-19 pandemic in early 2020. The government expeditiously employed digital systems for pandemic response, including emergency alerts, online mask distribution maps, and rapid dissemination of crucial information.

Figure 2.1. OECD 2023 Digital Government Index



Source: (OECD, 2024[12])

By solidifying achievements made since 1967 and laying the groundwork for the future, Korea strategically positioned itself to navigate the ever-changing landscape of digital transformation. Given rapid technological advancements and emerging global challenges, it is imperative that Korea maintain its commitment to innovation in public governance and its capacity for transformative change. Progress now needs to aim at strengthening sustainable and inclusive digital government that equitably distributes the benefits of technology across all geographic regions and demographic groups, safeguards privacy and security, and is resilient to novel, digital-era risks.

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3 Strengthening governance, investment, and skills for digital government

This chapter uses OECD standards and international best practices as benchmarks to examine Korea's approach to the governance of digital government, the management of digital government investments, and the development of digital talent and skills in the public sector. It explores how Korea has established robust institutional arrangements, strategic planning processes, and capacity-building initiatives to drive digital transformation across government. The chapter also highlights Korea's efforts to ensure policy coherence, promote innovation, and build a digitally skilled public workforce.

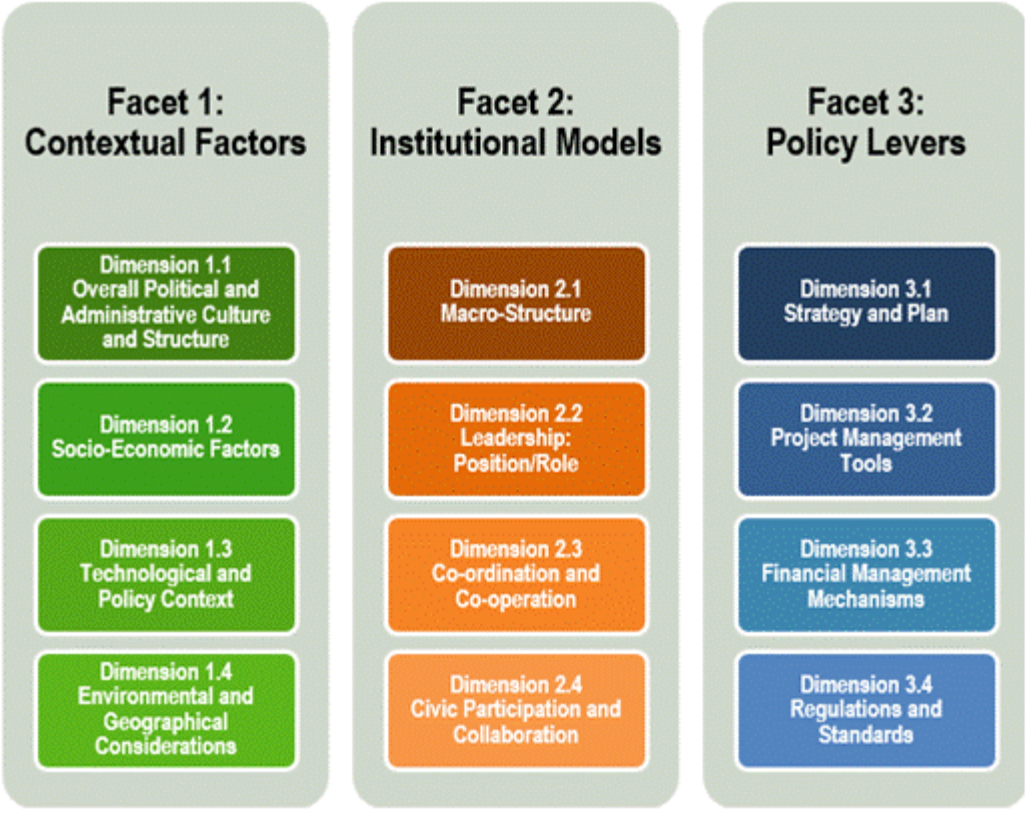
Introduction

Today's rapidly changing world confronts governments with increasingly intricate challenges, from global health crises to manmade disasters, climate change, technological shifts, and geopolitical uncertainty. Digital technology can help governments respond to these pressures. However, it requires more than mere adoption for governments to leverage its full potential. Instead, a robust and coherent governance framework can facilitate strategic and human-centred transformation of the public sector.

The 2023 OECD Digital Government Index (DGI) indicated that governments which achieve a high level of digital maturity are characterised by the presence of robust digital governance mechanisms (OECD, 2024[1]). These enable governments to break down silos, build institutional capacity, and lead systemic change across the public sector. Such an approach fosters conditions for human-centred service design and delivery, agile policymaking, and greater accountability and trust.

The *OECD E-Leaders Handbook on the Governance of Digital Government* presents a framework on the Government of Digital Government (Figure 3.1) that provides practical guidance to help governments design and implement effective governance arrangements for digital transformation (OECD, 2021[2]).

Figure 3.1. OECD Framework on the Governance of Digital Government



Source: (OECD, 2021[2])

Rooted in the OECD Recommendation of the Council on Digital Government Strategies (OECD, 2014[3]) , the framework is structured around three interrelated facets:

- **Contextual factors** imperative to ensure that digital transformation remains relevant, inclusive, and sustainable.

- **Institutional models** that determine how digital transformation is steered and implemented across government.
- **Policy levers** employed by governments to drive and sustain digital transformation.

Developing capacities to integrate digital transformation into the operational infrastructure of public-sector institutions is a requirement for robust governance of digital government. Ensuring that digital government delivers the expected benefits; promotes a coherent, integrated, and co-ordinated transformation; and secures value for money requires mechanisms and procedures to enable strategic investment in digital transformation efforts. Furthermore, the right conditions must be established to attract, develop, and retain digital talent and skills within the public sector.

This chapter analyses Korea's governance of digital government according to the OECD Framework on the Governance of Digital Government. It also looks at Korea's approaches to digital government investments and digital talent and skills, based on the OECD Digital Government Investments Framework and the OECD Framework for Digital Talent and Skills in the Public Sector.

Contextual factors

Governments' approach to digital government is shaped by their political and administrative culture, socio-economic conditions, technological landscapes, and geographical characteristics. These contextual factors influence how governance mechanisms are devised and implemented. Therefore, it is critical to understand country-specific characteristics to tailor governance arrangements.

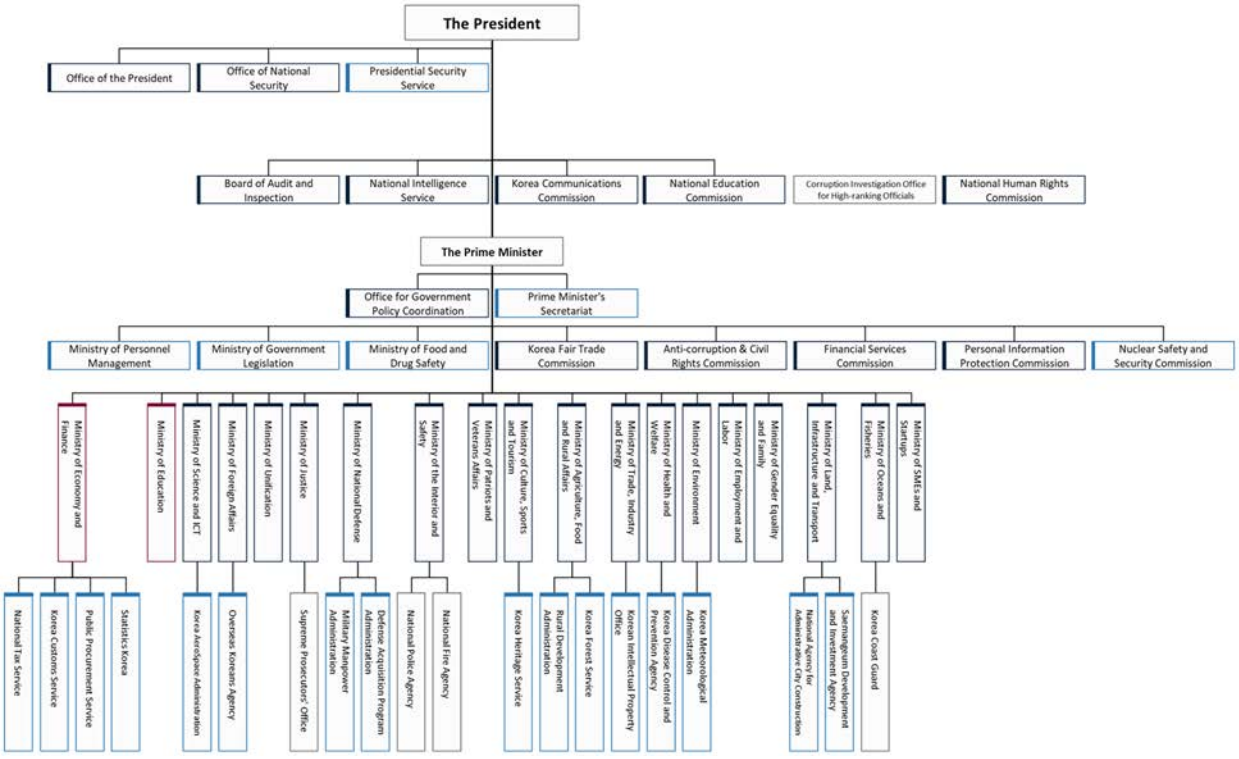
Overall administrative culture

Korea's governance of digital government is shaped by the influence of executive leadership. Korea is a unitary country with a strong central government, enabling coherent, nationwide, digital transformation. There has been consistent, top-level commitment to digitisation, e-Government and digital transformation across administrations. The Korean government started reforming the public administration system with the development of the 1st and 2nd Master Plans for Computerised Administration (1978-1982 and 1983-1987). These created a national administrative computer network that connects 33 cities, prioritising tasks in economic development, public service delivery, public safety, and administrative efficiency. Despite limited resources and technological constraints, Korea's early and strategic investments, backed by legal and institutional frameworks, catalysed development in Korea's tech industry, marking a significant milestone in its digital transformation (Ministry of the Interior and Safety, 2017[4]).

That commitment intensified over the years with continuous political support. In the early 2000s, the government made e-Government a national priority, driving Korea's digital transformation with technological advancements and a commitment to transparency. This effort positioned digital transformation at the core of administrative reform for greater accountability and integrity in the public administration, thus supporting anti-corruption measures. In 2017, Korea invested in building robust data-driven administration, and most recently, the country moved towards digital platform government, with a presidential committee driving whole-of-government digital innovation (Government of Korea, 2024[5]).

Administratively, Korea's public sector culture emphasises performance and technological proficiency. This can be attributed to a merit-based public service and investment in digital skills training (OECD, 2021[6]). The government has a hierarchical structure with 22 ministries, 20 administrative authorities, and eight commissions (Figure 3.2), with their mandates and responsibilities stated in national legislation (Ministry of the Interior and Safety, 2024[7]).

Figure 3.2. Organisation chart of Korea's central government



Source: (Ministry of the Interior and Safety, 2024[7]), https://www.org.go.kr/orgnzt/chart/viewEng.do

Historically, each ministry developed its information technology (IT) systems with support from affiliated agencies or in-house teams. This resulted in fragmentation and interoperability issues, while demonstrating individual excellence, such as in the budget-accounting and tax systems. Stove-piped legacy systems were identified as a significant impediment to integration of seamless, end-to-end services. This acknowledgement prompted a cultural shift towards interministerial collaboration and breaking down silos in the public sector (World Economic Forum, 2023[8]).

Thus, despite Korea's political and administrative context supporting the digital transformation of the public sector with strong leadership, competent bureaucracy, and clear national strategies, the challenge is to cultivate a more horizontal and collaborative administrative culture to realise fully integrated governance across levels of digital government. Furthermore, while the stability of governance ensures the continuity of digital government policies even with changing governments, each administration's new priorities (e.g., Government 3.0, the Digital New Deal, Digital Platform Government) require balancing novelty and long-term strategy.

Socio-economic environment

Korea's socio-economic environment provides a robust foundation for digital transformation, with a highly connected and educated population. Digital access and literacy in Korea are among the highest worldwide. As of 2023, internet penetration in Korea reached 97% of the population (World Bank, 2025[9]), with 97.3% using smartphones in 2024 (Ministry of Science and ICT, 2025[10]). Such connectivity enables most people to access digital public services, allowing the government to deploy digital solutions, such as a nationwide alert service, without excluding significant demographic groups (Box 3.1). Furthermore, Korea's tech-savvy population is receptive to new digital services. As of 2023, nearly 16.3 million people, around one-third of

the Korean population, used the government's AI chatbot assistant, *Guppy*, to access information and government services. This indicates a high level of user uptake of digital services (Government of Korea, 2024[5]).

Box 3.1. Korean Public Alert Service

Korea's nationwide, text-message alert system, known as KPAS, is a communication network to inform the public about emergencies, including natural disasters, public health crises, and security threats.

Overview

KPAS was introduced in 2005 with the implementation of a nationwide Wireless Emergency Alert (WEA) infrastructure. The system uses Cell Broadcast Service (CBS) technology, which facilitates the simultaneous transmission of messages to all mobile devices in a designated geographic area, ensuring the fast dissemination of information without inducing network congestion. Since 2013, all mobile phones sold in Korea must support WEA reception, ensuring that most of the population can receive emergency alerts.

KPAS was instrumental in several scenarios:

- During natural disasters, the system issues alerts for typhoons, earthquakes, and floods. These provide affected populations with real-time information and safety instructions.
- During the initial phases of the COVID-19 pandemic, the system was used to disseminate of information about confirmed cases, quarantine guidelines, and social distancing measures. These alerts substantially impacted public behaviour, helping management the virus' spread.

Initially, responsibility for issuing alerts fell on the central government, but was delegated to local governments in 2019. This decentralisation enables more localised and timely alerts.

Recent developments

In May 2023, an erroneous alert, advising Seoul residents to prepare for evacuation due to a North Korean satellite launch, resulted in widespread public confusion and criticism. Subsequently, the government unveiled plans to prevent a recurrence of this incident with an overhaul of the system, including enhanced clarity of alerts and multi-lingual support to inform foreign residents and visitors.

Source: (Yoon, Lim and Park, 2024[11]), (Reuters, 2023[12]), (Ministry of Culture, Sports and Tourism, 2024[13])

Social attitudes in Korea also influence digital government. The country's emphasis on speed and efficiency – as evidenced by its "*Pali, pali*" ("Hurry, hurry") culture – underlies a paradigm shift in Koreans' attitudes toward the functionality of government services. In recent years, the private sector's platform economy increased public expectations significantly. Koreans now expect their government to demonstrate the same degree of user-friendliness as the most widely used private services, such as Kakao or NAVER. This increases pressure on public sector institutions to innovate and enhance their service design and delivery, based on human-centred design principles and methods (World Economic Forum, 2023[8]).

Additionally, Korea's economic profile as a leading ICT and innovation-driven economy, is well-suited to its digital transformation efforts. A robust domestic tech industry provides the government with advanced solutions and public-private partnership opportunities. For example, the government uses private-sector platforms for digital identities and payments. After legislative reforms, Koreans can use private authentication services to access public services, replacing the previous, cumbersome, public certificate system (Ministry of the Interior and Safety, 2025[14]). In addition, the government's adoption of cloud computing employs certified domestic cloud vendors under the Cloud-First Policy, stimulating the local cloud industry while modernising the government's digital infrastructure (Samsung SDS, 2024[15]).

Socio-economic challenges persist despite these strengths. The rapid aging of the Korean population, coupled with significant socio-economic disparities, creates the risk of a digital divide. Many senior citizens and a segment of rural residents encounter challenges using advanced digital services. The government acknowledged this issue and acted on it (Box 3.2) with the development of the Digital Inclusion Action Plan (Government of Korea, 2020[16]).

Box 3.2. Digital Inclusion Action Plan

The Korean government announced the Digital Inclusion Action Plan in June 2020 to bridge the digital divide and ensure that all citizens, including those considered vulnerable, can use digital technologies for economic activities and improvements in their quality of life. The Plan addressed discrepancies in digital technology access and capabilities that could exacerbate economic and social inequality, and discrimination.

The plan laid out four objectives with the vision of "realising a digital world enjoyed together":

- Strengthen digital capabilities on a national scale
- Create an inclusive environment for the use of digital technologies
- Promote use of digital technology to foster inclusiveness
- Foster a digital-inclusion ecosystem

Various initiatives were implemented under these objectives, including:

- One-thousand Digital Competency Centers across the nation provide training in digital skills, such as the use of smartphones for banking or booking tickets, to elderly individuals, people with disabilities, multi-cultural families, and other groups with limited digital proficiency. The Centers also deploy Digital Assistants that provide 1-to-1 assistance and use digital skill-level assessments to customise the educational experience.
- Expansion of affordable connectivity included the installation of high-speed internet in 1,300 rural villages and increased free public Wi-Fi. In addition, the government provides subsidies for devices and data plans for low-income groups.

Source: (Government of Korea, 2020[16])

In summary, Korea's socio-economic favours the development and implementation of digital government initiatives. The high level of connectivity, digital literacy, and an innovation-oriented economy have been key to the rapid adoption of transforming services. The main challenge is to continue investing in ensuring digital inclusiveness across the full range of age, regional, and income demographics.

Technological context

Korea is recognised for its advanced ICT infrastructure and services; a technological landscape pivotal to facilitating digital transformation in the public sector. For many years, Korea has been at the forefront of advancements in broadband speed and mobile network technology. It was among the first countries to implement 5G on a nationwide scale in 2019, and is allocating resources to 6G research initiatives for implementation in the latter part of this decade (Ministry of Science and ICT, 2022[17]). All government agencies are connected via high-speed networks, and citizens can access services through multiple channels, including web, mobile apps, and public kiosks. The government also built shared digital and data infrastructures. Chapter 6 details Korea's digital public infrastructure, including its digital identity, data centres and cloud service.

Environmental and geographic considerations

Environmental and geographical factors have influenced the resilience and inclusivity of Korea's digital government. The high number of urban populations enables Korea to rollout and test digital government initiatives to enhance quality of life and safety quickly and easily. The country has demonstrated the effectiveness of its digital infrastructure and services in times of crisis.

The Korean population is predominantly urbanised, with the Seoul Metropolitan Area accounting for approximately half of the country's total population. This concentration makes it cost-effective to deploy digital infrastructure (e.g., fibre, 5G, public Wi-Fi) in cities, which enables sophisticated urban digital services faster than in rural areas. Seoul is particularly successful in this regard, emerging as a leading example of a smart city (Seoul Metropolitan Goverment, 2023[18]). However, past focus on urban centres risked neglecting rural communities, and called for government efforts to address Korea's geographic digital divide (Open Government Partnership, 2021[19]). These measures have influenced the government's investment in infrastructure and the design of public services. For example, topography and islands that increase travel times for citizens to government offices underscore the benefits of seamless service provision through online or mobile channels.

Natural disasters, including typhoons, floods, forest fires, and global pandemics, put considerable pressure on governments' resilience and responsiveness. Korea's responsiveness to the COVID-19 pandemic demonstrated agile digital governance and strong co-ordination, leveraging its robust digital and data systems to enable quick action and rapidly deploy services. Distribution of personal protective equipment (PPE) was orchestrated through already-available digital systems (Box 3.3), a vaccine booking system was launched, and educational institutions transitioned to digital channels. Nevertheless, the pandemic unearthed areas for improvement. For example, while Korea employed data-driven contact tracing and quarantine monitoring in accordance with its legal provisions, this gave rise to concerns regarding data-privacy protection during national emergencies. The government has thus undertaken efforts to institutionalise lessons from the pandemic. These include enhancing the scalability of digital services in periods of high demand, and refining data-privacy provisions for emergency situations.

Box 3.3. Face-mask distribution during COVID-19

Early in the COVID-19 pandemic, Korea faced challenges in guaranteeing access to face-masks. In response, the government leveraged existing systems to stabilise distribution in a transparent manner.

Real-time stock transparency via open application programming interfaces

The Health Insurance Review and Assessment Service (HIRA) provided real-time data on mask inventories and pharmacy locations. This information was transmitted by the National Information Society Agency through NAVER Cloud via open APIs. Next, developers and startups created user-friendly applications to help citizens locate available masks efficiently and with reduced wait time.

Digital purchase tracking and enforcement

To ensure fair distribution across the population and prevent hoarding, HIRA implemented a centralised sales server, which required vendors to log each mask transaction. This mechanism ensured adherence to purchase limits and prevented individuals from exceeding their allocations. Despite technical issues during the initial implementation, the system ultimately reduced wait times and enhanced distribution.

Source: (UNDP, 2020[20])

Environmental priorities such as climate change also have a profound effect on the development of digital government. Korea's commitment to achieving carbon neutrality by 2025 drives more environmentally sustainable information-technology practices in the public sector. One example is the consolidation of public data centres, with redundant servers retired as part of the cloud migration process, resulting in energy savings (World Economic Forum, 2023[8]). Furthermore, smart-city projects in Incheon, Busan, and other major urban centres incorporate environmental management systems that rely on government data platforms. The Incheon Metropolitan Government is developing a Digital Twin City model to optimise decision-making with urban-planning and environmental-change simulations, which optimising allow cities to predict and test disaster-response scenarios (Ministry of Land, Infrastructure and Transport, 2021[21]).

The national security situation regarding North Korea is a distinctive feature of the Korean context. This external threat environment prompts the government to prioritise security and resilience in its digital infrastructure and systems. The government maintains a constant state of alert against cyber activities of North Korea. This is reflected in the isolation or strict compartmentalisation of critical systems through the use of firewalls in Korea's shared digital government architecture. The National Cyber Security Centre under the National Intelligence Service co-ordinates with affiliate agencies to safeguard the digital infrastructure (National Cyber Security Center, 2025[22]). This security-conscious approach has slowed the adoption of certain cloud services or data sharing. However, it also enables Korea to invest in digital security, such as exploring the adoption of technologies like quantum encryption in government communications to future-proof against external threats (World Economic Forum, 2023[8]).

Korea still faces the challenge of ensuring that residents in all regions benefit from advanced digital services. Furthermore, increased reliance on digital systems requires robust disaster-recovery strategies such as the implementation of backup systems in the event of failure during a natural disaster or external shocks. Lastly, to maintain public trust, Korea should continue to balance the use of data with individuals' rights, as made apparent in the aftermath of the COVID-19 pandemic.

Institutional model

Clear and effective institutional models are paramount in ensuring sustainable digital transformation of the public sector. Institutional models refer to the governance arrangements –organisational structures, leadership roles, co-ordination mechanisms, and stakeholder engagement – that a government puts in place to drive digital transformation. These provide the foundation for governments to adopt a holistic, coherent, and co-ordinated approach to digital transformation. The following section examines Korea's macro-structure, a leading institution, digital leadership, and co-ordination and co-operation mechanisms.

Macro-structure

Korea's macro-level institutional structure embeds digital transformation at the centre of government operations. The structure is characterised by central co-ordination, accompanied by the articulation of specific roles for ministries, and complemented by cross-government committees and supporting agencies. Primary responsibility for digital government policy lies with the Ministry of the Interior and Safety (MOIS), which is entrusted to oversee digital government and the advancement of digital innovation in the public sector in accordance with the Electronic Government Act (Government of Korea, 2022[23]). In addition, the Ministry of Science and ICT (MSIT) contributes to digital transformation as the ministry responsible for overseeing the broader digital economy and infrastructure (e.g., 5G networks, the promotion of the ICT industry, and research and development of emerging technologies). Other ministries assume sector-specific functions, contributing to the digital transformation agenda through their respective initiatives.

Korea also has specialised agencies that serve as a technical arm to the government without adding layers of bureaucracy. These include the National Information Society Agency (NIA), the Korea Internet &

Security Agency (KISA), and the Korea Local Information Research & Development Institute (KLID). These institutions provide technical expertise, research and implementation support for other public sector organisations. (Box 3.4).

Box 3.4. Institutions supporting digital transformation in Korea's public sector

National Information Society Agency (NIA)

NIA serves as Korea's principal research and implementation body, supporting national digital transformation efforts. NIA was established in 1984 as the Information Technology Training Center (ITTC). It helps formulate and execute strategies that led to significant advancements in the country's digital infrastructure and services, supporting MOIS and the Ministry of Science and ICT. Since April 2025, NIA has four objectives with the mission of "tackling social challenges and paving the way for the future of the nation through digital means": (1) Strengthening National Resilience through AI; (2) Implementing the Digital Platform Government; (3) Leading a digitally inclusive, universal society; and (4) Establishing an Environment, Society, and Government (ESG) management system.

Korea Internet & Security Agency (KISA)

KISA is crucial to advancing and safeguarding Korea's digital landscape. KISA was established in 2009 to enhance the country's digital infrastructure, ensure cybersecurity, and support the public in navigating the digital landscape safely and effectively. KISA operates based on the following objectives:

- Creating a digital safety-net to provide citizens and businesses with a sense of security
  - Strengthening proactive response to digital threats
  - Minimising damage caused to people's lives by digital crime
  - Enhancing digital infrastructure safety
- Establishing a safe society through the protection and secure use of personal information
  - Raising the level of privacy across the country
  - Developing infrastructure and solutions to strengthen personal information protection
- Fostering growth engines via increased competitiveness in the information-projection industry
  - Embedding security protocols in the foundations of digital transformation
  - Securing growth opportunities within the information-protection industry
  - Training cyber-security professionals and mitigating skills gaps in information-protection.

In addition, KISA operates the national security vulnerability-management system, the Korea Computer Emergency Response Team and Coordination Center (KrCERT/CC), and the Cyber Security Big Data Center.

Korea Local Information Research & Development Institute (KLID)

KLID supports advancing the digital transformation of local governments. It provides technical expertise, research, and implementation support to local authorities, facilitating the development of digital services tailored to regional needs. KLID's initiatives include facilitating digital-technology adoption by local governments, enhancing administrative efficiency, and improving public service delivery. KLID serves as a conduit between national digital policies and their adoption at the local-government level. This ensures a certain extent of coherent and equitable digital transformation across the country.

Source: (National Information Society Agency, 2025[24]) (Korea Internet & Security Agency, 2025[25]) (Korea Local Information Research & Development Institute, 2025[26])

Local governments have their own digital strategies at the sub-national level, which generally align with national objectives and standards. These co-ordinate closely with MOIS and MSIT through formal and informal mechanisms. Examples include the sharing of data through the national open-data portal and the adoption of the national digital identity for region-specific services.

Leading organisation: MOIS

Korea's Ministry of the Interior and Safety demonstrates how an adequately empowered organisation can lead digital transformation of the public sector at the whole-of-government level. For over three decades, MOIS consolidated its position as the driving force of Korea's digital transformation, backed by political support and a concrete legal basis. This has been key to steering the digital transformation agenda across government, formulating a shared vision, enacting and amending regulations to adapt to a fast-changing environment, delivering innovative public services, and co-ordinating the efforts of all public sector institutions.

The Government Organisation Act designates MOIS as the leading public sector organisation for digital government in Korea. This mandate is reinforced by the Electronic Government Act enacted in 2001 with a clear role for MOIS. Over the years, MOIS's authority and responsibilities were reinforced with amendments to the Electronic Government Act. An amendment in 2007 established a council of ministry Chief Information Officers (CIOs) and mandated prior consultations with MOIS for all digital projects, to ensure co-ordination. In 2021, the Act was amended to mandate MOIS to oversee and support public sector institutions' initiatives to use AI and big data for "intelligent digital government services".

As the leading public sector organisation, MOIS has mandates to strategically plan, implement, and oversee public sector digital transformation. The Ministry's responsibility for national administration and government organisation management makes this possible. Within MOIS, the Digital Government and Innovation Office is responsible for co-ordination of policies that promote digital government across the public sector.

Box 3.5. Roles and responsibilities of MOIS

The Ministry of the Interior and Safety has decision-making and supporting roles and responsibilities specified in legislation and policies.

Decision-making responsibilities across the central government

- Prioritising digital investment projects
- Managing the value-proposition process (i.e., developing business cases) for digital projects
- Approving digital projects
- Mandating external reviews (e.g., performance assessments) of digital projects
- Providing financial support for the development and implementation of digital/ICT projects

Support functions

- Developing the National Digital Government Strategy
- Ensuring horizontal co-ordination among central-level public sector institutions involved in implementing the National Digital Government Strategy
- Supporting the development and implementation of institutional-level digital government strategies (e.g., in ministries and agencies)

- Developing and overseeing the adoption of common technical (e.g., interoperability) standards for the development of digital infrastructure and enablers across central government
- Advising public sector institutions at central/federal level about the implementation of digital projects (including public procurement)
- Monitoring the development of digital projects across national and subnational levels of government
- Co-ordinating the development of digital projects with subnational governments

In addition, MOIS oversees the management of information resources, public data, and digital services:

- **Information resource management –** MOIS manages centralised infrastructure, including the National Information Resources Service (NIRS) and government data centres that host systems for many public sector institutions. It is also tasked with migrating government systems to a secure cloud, and setting security requirements and providing support for cloud migration.
- **Data governance and open data –** MOIS is responsible for implementation of the Act on the Promotion of Data-Based Administration and the Act on Promotion of the Provision and Use of Public Data. These Acts (described in Chapter 4) aim to promote trusted, internal sharing of government data, and sharing of government data with the public as open data.
- **Digital services –** MOIS promotes digital-by-design principle across all levels of government to ensure that services are delivered through different channels in an integrated and proactive manner. The ministry also oversees and co-ordinates the national service portal GOV.KR.

Source: (OECD, 2025[27]), (Ministry of the Interior and Safety, 2025[28]), (Government of Korea, 2001[29]), (Government of Korea, 2013[30])

Placing the digital government agenda under MOIS was a strategic decision to achieve greater integration with fundamental government functions, and avoid fragmentation and silos. MOIS manages the resident register, government innovation and efficiency, local government administration, and government organisation management, including prescribed numbers of public officials (Government of Korea, 1948[31]) – all of which are crucial to the design and delivery of public services. MOIS has the capacity to embed a digital-by-design approach directly into administrative processes and public services. For example, MOIS was able to facilitate seamless information sharing system and digital identity as part of the ministry's mandate. Furthermore, as the interior ministry, MOIS has the leverage and authority to promote standardisation and interoperability across ministries and local governments.

In addition, Korea uses MOIS's accumulated knowledge of public governance, administrative reforms, and technology to drive the digital government agenda. Dating back to 1948, MOIS and its predecessors oversaw the early computerisation of government processes and later e-Government programmes, which built deep institutional knowledge and continuity.

Digital leadership

Korea's digital leadership model is multi-layered: top political leaders set a shared national vision and objectives; MOIS leads implementation and co-ordination; and institutional CIOs and Chief Data Officers (CDOs) ensure execution of the objectives within their domains.

The Korean government benefits from strong leadership and commitment at the top levels. The digital transformation of the public sector has been a priority for every administration from early on. For example, the 18th President (2013-2017) championed "Government 3.0", focusing on enhanced openness, data, and citizen-centricity. The 19th President (2017-2022) advocated for a "Data Republic", including the introduction of the Data-Based Administration Act. Most recently, the 20th President (2022-2025) emphasised Digital Platform Government, elevating the digital transformation to a top national priority.

Such political leadership has resulted in tangible support, with high-profile programmes receiving funding and inter-ministerial co-operation thanks to presidential endorsement.

The government designated CIOs in the late 1990s. Legislation stipulated that each government institutions and local governments should appoint a CIO – typically a senior official or a Director-General – to oversee the planning and management of ICT projects within their organisation (Government of Korea, 1995[32]).

As society evolves and digital transformation accelerates, the leadership required to steer digital transformation of the public sector has also changed. During the 2020 revision of the Framework Act on Intelligent Informatization (formerly the Framework Act on National Informatization), the former CIO roles were transformed into the Chief Intelligent Information Officers, recognising the importance of AI and data for digital transformation. These roles establish and promote policies related to intelligent informatisation to secure national competitiveness and improve quality of life for citizens.

Co-ordination and co-operation

Co-ordination and co-operation among all stakeholders are pivotal to ensure the coherence, consistency, and efficacy of digital transformation. They enable a holistic approach to digital transformation with sustainable impact on society, as opposed to a siloed, institution-based approach.

Korea emphasises co-ordination and co-operation to ensure coherence, integration and strategic alignment across the public sector. This is done through legal mandates, formal and informal committees, and shared platforms and services. The country's strong performance in the OECD Digital DGI, particularly the "Digital by Design" and "Government as a Platform" dimensions, reflects its efforts in inter-ministerial co-ordination and co-operation (Figure 3.3).

Figure 3.3. Korea 2023 OECD DGI Index results relative to the OECD average

Republic of Korea

Dimension	Strategic Approach	Policy levers	Implementation	Monitoring	Dim Average
Digital by Design	94%	99%	100%	93%	97%
Government as a Platform	100%	90%	87%	100%	91%
Data-driven public sector	100%	100%	100%	100%	100%
Open by Default	100%	100%	80%	100%	88%
User-Driven	100%	100%	80%	86%	91%
Proactiveness	94%	100%	98%	78%	93%
Grand Total	**98%**	**97%**	**90%**	**90%**	

OECD average

Dimension	Strategic Approach	Policy levers	Implementation	Monitoring	Dim Average
Digital by Design	74%	71%	70%	51%	68%
Government as a Platform	71%	58%	60%	56%	61%
Data-driven public sector	71%	62%	65%	44%	63%
Open by Default	71%	53%	53%	39%	53%
User-Driven	78%	53%	60%	55%	61%
Proactiveness	70%	63%	52%	45%	57%
Grand Total	**73%**	**62%**	**60%**	**50%**	

Source: (OECD, 2022[33])

At the highest level, the Korean government has the Presidential Committee on the Digital Platform Government (DPG Committee) established in 2023 as a co-ordination body to drive digital transformation of the public sector. Chaired by a presidential appointee, the Committee's 23 members include 19 private-sector experts and four ministers from the Ministry of the Interior and Safety, the Ministry of Science and ICT, the Ministry of Economy and Finance and the Personal Information Protection and Commission to ensure co-ordination with stakeholders in the public and private sectors and academia. Its aims to dismantle barriers between government institutions, facilitating a unified approach as "One Team"

government with private-sector partners to integrate government systems and data for more citizen-centred services. This paradigm of the Digital Platform Government prompted a transformation of digital governance in which public sector institutions and private technology enterprises work in unison to deliver integrated and proactive services.

In addition, the CIOs Council is pivotal to co-ordinating Korea's strategic digital agenda across central ministries and local governments. Established under Article 9 of the Framework Act on Intelligent Informatization, the Council implements policies for an intelligent information society, co-ordinates digital transformation projects, and fosters information exchanges and knowledge-sharing among central and local governments. The Council is co-chaired by the Minister of the Interior and Safety and the Minister of Science and ICT with representation from central and local government institutions to ensure inter-agency collaboration.

Korea also leverages legal frameworks to ensure co-ordination and co-operation. The Electronic Government Act stipulates the avoidance of duplicate investments, compelling public sector institutions to consult with each other and MOIS in planning digital projects (Government of Korea, 2001[29]). Furthermore, The Act on the Promotion of Data-based Administration encourages public sector institutions to share data and co-operate towards realising a data-driven public sector.

Beyond formal co-ordination mechanisms, the Korean government uses technical integration, providing shared platforms and services to facilitate co-ordination across public sector institutions. The Public Information Sharing System allows public sector institutions, including local governments, to instantly verify citizens' information through other institutions' databases. Another example is Government 24, a unified portal that provides citizens with access to services from multiple government departments. MOIS continuously expands the use of shared platforms, ensuring interconnectedness across all levels of government. This technical integration is a form of co-ordination because it imposes standard protocols and encourages institutions to work with national systems rather than develop their own.

The Korean government has legal and policy frameworks for co-ordinating digital transformation with local governments. The Electronic Government Act obligates each local government to develop its own plan – ensuring alignment with the national strategy – and submit it to MOIS for review (Government of Korea, 2010[34]). MOIS's dedicated Local Digital Government Coordination Division promotes central-local co-ordination. Its objective is to prevent redundant projects, bridge digital divides, and promote interoperability between central and local government systems. For example, *Saeol* is a standard administrative system for local governments deployed across all 228 municipalities, supporting 22 common administrative functions. It ensures coherence across local governments and allows them to access central government databases, and services like the GOV24 national service portal (Ministry of the Interior and Safety, 2025[35]).

Korea's institutional setup demonstrates how Korea integrates digital government as an inherent part of governance, leveraging long-term institutional capacity, leadership, and co-ordination with robust support from specialised agencies. Public-sector institutions clearly acknowledge MOIS as the leading institution in the digital transformation of the public sector. Co-ordination bodies, including the Digital Platform Government Committee and the CIO Council, facilitate co-ordination across the government, private sector, and academia. Furthermore, specialised agencies like NIA, KLID and KISA provide the necessary technical expertise and support.

However, it is important that Korea maintain agility and inclusivity in its institutional mechanisms. There is scope for further streamlining co-ordination among bodies with overlapping mandates and responsibilities, ensuring continuity of ongoing initiatives, and avoiding bureaucratic complexity. It will be vital to promote inter-ministerial co-operation and prevent the emergence of silos as the government changes and committees form to implement new national objectives. Furthermore, efforts need to be increased to ensure that all stakeholders – central ministries and agencies, local governments, citizens, and businesses – can voice their needs and contribute to and direct the development of digital government.

Policy levers to lead digital transformation

The E-Leaders Handbook on the Governance of Digital Government, drawing on Pillar 3 of the OECD Recommendation of the Council on Digital Government Strategies, identifies policy levers (hard and soft instruments) essential to advancing digital transformation (Figure 3.1). These support governments in operationalising their strategic ambitions, driving systemic change across government to respond to the needs of citizens and businesses.

This section examines two dimensions of policy levers: (1) strategy and planning, and (2) legislative and regulatory frameworks. Financial management mechanisms are discussed in depth under “Digital government investments”, below.

Strategy and plan

Korea has a clear vision, well-translated into actionable strategies. The planning process includes relevant ministries and agencies, and sets measurable targets, with a list of institutions responsible for implementation. Such discipline is instrumental in ensuring advancements in transforming its public sector.

As digital transformation remained a priority throughout changes in government, broader national plans have provided a high-level vision and shaped Korea’s digital government agenda. In July 2020, the Digital New Deal was launched as a national innovation project to accelerate digital transformation and boost national and industrial competitiveness. It included public service enhancements, digital infrastructure, and the development of talent for the digital future. Following the 2022 change in government, the administration announced a new national strategy in 2023: the Digital Platform Government Roadmap. It sets out a detailed, multi-phased plan to integrate government systems, reconstruct infrastructure, and deliver key projects in the areas of data and AI.

Alongside politically influenced national plans, Korea’s digital government benefits from consistent strategic planning set out in the Electronic Government Act. It requires MOIS to develop a master plan every five years, and obligates public institutions and local governments to develop institutional plans in line with the master plan (Government of Korea, 2001[29]). Detailed action plans accompany medium-term national strategies.

The current, 2021-2025 master plan outlines Korea’s vision, strategic pillars and initiatives, implementation timeline, and specific activities with the institutions responsible. Building on past achievements, the government set the vision and objectives for “A Better World Opened by Digital”. To achieve these, four strategic pillars were developed with corresponding initiatives and activities (Box 3.6 on the following page).

However, frequent changes in broader national agendas could create risks for the sustainability of initiatives, causing unnecessary disruptions and negative returns on government investments. As the Korean government has legal an obligation to develop five-year digital government strategies, it would be important to take stock of past achievements and build on ongoing initiatives to yield concrete results. Moreover, the context of rapidly evolving external factors, such as emerging technological advancements or crises, further compounds the challenge of maintaining flexible strategies. The Korean government showed prompt response during the COVID-19 pandemic, but challenges posed by technological disruptions – including those stemming from AI – will test the country’s strategic agility for years to come.

Box 3.6. Korea's Digital Government Strategy: 2nd e-Government Master Plan (2021-25)

Vision and objectives

By 2025, under the vision of "A Better World Opened by Digital", the government aims to:

- Digitally transform 80% of major public services
- Migrate 100% of public-sector systems to the cloud
- Design public services digitally from the planning stage (digital-by-design)
- Deliver services through citizen's preferred channels (omni-channel approach)
- Ask citizens to submit information only once ('once-only' principle)
- Open public data and services to the private sector for reuse

Strategic pillars and initiatives

Pillar 1. Intelligent Service Innovation (4 initiatives, 45 activities)

- **Personal digital assistant –** offering proactive service-notifications and support
- **MyData and digital certificates –** citizens can manage and share their personal data and receive digital certificates across sectors (e.g., health, education, patents)
- **Mobile ID and authentication –** blockchain-based mobile IDs and expanded use of private-sector authentication services
- **Proactive and integrated services –** proactive notification of service entitlement through GOV24 or at a community centre; integrated welfare and employment services; a next-generation administrative system for local governments, for greater interoperability and location-independent services

Pillar 2. Data-Driven Administration (4 initiatives, 58 activities)

- **Big-data platforms –** development of sector-specific platforms (e.g., health, real estate, maritime safety) linked to the central government's data-analytics centre
- **Real-time, data-based crisis response –** using field data from sensors, drones, and extended reality (XR) to monitor disasters, disease outbreaks, and infrastructure safety
- **Open Data 2.0 –** shift from supply-driven to demand-driven public data release, including unstructured data and application programming interfaces (APIs) for private sector use
- **Cloud-based work environment –** full migration of government systems to a government cloud; 5G network for the public sector, and AI in cybersecurity for secure, efficient operations

Pillar 3. Digital Infrastructure Expansion (4 initiatives, 21 activities)

- **Inclusive access –** support for vulnerable groups (e.g., the elderly, people with disabilities) via AI speakers, wearable devices, and digital-literacy programs
- **Public-private collaboration –** civic hacking, co-development of services, and certification systems for private providers of public services.
- **Global leadership –** expanded international co-operation (e.g., OECD, UN SDGs), digital government export, and capacity-building in developing countries
- **Legal and regulatory reform –** updated laws to support digital ID, MyData, AI-based administration, and privacy protection (e.g., pseudonymised data governance)

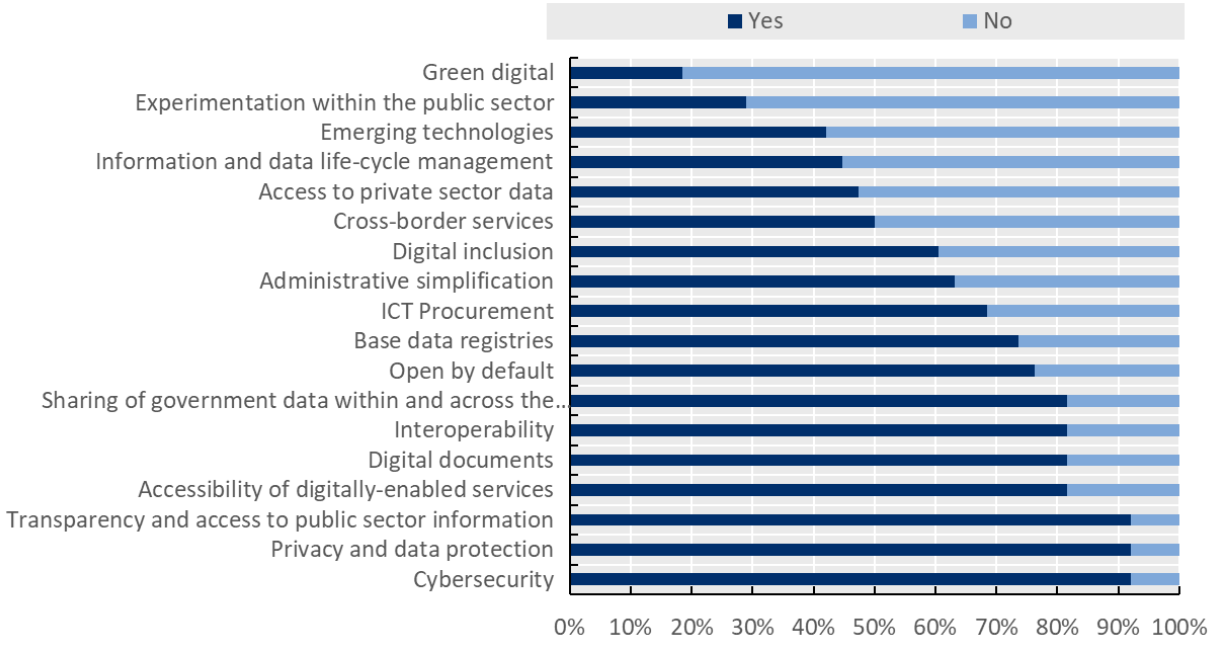
Note: The strategy was unofficially translated.
Source: (Ministry of the Interior and Safety, 2021[36])

Legal and regulatory framework

Principle 12 of the OECD Recommendation of the Council on Digital Government Strategies encourages governments to ensure that general and sector-specific legal and regulatory frameworks enable seizing digital opportunities (OECD, 2014[3]). A robust legal and regulatory framework constitutes the cornerstone of effective digital governance, shaping the institutions, policies, and measures that drive transformation. It is evident that binding and non-binding instruments both guide the design, implementation, and oversight of digital government strategies. With today's digital landscape evolving at a rapid pace, it is crucial for governments to establish legal and regulatory environments that facilitates the realisation of digital potential while mitigating the risks posed by emerging technologies.

The 2023 OECD DGI presents an overview of the legal and regulatory frameworks for digital government in the OECD member and partner countries. Most participating countries have legislation governing enablers such as sharing data (82%), digital documents (82%) and interoperability (82%). On the other hand, legislation in emerging areas like green digital (18%) and experimentation within the public sector (29%) remains rare (Figure 3.4).

Figure 3.4. Legal and regulatory frameworks for digital government in OECD and partner countries



Note: Data shows aggregated information from 33 OECD countries and 6 accession-candidate countries. Data is not available for Germany, Greece, Slovakia, Switzerland, and the United States.
Source: (OECD, 2022[33])

Korea has a complex regulatory framework for digital government, revised in the last five years to keep pace with technological advances and societal expectations. The Electronic Government Act is a foundational legislative instrument that established principles and guidelines for the governance of digital government. The Act underwent numerous amendments to incorporate new visions from changing governments and the emerging needs of society.

Korea's regulatory framework is complemented by a series of laws addressing specific issues (Table 3.1). Most of these include an article on the relationship to other statutes to ensure harmonisation.

Table 3.1. Legislation addressing digital transformation in Korea

Legislation	Purpose	Relevance to digital transformation
Act on the Promotion of Data-based Administration (2020)	Establishes measures to promote data-driven administration, aiming to increase the accountability, responsiveness, and reliability of public institutions, and to improve citizens' quality of life through objective, scientific decision-making.	Enabled public institutions to share and systematically analyse data, embedding evidence-based policy-making, and service design and delivery in government operations.
The Framework Act on Electronic Documents and Transactions (2002)	Provides legal recognition and security for electronic documents and transactions to ensure they are as valid as paper records; fosters e-commerce by clarifying the legal status of electronic documents, ensuring their security and reliability, and creating infrastructure for their use.	Established the basis for paperless trade and digital government by legitimising electronic documents and signatures; facilitates digital transactions and electronic record-keeping.
Regulation on the Promotion of Administrative Efficiency and Collaboration (2016)	Mandates simplification, standardisation, and digitalisation of administrative work while promoting inter-agency collaboration; improves efficiency and protect citizens' rights by streamlining administrative procedures and encouraging information-sharing among government bodies.	Standardised electronic document management and cross-agency workflow; the presidential decree was amended in 2017 to incorporate public feedback and ideas in policy-making.
Personal Information Protection Act (2011)	Protects individuals' freedom and rights by regulating the processing of personal information; requires lawful, fair collection and use of personal data, and establishing safeguards and oversight.	Imposed strict standards for the handling of personal data, enabling services to operate with robust privacy protections; a key component of MyData, giving citizens control over their data across sectors; essential for trust.
Credit Information Use and Protection Act (2009)	Regulates the use and protection of personal credit information; fosters a sound credit-information industry by promoting efficient use and systematic management of credit data while protecting individuals' privacy from misuse.	Facilitated data-driven financial services; facilitates services such as integrated personal credit management, allowing individuals to access and share their credit data digitally; supports innovation in fintech and consumer trust by safeguarding data and ensuring fair use.
Act on the Protection and Use of Location Information (2005)	Protects individuals' location privacy while encouraging the safe use of location-based data; prevents the leakage, abuse, or misuse of location information and fosters a safe environment for location-based services, improving citizens' quality of life and public welfare.	Fostered the development of innovative services in transportation, public safety, and commerce by establishing a regulatory framework for location-based services; critical for expanding mobile and IoT services under national strategies.
Framework Act on Intelligent Informatization (2020)	Guides the transition to an "intelligent information society"; sets out policies to integrate technologies such as AI, big data, and IoT across sectors to enhance national competitiveness and citizens' quality of life; provides the blueprint for applying AI and connected technologies throughout government and society.	Replaced the older national informatisation framework act to adapt to technological advancements; underpins major digital initiatives, including AI in public services, smart cities, and bridging the digital divide; emphasises human-centric and ethical use of technologies, and securing access to new services.
Official Information Disclosure Act (1996)	Ensures transparency via the right to access information held by public agencies; obligates public institutions to disclose information and process citizens' requests for information, securing their "right to know," promoting their participation, and improving government accountability.	Enabled proactive disclosure of government data and transparency in administration; paves the way for open-data initiatives by making government records accessible (with limited exceptions for privacy and security).
Act on Promotion of the Provision and Use of Public Data (2013)	Mandates public institutions to open their data for public use; guarantees citizens' right to access government-held datasets and encourages the use of such data for value-creation to improve quality of life and spur economic development through data-driven innovation.	Accelerated Korea's open-data agenda, with tens of thousands of public datasets released for public use following enactment.
Digital Signature Act (1999)	Facilitates secure electronic transactions by giving legal effect to digital signatures and establishing a public infrastructure; creates an official electronic certification system to recognise electronic signatures recognised as equivalent to handwritten signatures or seals.	Introduced government-authorised public certificates used for online banking, tax filings, and other digital transactions; crucial in the initial development of Korea's online banking and e-Government systems, was later amended to allow private-sector innovation in this domain.

Cloud Computing Development and User Protection Act (2015)	Provides a legal framework for the growth of the cloud computing industry while ensuring protection of user data; provides a balanced regulatory environment for all stakeholders rather than imposing restrictions on cloud services.	Accelerated the adoption of cloud technologies across the public and private sectors; encourages public institutions to prioritise the use of cloud services, aligning with a "cloud-first" approach.

Source: (Korea Legislation Research Institute, 2025[37]), (Library of Congress, 2020[38]), (Open Government Partnership, 2023[39]), (European Commission, 2023[40])

Korea collaborates with industry when establishing legislation and regulations, to ensure that policies are practical and forward-looking. In the development of its AI ethics guidelines and strategy, the government engaged experts from major tech companies, academia, and civil society to develop the national AI strategy and ethics standards (World Bank, 2022[41]). This multi-stakeholder approach facilitated aligning the guidelines with industry needs and expertise (Ministry of Science and ICT, 2024[42]).

Korea's Regulatory Sandboxes are another example, which shows how the government tests the efficacy and safety of novel approaches in a controlled environment before making legislative updates. The government collaborated with a consortium of leading mobile service providers to develop the secure PASS mobile app for storing and authenticating drivers' licences. This public-private partnership began in 2019 as an ICT regulatory sandbox pilot. Following rigorous testing and security assessments, the government acknowledged digital licenses as legally equivalent to a physical ID. A regulatory committee under MSIT approved updates to the PASS digital license in October 2023, allowing it to include resident registration numbers. This cemented its status as an official ID accepted in the financial, public, and medical sectors. This regulatory change was made possible by the industry partnership's proven, safe implementation as proof of concept.

Overall, Korea's legal and regulatory framework is comprehensive, creating a solid governance environment with clear rules and principles for diverse aspects of digital government. Continuous updating of legislation is instrumental in ensuring that regulatory frameworks remain aligned with ongoing developments and changes. It would be important for Korea to strengthen engagement with the private sector, academia, and civil society to guarantee that legal and regulatory frameworks remain appropriate and adhered-to in practice, especially when rapid innovation outpaces regulation.

Digital government investments

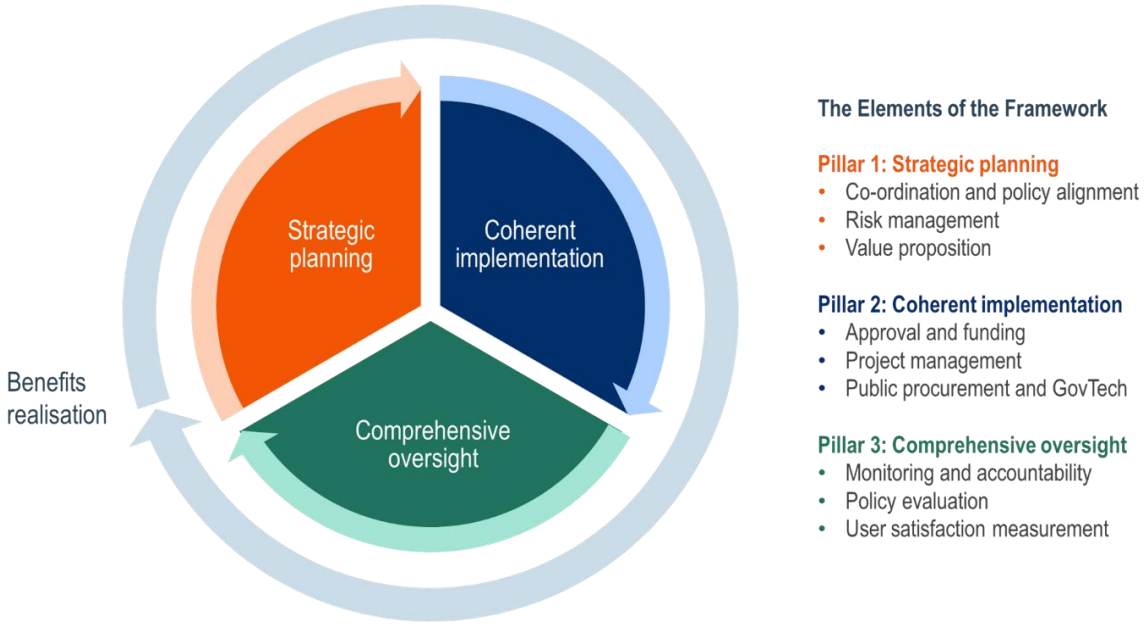
As governments accelerate digital-transformation efforts, global spending on digital technologies in the public sector is projected to increase by 8.4% annually between 2024 and 2027 (Gartner, 2024[43]). This investment is taking place in a context of fiscal pressure, where public administrations are expected to do more with less (OECD, 2025[44]). Managing investments in digital government is thus essential to ensuring that public spending delivers value for money, supports service quality, and meets citizens' increasing expectations

An end-to-end approach to investments in digital government can ensure that initiatives are cost-effective, delivered well, and align with the government's strategic objectives. Korean investment governance is a leading example of such an approach, with centralised oversight, robust processes, and incentives to ensure the delivery of digital initiatives. However, there is an opportunity to enhance the existing model with additional considerations in the review processes, more flexible budget allocations, and a more innovative approach to procurement.

The OECD Digital Government Investments Framework

The OECD's Digital Government Investments Framework guides countries toward strategic and effective investments in digital transformation across the public sector. The framework presents an end-to-end and whole-of-government approach based on three pillars: *strategic planning, coherent implementation,* and *comprehensive oversight* (**Figure 3.5**).

Figure 3.5. OECD Digital Government Investments Framework



Source: (OECD, 2025[44])

While these pillars align with the general phases of investment, they should be considered a cycle: better planning leads to better delivery, and comprehensive monitoring informs decision-making about current and future investments. Each pillar also includes three building-blocks to ensure that governments deliver value, maximise impact, and mitigate risk as part of a co-ordinated approach.

Korea's results in the 2023 OECD DGI show that the country has a strong model for managing digital-government investments across government, scoring 83% for its maturity in the area, compared to the OECD average of 51%. Evidence shows that Korea's centralised approach provides close oversight over the alignment, delivery, and outcomes of digital-government investments. This is evident at several points across the pillars of the investment cycle, as shown in Table 3.2 below. For example, the data shows policy levers for digital/ICT projects including:

- dedicated funding
- standardised value-proposition models
- standardised approval systems
- standardised models for project management
- guidelines for digital/ICT procurement in the public sector
- monitoring systems to track progress

- common methodology/tools to evaluate the impact of projects
- ex-post cost-benefit analysis

Table 3.2. Digital-government investment maturity in Korea, 2023 OECD DGI

Pillar	Concept	Korea	OECD
Planning	Standardised value-proposition model for digital/ICT projects	100%	88%
	Role of the value-proposition method in the development of digital/ICT projects	88%	63%
	Risk assessments conducted for digital/ICT projects at the central/federal government	50%	41%
	Risk categories considered during risk assessments of digital/ICT projects	80%	42%
Implementation	Dedicated fund for digital/ICT projects	100%	73%
	Standardised approval system for digital/ICT projects	100%	55%
	Standardised model for digital/ICT project management	100%	58%
	Agile methodologies included in standardised digital/ICT project management model	0%	39%
	Guidelines for digital/ICT procurement in the public sector	100%	67%
	Procurement mechanisms for digital/ICT goods and services at the central/federal government level	88%	44%
	Dedicated GovTech strategy, programme, or initiative	100%	61%
	Dedicated team to manage and implement GovTech initiative	100%	61%
	Goals of GovTech initiative	100%	43%
	Inclusion of GovTech collaboration in NDGS	100%	70%
	Resources to support collaboration with GovTech ecosystems	86%	24%
Oversight	Open information about the progress of digital/ICT projects	20%	39%
	Implementation of ex-post cost-benefit analysis of digital/ICT projects	100%	27%
	Monitoring system to track progress of digital/ICT projects	100%	85%
	Common methodology/tool to evaluate impact of digital projects	100%	39%
	Areas where common methodology to evaluate impact of digital projects is applied	55%	28%

Source: (OECD, 2022[33])

These policy levers highlight that Korea's management of digital government investments has three main characteristics: a focus on alignment with strategy, budgetary priorities, and legal requirements; robust processes in place in planning and approval stages; and the evaluation of performance through enforcement and incentive measures to improve delivery. However, the results also show the potential for Korea to further strengthen its approach under each pillar is to digital government investments, including with:

- environmental risk assessments for digital and ICT projects
- agile project methodologies for more innovative and iterative delivery
- open information on projects for greater transparency and accountability, and
- evaluations to understand the environmental impact of digital government investments.

Korea's approach under each pillar is discussed in detail within the Korean context below, to analyse the results and highlight both progress to date and efforts that could be made to strengthen Korea's approach to managing its digital-government investments.

Pillar 1: Strategic Planning

The Strategic Planning pillar focuses on strengthening the governance of digital government through clear leadership, policy levers, and co-ordination mechanisms to steer public-sector digital transformation. Through strategic alignment and co-ordination between stakeholders, governments can improve planning of digital government investments. This pillar includes improving:

- **Co-ordination and alignment** for the effectiveness of digital-government investments in light of strategic and policy objectives, which benefits from clear leadership and defined responsibilities
- **Risk-management** to identify and mitigate risks in a timely manner, based on a comprehensive approach that considers delivery, compliance, security, and social and environmental impact
- **Value-proposition** in the development of business cases or proposals using a structured and standardised method to estimate the costs, benefits, and potential risks.

Korea's strengths under the Strategic Planning pillar are due to its efforts towards aligning projects to strategic and policy objectives, and its close management of proposals during the planning and approval stages of digital-government investments.

The Ministry of Economy and Finance's (MOEF), MOIS's, and MSIT's central role in managing digital government investment in Korea ensures alignment with the government's digital strategy and its budgetary priorities, and that public institutions comply with guidance and legal requirements related to digital and data initiatives. It is also clear that duplication of investments is examined in investment planning for digital projects, encouraging public institutions to consider sharing or reusing solutions.

Second, Korea has a robust process for planning and approval of digital-government investments, which leverages preliminary reviews and feasibility studies for investments above a certain threshold. Article 67 of the Electronic Government Act, the Guidelines for E-Government Performance Management, and the Pre-Consultation and Performance Management Business Manual require a preliminary review for new projects or projects soon to be implemented that are worth:

- KRW 1 billion or more for the central government.
- KRW 200 million or more for regional governments.
- KRW 100 million or more for local governments.

Furthermore, Article 38 of the National Finance Act requires feasibility studies for digital projects (Box 3.7) of more than KRW 30 billion of government funding. To support these studies, MOEF provides guidance and forms to public institutions as part of the Detailed Guidelines for Preparing the Budget and Fund Management Plan. MSIT assesses the findings and recommends to MOEF whether a project is sufficiently viable to receive funding.

Box 3.7. Feasibility studies for digital and ICT project proposals in Korea

Feasibility studies supervised by the MOEF evaluate the validity of large-scale projects to ensure efficient allocation and management of public resources. Their purpose is to prevent budget waste and enhance fiscal management through transparent, fair, and objective decision-making based on:

- **Project overview**, including the background, purpose, progress, and project plans
- **Economic feasibility analysis** to assess costs and benefits, estimate demand, and calculate financing, including return on investment
- **Policy analysis** to assess non-economic factors, policy coherence, execution commitment, funding risks, and special evaluation categories
- **Balanced regional development** to evaluate local economic impact and reflect national policy to prevent regional imbalances
- **Comprehensive evaluation** using the Analytical Hierarchy Process (AHP) to assess project appropriateness, investment prioritisation, and policy suggestions based on economic and policy analysis

Source: (Korea Development Institute, n.d.[45])

Projects subject to preliminary review by MOIS (Box 3.8) include those for the central government and affiliated agencies, public institutions, metropolitan city governments and affiliated agencies, and regional public corporations. MOIS considers the project objective, scope (including users), function, and cost. Its assessment is provided to MSIT and MOEF as a reference for their assessments of the project.

Box 3.8. Preliminary review of the design of digital and ICT projects in Korea

Key to Korea's e-Government strategy, the preliminary review process for digital and ICT projects ensures that proposed initiatives are strategically aligned, performance-driven, and fiscally responsible. Before receiving funding, government agencies must submit comprehensive project plans that define objectives, expected outcomes, and key performance indicators. These plans are evaluated for technical feasibility and their alignment with national digital strategies and policy priorities.

The review process assesses project necessity, potential for public value-creation, and risk of duplication with existing initiatives. This helps prevent resource waste, promotes interoperability across government systems, and ensures that projects contribute to Korea's digital transformation goals.

By linking project design with performance-based budgeting and strategic oversight, Korea's preliminary reviews foster accountability, effective resource-allocation, and cohesive digital-service delivery. This structured approach ensures that public investments in ICT have impactful and align with long-term government priorities.

Source: (Ministry of the Interior and Safety, n.d.[46]; Torneo, 2015[47])

As Korea strengthens its strategic planning of digital and ICT investments, it could incorporate greater consideration of social and environmental factors in the review of proposals, adopt a more flexible budgeting approach to allow agile and rapid transformation, and bolster the assessment of environmental risks for digital and ICT projects.

The review process for budget approval and annual evaluations ensures that public institutions address user needs, environmental impact, and considerations for individual rights and liberties. Given the strength

of the approval and review processes for digital initiatives, there could be opportunity for measures to address these gaps – particularly around environmental impact. Similarly, and in line with the findings in Chapter 6, there is an opportunity to incorporate evidence of user research and testing at each phase so that solutions address the needs and expectations of users at all stages of a project.

A more flexible approach to budget allocation could allow agile and rapid transformation. Public institutions expressed that they find the current budget-allocation process effective, but constraining. They reported the annual allocation to be very rigid, not allowing for changes during delivery to explore digital technologies, like AI, or respond to changing user needs and expectations. As such, Korea could explore additional budget mechanisms, including multi-year funding, funding teams instead of projects, allowing a margin of overspend where there is a strong business case, or funds dedicated for the uptake of AI.

For example, **France** has two co-financing funds to accelerate digital transformation of the public sector. *Fonds pour la transformation de l'action publique* (FTAP) is available to fund both large-scale (above EUR 9 million) and medium-scale investments through open or thematic fund application, and staggers the funding to ensure agile and iterative delivery of projects, with semi-annual check-ins with the agency that administers the fund. The *Fonds d'accélération des Startups d'État et de Territoire* (FAST) is open to intrapreneurs within the French public administration who have developed a digital public service that has validated its value proposition with a significant segment of its target users and is therefore ready for large-scale deployment. In addition to co-financing, the fund provides personalised support to the teams in charge of the service, helping them remove obstacles to growth. In return, it requires them to set a quantified impact target and a percentage of total users to be reached, and it ensures rigorous monitoring of progress toward these results. (Direction Interministérielle de la Transformation Publique, 2024[48]).

In **Denmark**, the Government allocated around DKK 290 million (EUR 40 million) to two funds providing grants to public-sector innovation projects. The first (around DKK 190 million) supports pilot projects for AI solutions to solve societal problems, with a focus on upholding the security and ethical use of citizen data. The second is dedicated to proposals for the use of new technologies, including AI, to raise welfare, alleviate the shortage of labour or support the green transition. Agencies apply directly to these funds. The strength of the applications is evaluated against the intent of the funds by the Agency for Digital Government, Danish Regions, an association of the five regions, and Local Government Denmark (an association of the 98 municipalities) (Digitaliseringsministeriet, 2025[49]), (Digitaliseringsstyrelsen, 2022[50]).

Finally, Korea could bolster its assessment of environmental risks for digital and ICT projects. The Electronic Government Act requires agencies to assess and manage the risks of their projects – currently standardised for risks associated with cybersecurity, service disruption, legacy ICT systems, and the privacy and rights of citizens. However, the 2023 OECD DGI highlighted a gap around environmental risks, which could include sustainability, energy consumption, impact on the environment, and regulatory compliance. **Denmark** issued guidance on risk management, sustainability, and green procurement (Økonomistyrelsen, 2024[51]), and the **United Kingdom** Treasury developed its Green Book to help agencies evaluate the effects of climate change, energy use, and greenhouse gas emissions (HM Treasury, 2022[52]). Finally, **France's** *Référentiel général d'écoconception de services numériques* (RGESN) framework for the eco-design of digital services encourages the use of renewable energy, efficient resource-management, and compliance with environmental standards (Direction interministérielle du Numérique, 2024[53]).

Pillar 2: Coherent Implementation

The Coherent Implementation pillar focuses on developing digital investments to build coherence and agility in the use of digital technologies in the public sector. Governments use shared tools and methodologies to realise benefits. This pillar includes improving:

- **Approval and funding,** to determine whether a proposal is feasible and ready for implementation, to prioritise projects based on strategic objectives and delivery confidence, and to allocate funding
- **Project management,** using standardised tools and methodologies to support the agile and effective delivery of investments in the digital transformation of the public sector
- **Public procurement and GovTech collaborations** with diverse procurement approaches to promote strategic partnerships with external actors to support successful project delivery

Under this pillar, Korea's strengths are its standardised project-management methodology and strong procurement function. In accordance with Articles 2 and 14 of Korea's Guidelines for the Development and Operation of Information Systems of Administrative Agencies and Public Agencies (Government of Korea, 2022[23]), all government agencies must undertake detailed planning, risk management, and continuous monitoring and evaluation for their projects. The guidelines mandate standardised procedures and documentation to ensure consistency and quality. These encompass comprehensive planning, early risk-identification and mitigation, maintaining clear and consistent documentation, regular stakeholder-engagement, and integrating security measures throughout the project lifecycle. Continuous monitoring is done to track progress and ensure compliance. This model ensures more-consistent outcomes for digital projects, and more-effective project oversight.

Korea's centralised procurement function supports the public administration with various methods to procure digital solutions. It is mandatory that procurement go through a centralised system manged by the Public Procurement Service (PPS), which collects and reviews requirements from government agencies, checks compliance with policy and legal requirements, approaches the market, and collects and evaluates proposals with the assistance of independent, third-party evaluators. Enabling this process, PPS developed the Korea Online E-Procurement System (KONEPS) as a platform to manage the end-to-end process from tender, to contracting and payments. It includes open data to ensure transparency in public procurements (Public Procurement Service, 2020[54]). The 'Next-Generation KONEPS project" (Box 3.9) was developed and launched in March 2025 to enhance the single digital window for procurement and improve use of technologies like AI, big data, blockchain, and cloud.

Box 3.9. Next-Generation KONEPS for digitally enabled procurement

KONEPS is used to manage the procurement cycle from notices, through bidding, contracts, and payments. It features an online marketplace offering goods and services at pre-negotiated prices. From 2021 to 2025, the PPS undertook a project to replace the old KONEPS system and onboard new public institutions. The 'next generation' upgrade integrates advanced technologies like AI and blockchain, supports mobile tender submissions, and enables digital document sharing. Policy officials can gain real-time access to procurement data, while AI offers user support and blockchain helps prevent forgery and enhances transparency in public procurement. The 'next generation' KONEPS also introduces:

- **Customised notice recommendation,** which uses supplier information and bidding history to recommend relevant opportunities, benefitting SMEs and newer providers in the market
- **Demand forecasting,** which analyses various product and service categories to predict demand and provide information for business planning
- **Bid congestion prediction,** which displays platform traffic levels, allowing bidders to choose less congested times for stable access, and recommendations based on purchase history

Source: (Choi, 2024[55])

As Korea looks to strengthen the implementation of digital and ICT investments, it could incorporate more innovative procurement mechanisms and more-agile project-management methodologies to foster innovation and encourage more cost-effective delivery of digital solutions.

Korea could enhance public procurement to improve delivery of strategic objectives. The current model could evolve through more-innovative procurement practices, including GovTech collaborations between the public and private sectors and other actors to co-design digital solutions (OECD, 2024[56]):

- **Design contests** to seek innovative pitches or design-concepts from the market
- **Pre-commercial procurement** to engage suppliers in the development of solutions before they become commercially available
- **Innovation partnerships** to collaborate with suppliers to co-create innovative solutions
- **Competitive dialogue** to allow detailed discussions with suppliers to refine project specifications
- **Outcome-based procurement** to focus on desired outcomes rather than on specific products or service requirements.

This could enable public institutions to better use available funds in a more agile and cost-effective way, which would support user-centred outcomes and more-targeted engagement with Korea's private sector. **Lithuania**'s GovTech Lab co-ordinates a structured program to define public-sector challenges with agencies, call for solutions from the market, test and develop proofs-of-concept, and scale solutions for reuse (GovTech Lab Lithuania, 2025[57]; GovTech Lab Lithuania, 2024[58]). **Norway**'s StartOff program used a repeatable methodology to deliver solutions in collaborations between the public and private sectors, within a defined six-month process from defining the challenge to delivering a minimum viable product (MVP) toward the solution (Direktoratet for forvaltning og økonomistyring, 2024[59]).

Korea could adopt more-agile project methodologies for more innovative and iterative delivery, which could be useful in the context of Korea's annual funding model. Rather than a more traditional and sequential 'waterfall' approach, agile methodologies break projects into smaller work packages to gather requirements, design, and pilot solutions to test, ensuring that the result delivers the outcome required and meets the needs and expectations of users. The **United Kingdom's** government supports agencies with principles, tools, and governance needed to work in a more agile. This includes understanding how to use

agile methods (e.g., user stories and roadmaps), how to measure and report on progress, how to ensure the right spending controls, and how to run a service sustainably (GOV.UK, 2025[60]).

Pillar 3: Comprehensive Oversight

The Comprehensive Oversight pillar focuses on accountability and performance, enabling countries to track investment portfolios, improve project-management, and ensure that investments yield the intended benefits. This pillar includes improving:

- **Monitoring and accountability** to track the progress of investments and enable early identification of risks in the delivery of projects
- **Policy evaluation** to assess the ex-post effect of investments, including return on investment (ROI), contribution to policy objectives, and extent of the intended benefits
- **User-satisfaction measurement** to know the extent to which investments meet user expectations for and improve their experience with public services

When implemented as part of an integrated investment framework, these elements can support governments to make more impactful investments in their digital future.

Korea's strengths in comprehensive oversight are its annual reviews of digital and ICT investments to determine whether they should continue to receive funding, and the development of digital systems to support monitoring.

The Korean model has a strong model of annual reviews to evaluate the performance of digital investments, enforce compliance, and incentivise more-effective delivery of outcomes. While the development and delivery of digital initiatives are generally approved as three-year projects, budgets for these are allocated on an annual basis. MOIS develops an e-Government Performance Management Plan (Box 3.10), which includes targets and performance indicators agreed with delivery institutions.

To secure the following year's funding, public institutions must demonstrate to MOIS and MOEF their achievement of targets, performance against indicators, overall cost and efficiency, ease of use and operation, and alignment with the government's strategic objectives. While this method of allocating budgets might challenge the agility of public institutions in responding to new technologies or changing requirements, it nevertheless serves as an effective oversight mechanism.

Box 3.10. Oversight under Korea's e-Government Performance Management Plan

As part of its **e-Government Performance Management Plan**, Korea institutionalised a digital and data-driven approach to managing public-sector performance and finances. Two components are the **Integrated Evaluation System (e-IPSES)** and **Performance-Based Budgeting (PBB)**.

e-IPSES is a central, digital platform that consolidates performance data from all government agencies. It is a cornerstone of Korea's e-Government infrastructure, enabling transparent and systematic evaluation of government programs in real time. e-IPSES aligns performance metrics with strategic goals, providing an evidence base for financial planning and resource reallocation.

PBB ensures that budget decisions are directly informed by program outcomes. Government agencies must submit annual performance plans and results, conduct self-assessments, and participate in targeted evaluations. These feed into the budgeting process, linking fiscal decisions to public value.

Together, e-IPSES and PBB exemplify Korea's integrated approach to public financial management: leveraging digital tools to promote efficiency, accountability, and results-oriented governance in line with its e-Government vision.

Source: (Korea Institute of Public Finance, 2019[61]), (Torneo, 2015[47])

Korea has several digital-finance systems that help monitor the government's financial management (Box 3.11). These platforms act like the nervous system of Korea's public finance, linking data, decisions, and actions across institutions. By promoting automation, compliance, and capacity-building, Korea's digital-finance systems enhance transparency, operational efficiency, and fiscal accountability, ensuring public resources are managed responsibly and aligned with national policy goals.

Box 3.11. Digital finance systems in Korea

Korea's digital finance infrastructure strengthens public-sector financial management through a suite of integrated systems:

- **dBrain+** acts as a '**next-generation' digital accounting system** to manage national budgeting, execution, and settlement in line with financial laws, enabling real-time oversight
- **Public Institution Accounting System** ensures transparency by standardising the submission and analysis of financial statements across the public sector
- **eGrants** digitises the management of government subsidies, offering traceability, efficiency, and reduced administrative workload

In addition, Korea's **eFinance Learning** training platform equips government officials with the skills to navigate and optimise these systems.

Source: (Korea Fiscal Information Service, 2025[62])

To strengthen its comprehensive oversight of digital and ICT investments, Korea could publish information on projects for greater transparency and accountability, as well as improve its efforts to evaluate the environmental impact of digital government investments.

The 2023 OECD DGI highlighted that Korea could improve its disclosure of information on projects, for greater transparency and accountability. To achieve this, Korea could create a publicly available dashboard or publish status reports offering regular data on digital and ICT projects. In addition to the annual reviews, this could encourage more efficient and effective project delivery. **France** publishes an overview of major digital projects, aggregated budgetary indicators, any signs of planning slippage, and

expected impact (Direction interministérielle du Numérique, 2024[63]). **Denmark**'s IT Council publishes an assessment of the progress of major IT projects, using a 'traffic light' rating to categorise the investments based on expected project costs, adherence to schedule, and expected realisation of financial and non-financial gains (Økonomistyrelsen, 2024[64]), (Økonomistyrelsen, 2024[51]).

The 2023 OECD DGI also highlighted that Korea could improve its evaluation of the environmental impact of digital-government investments. Linked to the previously described gap in assessing environmental risks during strategic planning, Korean could monitor and evaluate the environmental impact of the projects during and after delivery. The **United Kingdom** Treasury's Magenta Book (together with the Green Book mentioned previously) provides guidance to government agencies about qualitative and quantitative methods to evaluate the impact of projects – including environmental impact (HM Treasury, 2011[65]; HM Treasury, 2020[66]). The Green Book also provides more-specific guidance with regarding impacts related to climate change (HM Treasury, 2022[52]).

Digital talent and skills

The digital transformation of society results in significant changes in how people communicate and interact with government, and thus in their expectations of government. Governments must therefore equip themselves with the digital skills and profiles to lead, navigate, and implement digital transformation. Many countries are adapting their work environments to foster digital competencies, creating the necessary professions, introducing essential digital skills, and offering retention plans to support their digital-transformation goals.

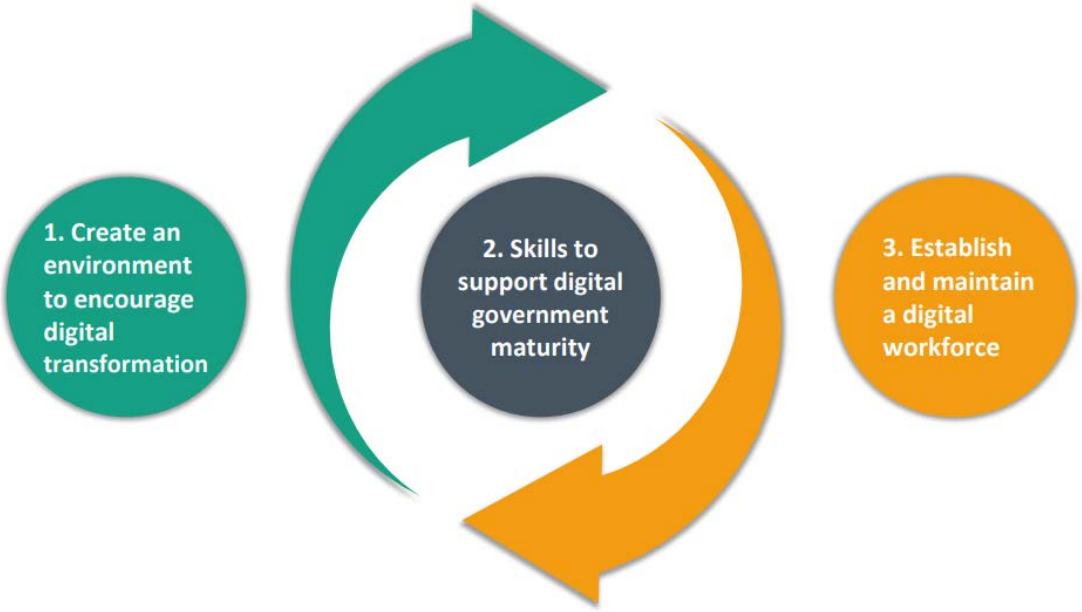
While Korea has opportunities to go further, it made significant progress across the three pillars of the OECD's Framework for Digital Talent and Skills in the Public Sector, including building an enabling environment for digital work, with comprehensive and strategic approaches to developing capability, training to enhance a range of specific digital skills that can position Korea for the future, and actions to build and sustain a qualified workforce through measures to attract, develop, and retain digital skills and talent for Korea's public administration.

The OECD's approach to digital talent and skills in the public sector

The OECD Framework for Digital Talent and Skills in the Public Sector embeds digital capabilities across government institutions and society (OECD, 2021[67]). Building on earlier OECD work in countries such as Brazil, Panama, and Portuguese-speaking African nations, the Framework recognises that individual and team skills are essential but insufficient for successful digital transformation.

The Framework emphasises that digital maturity in government depends on skills, supportive contexts, and sustained workforce development. By examining these dimensions, the Framework informs policy on how to strengthen digital capacity across the public sector, concluding with recommendations for governments to drive coherent, system-wide digital transformation. It is structured around three interconnected pillars: (1) the enabling environment for digital work; (2) the range of skills needed among all public servants, including leaders and specialists; and (3) the actions required to build and sustain a digitally skilled workforce.

Figure 3.6. OECD Framework for Digital Talent and Skills in the Public Sector



Source: (OECD, 2021[68])

Pillar 1: Creating an environment to encourage digital transformation

To support digital transformation, governments must foster an environment that enables the development of digital skills, talent, and modern ways of working. This involves leadership that articulates a clear digital vision and promotes a culture of experimentation, learning, and adaptability. Organisational structures should support improved ways of working, including through flatter hierarchies, cross-functional collaboration, and revised job roles focused on user needs rather than on traditional technology functions. These changes align workforce-planning with societal skills-development and ensure that public services remain responsive and inclusive. Creating such an environment requires a work culture that supports lifelong learning through both formal and informal training, mentoring, and opportunities to experiment without fear of failure. Agile methodologies and digital tools should be embedded across operations, encouraging innovation and flexibility. Performance, motivation, and citizen trust improve when public servants feel included, empowered, and equipped to lead change. Ultimately, digital transformation depends on technology and the capacity of people to drive and sustain change, supported by policies that enable diverse, multi-disciplinary teams to thrive. Governments must view this as a long-term investment in public-sector effectiveness and resilience.

The Korean government acknowledges the importance of cultivating digital competencies early. It made considerable progress in fostering digital proficiency among government officials and an ecosystem to leverage the expertise of the private sector and academia. The OECD review team found that the need to continually enhance digital skills is acknowledged across a multitude of Korean public institutions, resulting in an array of training programmes for public officials at the central level. Further, Korea is often seen as one of the leading countries on digital government and actively engages in peer learning and development internationally – either bilaterally or through multilaterally, as discussed in Chapter 2.

To support this, the Ministry of Personnel Management issued the Comprehensive Plan for Civil Servant Talent Development in 2024, outlining a strategic approach to a highly competent and adaptable public workforce (Box 3.12). The plan focuses on strengthening policy-execution capabilities, enhancing digital and AI competencies, and fostering a culture of self-directed learning among civil servants. It introduces

training programs tailored to roles and career stages, emphasising foundational education for new hires and continuous professional development. Initiatives include expanding policy-relevant education, integrating ethical AI use, and leveraging digital platforms to facilitate accessible and flexible learning. The plan highlights specialisation in job functions and supports government responsiveness in addressing national challenges such as demographic shifts and technological transformation. By aligning talent development with national priorities, the improves public-service delivery and reinforces the government's capacity to meet evolving public needs (Ministry of Personnel Management, 2024[69]).

Box 3.12. 2024 Comprehensive Plan for Civil Servant Talent Development

The **2024 Comprehensive Plan for Civil Servant Talent Development** released by Korea's Ministry of Personnel Management sets out a roadmap to enhance the capabilities of public officials in response to national challenges and global trends. It aims to build a competent, agile, and forward-looking civil service capable of driving policy implementation and public value in an era marked by demographic change, digital transformation, and growing complexity.

The plan emphasises three priorities: (1) strengthening policy responsiveness and execution; (2) promoting self-directed learning among civil servants; and (3) delivering customised training tailored to career stages and roles. Initiatives include foundational training for new recruits, expanded onboarding programs, professional development focused on digital skills, artificial intelligence, and ethical governance. To support continuous learning, the government will enhance digital-learning platforms and increase access to job-specific education.

Implementation will be guided by clearer role definitions, improved training infrastructure, and stronger alignment between national policy goals and workforce development. By combining strategic foresight with practical reforms, the plan aims to train a more capable, innovative, and accountable public sector.

Source: (Ministry of Personnel Management, 2024[70])

Complementing this plan, MOIS has Guidelines for Building Data Competency of Public Institutions to enhance data capabilities in government entities. These guidelines emphasise the importance of integrating data-driven practices into public administration to improve decision-making, policy development, and service delivery. Components include establishing dedicated data-management roles, implementing standardised data-governance frameworks, and investing in training programs to develop data literacy among public officials. The guidelines advocate for inter-agency collaboration to facilitate data sharing and the adoption of advanced analytics tools. By adhering to these directives, public institutions foster a culture of data-informed governance, leading to increased efficiency, transparency, and responsiveness in addressing public needs (Minitery of the Interior and Safety, 2022[71]).

Korea's efforts target several roles across the public administration, including management, back-office and frontline civil servants, specialised teams (e.g., digital, ICT, and data), and policy roles. In the plan's implementation, the Korean Government uses:

- **Formal training programs** about different topics, provided by Korea's National Human Resources Development Institute
- **On-demand training** through the Nara Learning Centre via a digital platform, where civil servants can learn at their own pace
- **Informal learning mechanisms** through the Public Human Resource Development Platform, which supports knowledge and skills transfer using public officials as content creators (e.g., with a curated selection of the best lecture recordings)
- **Multi-disciplinary teams**, where possible, to deliver digital solutions

- **Mobility and skills-transfer mechanisms**, including personnel movement of civil servants across the public sector (as discussed in the sections that follow) with such mechanisms as knowledge transfers and handovers as well as occupational restructuring to secure specialised workforce in such fields as ICT and data and long-term employment mechanisms in order to maintain continuity.

In addition, many public institutions provide training opportunities specific to their work. This ensures that public officials have access to skill-development opportunities tailored to their roles and responsibilities. Finally, to maximise these efforts, some agencies link training initiatives to the assessment of employees' performance, as in the Korea Customs Service (Box 3.13).

Box 3.13. Performance-linked training in the Korea Customs Service

The Korea Customs Service (KCS) has a comprehensive, performance-linked training framework to enhance the effectiveness and professionalism of its workforce. Central to this approach is the Customs Human Resources Development Institute, which offers a range of programs, including foundational, specialised, and global leadership courses. These align with specific job roles and career stages, ensuring that training is applicable and impactful.

To evaluate the effectiveness of its training, KCS employs results-based management. This includes randomised controlled trials to assess behavioural changes among trainees, providing empirical data on the impact of training programs. Additionally, KCS uses a professor-evaluation system that assesses lecture quality, satisfaction levels, and research outcomes, with rewards for high-performing instructors.

The KCS Charter reinforces a culture of accountability by establishing clear service standards and procedures for addressing customer dissatisfaction. Collectively, these initiatives demonstrate KCS's commitment to integrating performance metrics into its training programs, fostering a responsive and competent customs workforce.

Source: (World Customs Organisation, 2018[72]), (Igarashi, 2018[73]), (Customs Human Resources Development Institute, 2025[74])

These initiatives create an environment that enables the development of digital skills, talent, and modern ways of working to drive the digital transformation of Korea's public administration.

Korea still can face challenges in carrying out long-term complex projects especially in technical domains like digital transformation due to the rapid pace of technological change and frequent personnel movement. In addition to its initiatives on large-scale digital upskilling in the public administration, there is growing recognition of the need to balance mobility with role-specific stability. To address this, Korea could consider encouraging long-term service in digital areas, protected offering targeted retention incentives, and professionalising its digital workforce. **Estonia** maintains long-term technical staff in key digital agencies, such as the Information System Authority and the Government CIO Office, to ensure continuity and sustained leadership. The **United Kingdom**'s Government Digital Service (GDS) and departmental digital teams use dedicated Digital, Data, and Technology (DDaT) career frameworks that limit rotation and support deep expertise. These models show that investing in stable, skilled, digital roles is critical sustained innovation, ensuring the effectiveness of service delivery, and achieving long-term digital transformation in the public sector.

Pillar 2: Developing skills to support digital government maturity

Public sector organisations must prioritise developing and maintaining the right skills across their workforce to support digital government maturity. This means equipping public servants with technical competencies, socio-emotional, leadership, and user-focused skills to design and deliver modern, citizen-centric services. Governments should foster a culture of lifelong learning, supported by formal training and informal opportunities such as mentoring, peer learning, and cross-functional collaboration. Job roles and career

paths must evolve to reflect the interdisciplinary nature of digital work, encouraging mobility, flexibility, and skill development. Agile methods, diverse teams, and user-driven approaches should become the norm, ensuring that staff are empowered to innovate and adapt in response to rapidly changing needs. Investing in people – not just technology – is essential to enable sustained digital transformation and deliver more-responsive, inclusive, and effective public services.

MOIS adopted a comprehensive approach to strengthening the digital capabilities of its civil service, aligning with its broader goal of advancing digital-government maturity. Central to this effort is the Digital Civil Servant Competency Framework, which categorises essential skills into three domains: technology usage; data-based policy analysis; and digital citizen engagement (Box 3.14). This framework provides a diagnostic tool to assess civil servants' current competencies and a strategic guide for targeted upskilling. To operationalise the framework, MOIS issues detailed guidelines to government agencies for embedding digital and data competencies in their workforce. Notably, MOIS supports continuous capacity-building through collaborative platforms and cross-agency learning networks, encouraging the dissemination of best practices and innovation.

Box 3.14. Digital Civil Servant Competency Framework

Developed by MOIS, the Digital Civil Servant Competency Framework supports the professional development of public officials in line with Korea's digital objectives, focusing on:

- **Technology utilisation** – building skills to understand and apply digital technologies like AI, big data, and cloud computing in public service
- **Data-based policy analysis** – strengthening capabilities to use data for evidence-based policy-making and service improvement
- **Digital citizen engagement** – promoting the use of digital tools to communicate with, engage, and serve the public in more responsive and inclusive ways

Used as both an assessment tool and a guide for training, the framework helps agencies identify skill gaps and invest in targeted capacity building. It ensures civil servants are equipped with the digital, analytical, and engagement skills for modern, citizen-focused governance.

Source: (Tuan and Hai, 2025[75])

To add specific skills, the Korean government implemented a comprehensive and future-focused strategy to build the digital capabilities of its civil servants, aligning with national goals for digital-government maturity (Box 3.15). Led by MOIS and delivered through the National Human Resources Development Institute, annual training and e-learning programmes address a range of competencies essential for digital governance. These include enhancing awareness of digital and emerging technologies (such as artificial intelligence, big data, the metaverse, and NFTs) and promoting digital literacy to help officials navigate transformation. User-centred governance is strengthened by courses in empathy, cross-generational communication, and active listening. Service-design capabilities are supported by training in data-driven policy-making, remote-delivery models, and conflict resolution. Open collaboration is fostered via content on negotiation, co-ordination, and integrated teamwork across departments. Trust in digital tools is reinforced through programs on cloud innovation and digital ecosystems, while data literacy is developed through courses on data analysis, visualisation, and leadership. This integrated, regularly updated approach equips public officials with technical skills and the strategic, collaborative, and user-focused mindsets to lead an increasingly digital public sector.

MOIS also organises national data-analysis competitions to promote a data-driven culture, encouraging innovation and real-world application of public data. The 10th Pan-Government Public Data Utilisation Startup Contest recognised the Land/City Law Convergence Spatial Information Analysis System, which

integrates legal and urban planning data with spatial information to support more-informed land use and urban-development decisions. By harnessing open data, the system enables comprehensive analysis of regulatory and geographic factors, contributing to more-efficient and evidence-based policy-making. These initiatives demonstrate Korea's commitment to embedding data skills and innovation in public administration.

Box 3.15. Guidelines for Building Data Competency of Public Institutions

MOIS's Guidelines for Building Data Competency of Public Institutions provide a framework to enhance data capabilities across government agencies. They aim to institutionalise data-driven decision-making, thereby improving policy development, administrative efficiency, and public-service delivery. By adhering to these guidelines, public institutions can foster a culture of data-informed governance, with increased transparency, accountability, and responsiveness to public needs.

Initiatives outlined in the guidelines include the:

- **Establishment of data-management roles –** public institutions are encouraged to designate Chief Data Officers (CDOs) to oversee data governance and strategy
- **Standardisation of data-governance frameworks –** implementation of uniform standards and protocols to ensure consistency, quality, and interoperability of data across agencies
- **Investment in training programs –** development and deployment of training modules to improve public officials' data literacy and analytical skills
- **Promotion of inter-agency collaboration –** facilitation of data sharing and collaborative projects between government entities to leverage collective insights
- **Adoption of advanced analytics tools –** integration of modern data analytics and visualisation tools to support evidence-based policy-making

Source: (Ministry of the Interior and Safety, 2025[76])

To strengthen its skills to support digital government maturity, Korea could consider how to structure personnel movement to allow for deeper skills and to strengthen the take-up of training in key skills at the national and local levels of government. However, it is important to note that "Mobility is not an end in itself, but should be pursued to achieve specific benefits, which need to be carefully managed" (OECD, 2023[77]). As discussed in the previous section, frequent personnel movements in the Korean public sector have previously presented a challenge, particularly regarding implementation of long-term projects. The project's findings highlight that one opportunity to address this could be through better alignment of personnel movements with the lifecycle of key digital and ICT projects. Having civil servants embedded within these project teams for the term of its implementation could facilitate the development of more in-depth skills and enhance continuity among public officials. This would also mitigate the potential loss of institutional knowledge that often accompanies personnel changes.

In addition, more frequent and comprehensive digital skills training could be needed at central and local levels. Implementation of training programmes accessible across all levels of government could prepare public officials to adopt to digital technologies and evolving practices. Research interviews highlighted that, while Korea has extensive programmes to encourage the development of civil servants' skills, this was not necessarily consistent between national and local levels of government. Further, stakeholders across both levels of government reported that, despite training, civil servants remain used to old systems, posing a challenge to the use of cloud-based solutions. These efforts should also consider the digital literacy required at the leadership level to facilitate this digital transformation – developing and using digital tools

and skills relies on leadership fully understanding the technology in order to drive projects forward and also implement appropriate workforce strategy.

Another approach could focus on developing future-ready digital talent through the education system. This would align with Korea's ambitious plan to train 100,000 cybersecurity professionals by 2026 (Ministry of Science and ICT, 2022[78]). This initiative is part of the broader Comprehensive Plan to Nurture Digital Talent being led by MSIT to expand digital-education opportunities and strengthen digital capacities nationwide.

One way to address these needs could leverage the skills and talent of the private sector (instead of competing with it) to drive cultural change in the public sector through innovative, public-private talent exchanges. This could allow civil servants to work temporarily in tech companies and vice-versa. These exchanges expose public officials to agile practices, emerging technologies, and user-centric design methods commonly found in the private sector. Participants would return with fresh perspectives, helping challenge bureaucratic norms and nurture a more innovative, digital-first mindset in government. In addition to solving an issue around digital talent gaps, this approach could bridge the gap between sectors, accelerating digital-skill development and cultivating a culture of collaboration, experimentation, and continuous learning in the public service.

Pillar 3: Establishing and maintaining a digital workforce

A digital workforce requires a proactive, strategic approach to recruitment, development, and retention. Governments must invest in people by offering flexible career paths, fair and transparent reward systems, and continuous opportunities for growth through formal training and informal support. Initiatives such as job mobility, mentoring, multi-disciplinary team structures, and 360-degree feedback loops empower employees, boost engagement, and improve performance. Embedding digital skills across roles rather than isolating them in technical functions ensures broad institutional capability. To adapt to an increasingly digital-first environment, public-sector organisations should promote agile ways of working, support remote and hybrid models, and ensure access to tools and technologies. Inclusive, learning-rich environments where staff feel safe to innovate and collaborate are essential for long-term success. These efforts build organisational resilience and enhance employee satisfaction and retention, ensuring the public sector can attract, grow, and keep the digital talent to meet evolving societal demands.

Korea implemented a comprehensive strategy to attract, develop, and retain digital talent in the public sector, ensuring a highly skilled workforce capable of driving digital transformation. To enhance recruitment transparency, *Nara* is a pan-government recruitment portal with standardised job descriptions, clear eligibility criteria, and position details, fostering accessibility and trust in public service employment (Ministry of Personnel Management, 2025[79]).

Proactive hiring strategies, including open, competitive recruitment and fixed-term appointments, are governed by the State Public Officials Act and the Decree on Appointment of Public Officials (Government of Korea, 2024[80]), enabling the government to attract specialised digital talent. The public sector is aiming to be an employer-of-choice through outreach efforts ensuring that professionals recognise government service as a dynamic career path. Bias-reduction measures such as annual workshops and consulting sessions promote fair and merit-based recruitment (Ministry of Personnel Management, 2024[70]).

Beyond recruitment, Korea prioritises talent retention through performance-based pay, career advancement frameworks, and structured professional-development programs. The Regulation on Allowances for Public Officials (Government of Korea, 2025[81]) outlines compensation mechanisms, including special duty allowances and merit-based bonuses, ensuring that high performers are recognised and rewarded. Flexible working arrangements and family-friendly leave policies reinforce workforce sustainability, creating an environment that supports well-being alongside productivity. The Act on the Capacity Development of Public Officials (Government of Korea, 2022[82]) establishes a robust framework

for lifelong learning with specialised training institutions and commissioned programs (Box 3.16). These measures strengthen Korea's ability to build and sustain an agile, high-performing digital workforce that underpins long-term public-sector modernisation.

Furthermore, the Korean government demonstrates a capacity to fill the public-sector skills and talent gap by establishing strategic partnerships to tap the expertise of the private sector and academia. Such partnerships facilitate the use of industry advancements by public institutions, innovating and enhancing service delivery in time to meet the expectations of Korean citizens and businesses.

Box 3.16. Act on the Capacity Development of Public Officials

The Act on the Capacity Development of Public Officials in Korea aims to enhance the efficiency, professionalism, and ethical standards of civil servants through systematic training and development. Enacted to strengthen public service quality, the Act establishes a legal framework for planning, implementing, and evaluating education programs tailored to various public-official roles. It mandates continuous learning and performance-based development throughout a public official's career, emphasising competence in policy planning, service delivery, and integrity.

Provisions include the designation of responsible institutions such as the Ministry of Personnel Management and the National Human Resources Development Institute to oversee training standards and curriculum development. The Act promotes customised training by job category, rank, and function, including programs for leadership, global competencies, and digital literacy. It encourages co-operation with domestic and international institutions and supports the use of advanced learning technologies.

Additionally, the Act stipulates regular assessments of training effectiveness and encourages linking training results to promotions and evaluations. Overall, the law reflects Korea's commitment to cultivating a skilled, ethical, and innovative public workforce aligned with national goals and changing administrative demands.

Source: (Government of Korea, 2022[83])

Challenges remain for the Korean public sector remain in more specialised fields, specifically cloud computing, data analytics, AI, and user-centred design. Public institutions acknowledge that they face challenges attracting and retaining proficient personnel, primarily due to the competitive remuneration and advancement prospects offered by the private sector.

OECD countries launched a range of strategic initiatives to address challenges in attracting and retaining digital talent, offering models for governments to strengthen their digital economies. **Germany**'s Make IT in Germany platform supports international recruitment by streamlining visa processes and providing comprehensive guidance for foreign IT professionals. **Canada**'s Global Talent Stream offers expedited work permits – often within two weeks – for highly skilled tech workers, enabling companies to fill critical digital roles quickly. **Finland**'s Talent Boost program supports urban and regional employers in attracting international experts, particularly in the ICT sector. **France** introduced the French Tech Visa, a fast-track immigration pathway for tech founders, employees, and investors, reinforcing the country's image as a startup-friendly environment. **Estonia**'s pioneering e-Residency program enables entrepreneurs worldwide to establish and manage EU-based digital businesses remotely, enhancing the country's global profile as a digital hub. The **United Kingdom**'s Digital Skills Partnerships address regional skills gaps by fostering collaboration between government, industry, and education providers to deliver tailored digital training. These initiatives demonstrate that comprehensive approaches – including streamlined migration pathways, regional training investments, and innovative remote-business models – can boost digital talent pipelines while supporting national innovation goals. Governments looking to build a competitive digital workforce could benefit by adapting them to local contexts and economic priorities.

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4 Improving data governance, sharing, and use

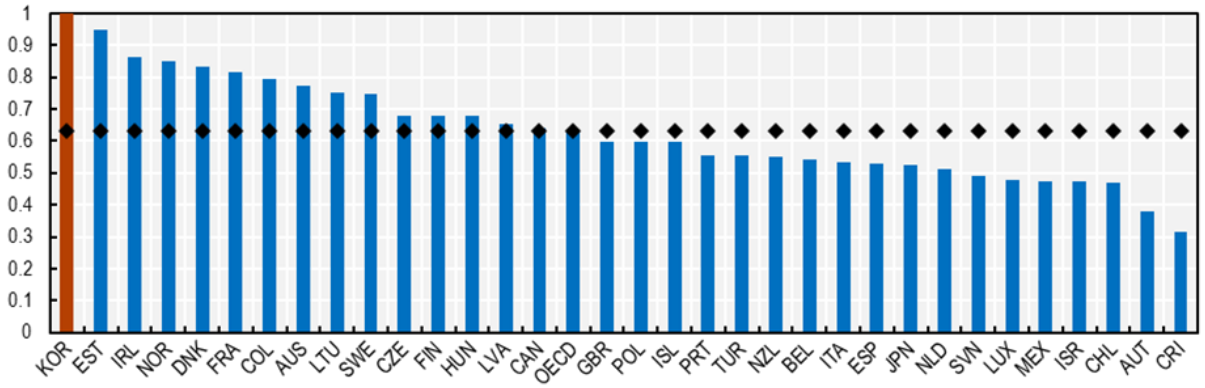
This chapter highlights Korea's approach to building a data-driven public sector. It explores the legal and institutional frameworks for data use, internal and external data sharing, including open data publication, while noting emerging challenges related to data privacy, interoperability, and the need for robust data governance and support to public institutions.

Introduction

Data is a foundational asset for 21st-century governments, essential for designing and delivering human-centred policies and services in pursuit of better outcomes for society. Public-sector data sharing generates social and economic benefits estimated between 0.1% and 1.5% of GDP, rising to as much as 4% of GDP when including private-sector data. The extent of these benefits depends on how open, accessible, and well-governed the data is (OECD, 2019[1]). In this context, governments face rising pressure to meet growing citizen expectations, manage complex policy challenges, and operate with greater efficiency and transparency.

Korea is advanced in this area thanks to a robust data policy and sustained government investments over many years, which are now bearing fruit. Korea ranks first among OECD countries in the 2023 OECD Digital Government Index (DGI) assessment of government data maturity (Figure 4.1). This Index evaluates whether governments have enablers such as national data strategies; interoperability frameworks; foundational data infrastructure; and measures to ensure data quality, protection, sharing, and reuse; among other issues.

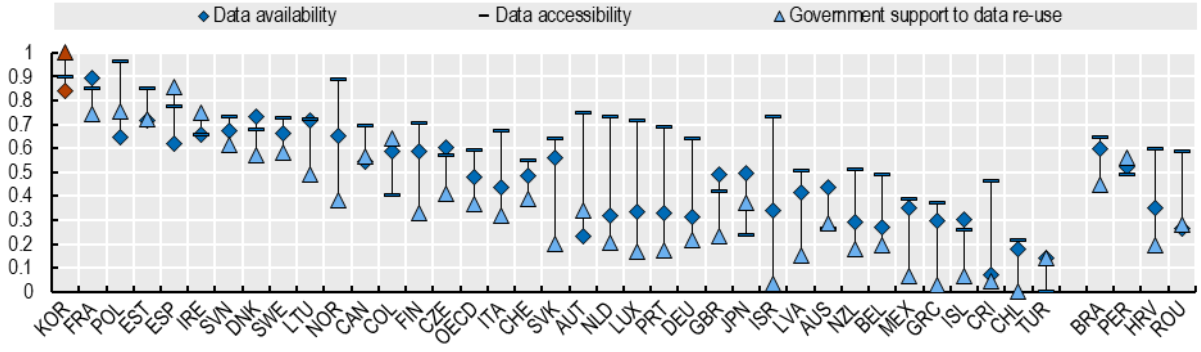
Figure 4.1. Data-driven public sector maturity in Korea, 2023 OECD DGI



Source: (OECD, 2024[2])

Korea also ranks first among OECD countries in open data maturity according to the OECD Open, Useful and Re-usable Data (OURdata) Index (Figure 4.2) (OECD, 2023[3]). The Index measures the maturity of government open-data policies (e.g., the existence of a strategy, requirements, stakeholder engagement, re-use initiatives) and their implementation (i.e., publication of high-value datasets). Korea has strong policies and frameworks for publishing open data and fosters a dynamic, national open-data ecosystem, including active engagement with start-ups and the private sector. Korea stands out from OECD countries for its engagement with the private sector and other data users to promote the re-use of government data for innovation. This is an important factor in Korea's significantly higher performance.

Figure 4.2. Open government data maturity in Korea, 2023 OECD OURdata Index



Source: (OECD, 2023[3])

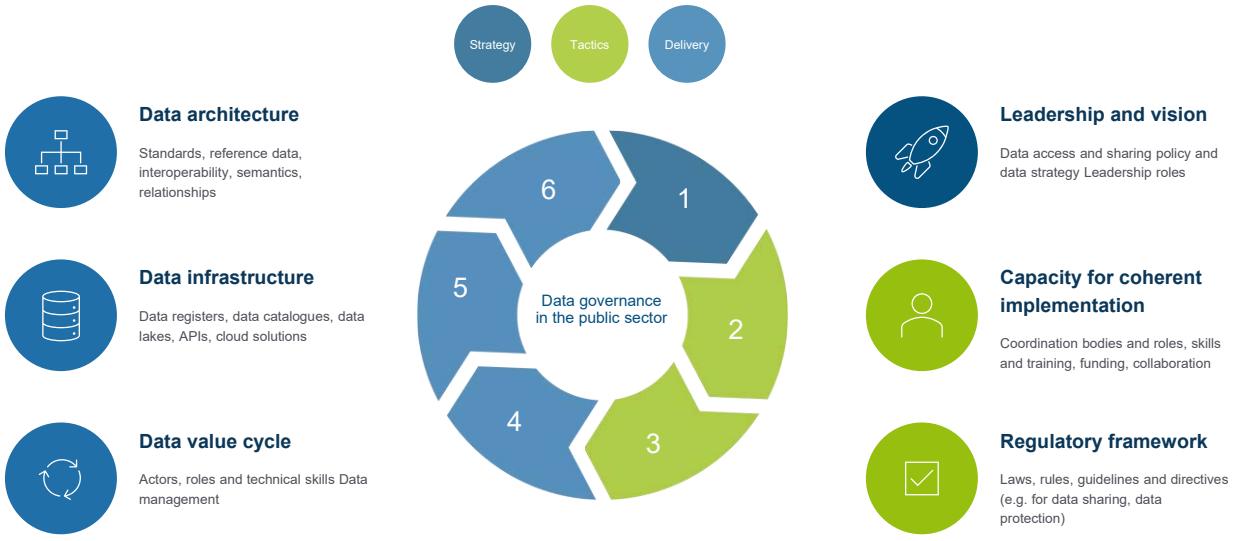
While Korea is recognised internationally for its approach to data in the public sector, this is a rapidly evolving area. Digital technologies, particularly artificial intelligence (AI), transform how data can and should be collected, analysed, and used in the public sector (OECD, 2025[4]; OECD, 2025[5]). At the same time, these advances raise challenges related to data governance, ethical use, privacy, interoperability, and public trust. Korea must keep pace with these developments, and the remainder of the chapter will examine how best to do so.

Data governance in the public sector

Good data governance underpins the public sector's ability to access, share, and use data to its fullest potential. This includes enabling the use of data to develop, implement, and monitor public policies and services, and enhance internal efficiency. Data governance covers the technical, policy, and regulatory frameworks to manage data throughout its lifecycle and across policy domains, such as health, research, public administration, and finance (OECD, 2025[6]).

The OECD's framework for data governance in the public sector identifies six elements of public-sector data governance across the three phases of strategy, tactics, and delivery. Effective data governance begins with leadership and a strategic vision that treats data as an asset. It also requires enabling rules and regulations for data sharing and use, including interoperability and data protection, as well as skilled personnel, spaces for experimentation, and a robust data infrastructure to enable data sharing and integration (OECD, 2019[7]).

Figure 4.3. OECD Framework for Data Governance in the Public Sector



Source: (OECD, 2019[7])

Strategic leadership and vision

Korea shows a strong political commitment to making better use of data, with an active, top-down leadership approach. The Ministry of the Interior and Safety (MOIS) and the National Information Society Agency (NIA) lead and steer the development and implementation of policies for public-sector data access and sharing. This leadership enables a clear, unified vision and aligns government agencies toward common goals. These efforts have shown their effectiveness, with 85% of surveyed public institutions believing that managers and frontline public officials recognise the value of data and are motivated to improve data management (OECD, 2024[8]).

Korea's strategic vision for data use in the public sector is underpinned by a robust legislative framework. Besides the Electronic Government Act, which covers provisions on data sharing, the Act on the Promotion of Data-Based Administration enacted in 2020 provides the legal foundation for fostering a data-driven public sector in Korea. Its objective is to enhance the accountability, responsiveness, and reliability of public institutions while improving quality of life for citizens through objective, evidence-based policy-making and service delivery. The Act defines "data-based administration" as the use of data (whether generated or obtained by public institutions, private companies, or other entities) for policy formulation and decision making (Government of Korea, 2020[9]). It covers the full data lifecycle, including collection, storage, processing, analysis and visualisation, at both central and local government levels.

The Act establishes a long-term, systematised approach to public-sector data governance. It mandates MOIS to develop a Master Plan for Promoting Data-Based Administration every three years. This plan, prepared in consultation with other government bodies and subject to deliberation by a committee, outlines core objectives, medium- to long-term development directions, legal and institutional reforms, sectoral strategies, data infrastructure and interoperability initiatives, capacity-building measures, and funding arrangements. The Act also mandates and empowers MOIS to issue guidelines for sectoral implementation across the public sector and request information from public bodies to inform the plan. In parallel, each central and local government authority must prepare annual implementation plans aligned with the Master Plan. These should include assessments of progress, annual priorities, data-management strategies, co-ordination mechanisms, and workforce-development plans (Government of Korea, 2020[9]).

In addition, the Act on the Promotion of the Provision and Use of Public Data, adopted in 2013 promotes the proactive release and reuse of public-sector data to support citizens' right to access public information and open data, and stimulate innovation and economic growth. It requires public institutions to make data openly available wherever possible and mandates MOIS to work in consultation with the Ministry of Science and ICT on (MSIT)— a national Master Plan on Promotion and Use of Public Data every three years (Government of Korea, 2013[10]). Together, these two Acts establish the legal and policy backbone of Korea's data-governance framework, guiding internal administrative reform and broader efforts to enable data reuse across society.

Finally, the National MyData Innovation Promotion Strategy launched in 2023 by the Personal Information Protection Commission (PIPC) establishes a framework for data portability across sectors. Rooted in amendments to the Personal Information Protection Act (PIPA), the strategy sets out a phased rollout of the MyData system, beginning with ten high-impact sectors such as healthcare and public welfare (Personal Information Protection Commission, 2023[11]). The MyData initiative empowers individuals with greater control over their personal data, enhances interoperability between institutions, and stimulates innovation by enabling safe and seamless data sharing. Key elements of the strategy include promoting strong privacy safeguards, sector-specific implementation plans, and support for intermediary platforms. The initiative is described in detail in later sections of this chapter.

Capacity to implement public-sector data strategy

Co-ordination

Korea ensures coherence in implementing its data strategy across the public sector through a governance framework established under the Act on the Promotion of Data-Based Administration. The Act is implemented by the Open Data Strategy Council, chaired by the Prime Minister. The Council has up to 35 members, combining government officials and external experts, and is supported by MOIS, which also serves as its secretariat. It operates two subcommittees: one on data-based administration and the other on the provision and use of open government data. (OECD, 2025[12]). The Act also requires central government bodies and local governments to prepare annual implementation plans aligned with the national master plan. These must include evaluation metrics, workforce-development strategies, budget management, and proposals for inter-agency data sharing. To support implementation, every public institution designates a data-based administration officer, which the OECD considers a good practice (OECD, 2025[12]).

A similar approach applies under the Act on Promotion of the Provision and Use of Public Data. The Council co-ordinates major open data policies, including the development of master and implementation plans, setting data release priorities, and improving related systems. It is supported by a working subcommittee and expert groups that enable in-depth technical deliberation across varied fields. All levels of government are required to submit annual implementation plans for review and approval by the Council. These must include evaluations of progress, budgetary plans, data-quality measures, and initiatives to promote access to and the use of open data (Government of Korea, 2013[10]; OECD, 2025[12]). The Council also operates the Open Data Mediation Committee that mediates disputes when public institutions refuse or discontinue the provision of open data (OECD, 2025[12]).

Finally, whole-of-government co-ordination of the National MyData Innovation Promotion Strategy is secured through a newly established MyData Task Force and a public-private council. This strategy, while not led by MOIS, complements Korea's broader public-sector data-governance framework given that the MyData initiatives also cover public-sector data sharing and public-private data sharing (OECD, 2025[12]).

Skills and financial resources

Implementing data policies and strategies requires sufficient human and financial resources. This includes access to skilled staff, sustained investment in data infrastructure and tools, and dedicated financing through strategic planning and budgeting processes (OECD, 2019[7]). Without these foundations, data initiatives risk falling short of their objectives.

Korea strengthens data literacy through structured policies and targeted training. Article 24 of Korea's data legislation mandates long-term workforce planning and the development of curricula and qualification standards for data-related roles, led by the MOIS and the MSIT. As explained in Chapter 3, MOIS leads the Korean Digital Civil Servant Competency Framework (Chapter 2), which identifies data-based policy analysis as one of three core skill domains. In parallel, MOIS developed a Guideline for Building Data Capability of Public Institutions, which includes the Data Capability Indicator Framework and a Four-Step Procedure for Enhancing Data Capability covering diagnosis, planning, implementation, and evaluation (OECD, 2025[12]).

In terms of implementation, 54% of public institutions surveyed in Korea believe there are sufficient financial resources to improve data management, including 8% who strongly think so (OECD, 2024[8]). The other 46% think resources are only somewhat sufficient (23%) or not sufficient at all (23%). Yet as discussed in Chapter 2, some public institutions feel constrained by the government annual budget-allocation process, which they see as rigid and impacting their ability to keep pace with data-governance developments. While 54% of public institutions in Korea believe they have sufficient skilled personnel to improve data management, 46% either disagree or find skills only somewhat adequate (OECD, 2024[8]).This indicates an opportunity to design and implement more agile financing mechanisms to address skilling gaps in the public sector in a more efficient way.

These structural initiatives are reinforced by practical online training programmes, such as the 2023 and 2024 Cyber Education offerings, with modules like "Transform Your Report with Just Excel!", "First Steps as a Data Leader", and "Data-Based Administration and Data Literacy", as well as the Public Data Quality Management Training Platform. Despite these efforts, data literacy remains an area for development. There is a need to deepen and broaden data skills across all levels of government to embed data-informed decision-making in everyday public administration. Strengthening practical, hands-on capabilities and promoting a culture that values and uses data are critical to sustaining progress. This includes more targeted training in data-sharing and privacy-enhancing technologies, currently seen as barriers to more effective data use in government (OECD, 2025[12]).

Rules, guidelines, and standards for data sharing and use

As governments increase reliance on data to deliver integrated services and support evidence-based policy-making, legal frameworks must enable the secure and efficient sharing of information across agencies, and the straightforward provision of data by citizens. Digital-ready regulation is key to ensuring that data can flow while maintaining high standards of privacy, security, and accountability. As discussed earlier, the primary laws in Korea affecting data sharing and use include the:

- Electronic Government Act
- Personal Information Protection Act (PIPA)
- Act on the Promotion of Data-Based Administration
- Act on the Promotion of Provision and Use of Public Data

Meanwhile, some laws have not yet been updated to facilitate smooth data flows across the public sector. The Enforcement Decree of the Certification Seal Imprint Act still requires the storage, use, or sharing of physical documents and handwritten signatures, which creates unnecessary friction and hampers data sharing and seamless public-service delivery (Government of Korea, 2016[13]). To simplify administrative

procedures and cut red tape, amendments are underway that will allow the issuance of electronic seal certificates through the GOV24 platform.

To further reduce the unnecessary use of physical documents, four bills were submitted to the National Assembly to clarify that electronic documents are legally recognised as originals wherever originals are required to be stored or verified. In addition, 23 Presidential decrees and sub-decrees were promulgated, and further legal and institutional reforms are planned. These include a legal revision to allow public agencies to verify bank account information electronically, eliminating the requirement for applicants to submit physical copies of passbooks when applying for government benefits ((n.a.), 2025[14]).

Lastly, as explained earlier, recent amendments to the PIPA make it more difficult for public sector bodies to exchange and match datasets, particularly when doing so requires the national identification number. Public agencies now need to invest more in anonymisation or pseudonymisation techniques, legal-compliance efforts, and secure infrastructure. These challenges could be mitigated through more hands-on training and support for public servants (OECD, 2024[15]).

Data infrastructure and architecture

Delivering value throughout government data requires reliable infrastructure, robust architecture, and coherent governance to ensure data flows seamlessly across all phases, from collection, to processing, sharing, and use and reuse (OECD, 2019[7]). Korea's evolving approach to digital government, especially its transition to cloud-native infrastructure and its strengthening of foundational registries and Application Programming Interface (API) management demonstrate progress in creating an enabling infrastructure for a data-driven public sector.

Public institutions in Korea report that they are satisfied with the existing data infrastructure (OECD, 2024[8]). However, a main barrier to data use in the public sector is the lack of information about available datasets. Thus, improvements to data infrastructure could make datasets more easily findable and available for reuse. This could include the development of data catalogues that list datasets available for internal sharing and reuse only in the public sector, even if not accessible to the public. One example is the United States, where federal agencies are required to develop, maintain, and publish data-asset inventories (Box 4.1).

Box 4.1 Federal Agency Data Inventories in the United States

In the United States, federal agencies are required to maintain and publish comprehensive data inventories as part of a broader effort to promote transparency, improve data management, and enable data reuse. These requirements are set out in the Foundations for Evidence-Based Policymaking Act of 2018 ("Evidence Act") and reinforced by OMB Memorandum M-19-23 on the Federal Data Strategy.

Under the Evidence Act, each federal agency must develop and maintain a comprehensive data inventory that accounts for all data assets created, collected, or under the control or direction of the agency. Agencies must make their data inventories available to the public "to the extent practicable", through the Data.gov platform, with sensitive or restricted-access data flagged appropriately.

Implementation practices include:

- **Designation of Chief Data Officers (CDOs) –** agencies appoint a CDO responsible for data governance and compliance with inventory requirements
- **Use of metadata standards –** data assets are described using standard metadata schemas to ensure consistency and interoperability
- **Incremental publication –** agencies prioritise high-value datasets for early publication while continuing to expand coverage over time

- **Cataloging public and non-public data –** inventories distinguish between datasets that are publicly available and those that are restricted due to privacy, security, or other considerations

The U.S. approach fosters a culture of data stewardship across government while enabling researchers, developers, and the public to find and access federal data more easily.

Source: (Federal Chief Data Officer's Council, 2022[16]); (Congress.gov, 2019[17]); (Office of Management and Budget, 2019[18])

Korea has an integrated, cloud-based infrastructure through the National Information Resources Service (NIRS), which operates shared government data-centres and offers cloud services via the Government-Wide Cloud (G-Cloud) system (National Information Resources Service, 2025[19]; OECD, 2025[12]). This infrastructure is backed by a legal and strategic framework, including Article 54-2 of the Electronic Government Act and the 4th Master Plan for Cloud Computing, which mandates cloud adoption across the public sector. The Cloud-Native Transition Plan and accompanying user guides ensure that administrative and public institutions have practical guidance to migrate their services and information systems (Government of Korea, 2023[20]).

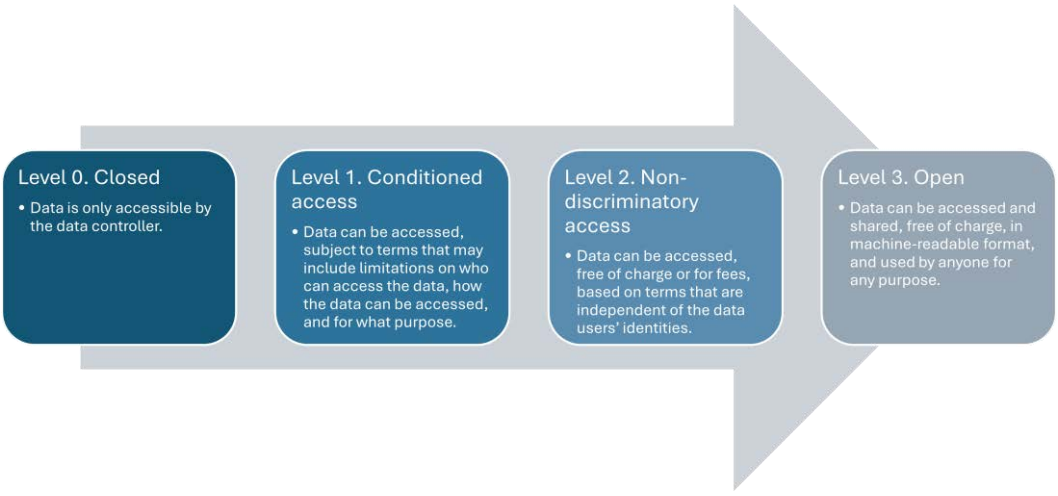
In addition, Korea's public-sector API ecosystem demonstrates advanced segmentation aligned with user needs. Open APIs are available through the national open-data portal Data.go.kr, while internal administrative data is exchanged via the Public Information Sharing System (see below). The GOV24 system supports inter-agency integration, and a unified platform enables public-private digital-service integration (Chapter 6). This structured approach to API management supports secure, reliable, and efficient data flows across government and with external actors.

At the architectural level, Korea is strengthening its base registry framework through Article 44-2 of the Electronic Government Act and the Government Master Data Management System (GMD). These initiatives aim for a consistent definition and use of master data across ministries and agencies, in line with OECD countries such as Norway and Sweden (OECD, 2024[21]; OECD, 2024[22]).

Government data access and sharing in practice

The OECD encourages data access and sharing arrangements that ensure public sector data are as open as possible to maximise their benefits, and as closed as necessary to protect public and private interests, including those related to national security, law enforcement, privacy and personal data-protection, and intellectual property rights (Figure 4.4) (OECD, 2024[23]; OECD, 2021[24]). The term "data access and sharing arrangements" refers to institutional, regulatory, policy, legal, and contractual frameworks that establish the conditions to access and share data (OECD, 2021[24]).

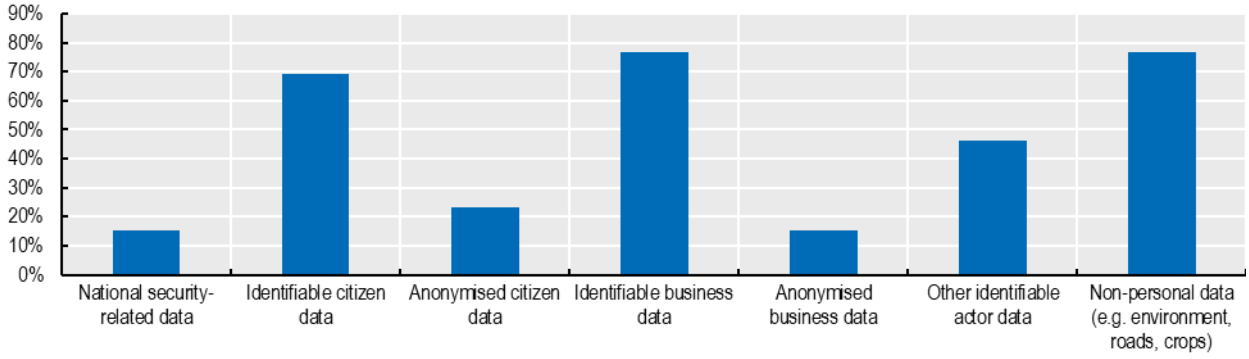
Figure 4.4. Degrees of data openness



Source: Adapted from (OECD, 2019[98]; OECD, 2021[117])

Most public institutions surveyed in Korea collect, process, and reuse identifiable data on citizens (69%) and businesses (77%), highlighting the public sector's role as a service provider (Figure 4.6) (OECD, 2024[8]). A similar share (77%) process non-personal data, such as environmental information, reflecting the range of policy areas involved. In contrast, anonymised data on citizens and businesses or data related to national security are used less frequently.

Figure 4.5. Types of data collected, processed, and reused by public institutions in Korea



Source: (OECD, 2024[8])

The main sources of data processed by Korean public institutions are internal: 100% of institutions surveyed rely on their own organisational data, 92% access data from base registries (such as the business or resident register), and 84% source data from other public sector institutions within the same policy area (OECD, 2024[8]). Between 44% and 55% of institutions reported using research data, citizen self-reported data, or data from public institutions outside their immediate policy domain. Less than a quarter of institutions rely primarily on external data sources, such as private-sector organisations, non-governmental organisations, media, citizen-extracted data (e.g., video surveillance), or data from international organisations.

Sharing data in the public sector: the 'once-only' principle

Data sharing is important for governments to provide seamless services and make informed policy decisions. One objective is the 'once-only' principle of making sure that individuals and businesses should have to provide their data to the government only once (OECD, 2024[23]; OECD, 2024[22]). To achieve this, public institutions need to be able to access and share data with each other securely and responsibly. This kind of data sharing should follow rules that define *who* can access data, *how* it can be used, and *for what purposes* (OECD, 2021[24]). These safeguards are important when handling sensitive data such as personal information (e.g., health records, personal-identification data, tax data), credentials (e.g., driving licences, work permits), or information critical to public safety and national security. Controlled data sharing often takes place between government agencies or trusted service providers in accordance with national laws on privacy, security, and confidentiality. The goal is to protect individuals' rights while making sure the data is used to deliver services in line with national legislation.

The public-sector MyData Initiative established in 2019 and led by the National Information Society Agency (NIA) lets individuals request that their personal data held by public institutions be shared with other public bodies with consent for the purpose of simplifying access to and interaction with public services (Ministry of the Interior and Safety, 2025[25]). The Personal Information Protection Act (PIPA) amended in 2023 provides the legal basis to implement the system across sectors, including the public sector and the financial sector. Currently, data from over 139 types of public services, including proof of birth or family relationships, tax records, and military service documentation can be shared automatically through APIs with public agencies or essential services providers to support public-service delivery and reduce the administrative burden.

Government bodies in Korea share data internally through the Public Information Sharing System operated by MOIS (OECD, 2025[12]). Under the Electronic Government Act, agencies must use this system unless there is justifiable reason not to. According to the Act, ministries and agencies must share their administrative data with other agencies that require it. Where reliable administrative information is available from another agency, the same information should not be collected separately (Government of Korea, 2022[26]). The Act allows sharing and joint use of administrative information required for civil complaints, administrative tasks, or legally mandated duties, excluding sensitive or confidential data such as national security information. Agencies must ensure that shared data is accurate, up-to-date, and used only for specific, necessary purposes. Applications for joint use must be approved by MOIS in consultation with the data-holding agency. If the data involves personal information, consent must be obtained from the data subject, and consultations should be held with PIPC to ensure compliance with privacy and data-protection regulations (Government of Korea, 2022[26]). The Public Information Sharing System has its own website, www.share.go.kr, where institutions and citizens can read about the system and download monthly statistics about data-sharing activities.

Despite progress to enable safe and secure data sharing across agencies, several public-sector institutions in Korea raised concerns during the OECD fact-finding mission about increasing challenges in sharing and combining datasets that contain personal information. Specifically, such data can only be matched and combined using the Resident Registration Number (RRN), which is tightly regulated. Recent legislative amendments introduced stricter requirements, mandating that shared data must be anonymised or pseudonymised. While these measures strengthen data protection and privacy for good reasons, they also create challenges for public institutions that now need more support and guidance to understand how and what data they can combine while ensuring regulatory compliance, as well as more support to apply privacy-enhancing technologies (PET), including anonymisation or pseudonymisation (OECD, 2024[15]). The Korean government could invest in more tailored support and dedicate resources and mechanisms to strengthening public institutions' ability to share and use data to its potential, while complying with regulations.

Sharing government data with the broader ecosystem

Sharing government data with external actors – whether through open data initiatives, controlled access frameworks, or data partnerships – can generate substantial economic value (OECD, 2021[24]). A 2023 estimate by the European Commission valued the global data economy at approximately EUR 1.5 trillion in 2021, with projections reaching EUR 2.6 trillion by 2025 (European Commission, 2023[27]).

The OECD estimates that the use and reuse of public-sector data can contribute between 0.1% and 1.5% of GDP (OECD, 2019[1]). In these cases, data access can be shared either on non-discriminatory terms (meaning anyone can access and use the data regardless of who they are) or with specific organisations for specific purposes in a secure, controlled environment. An example of the first is the European Data Spaces, which are sector-specific frameworks that enable the secure, trustworthy, and interoperable sharing and use of data across the EU in areas such as mobility, public administration and language. The data spaces have fair, transparent, proportionate, and non-discriminatory access rules (OECD, 2024[23]; European Commission, 2025[28]). As part of the MyData Initiative, Korean public institutions can share citizens' data directly with essential service providers such as banks, with the consent of the data subjects and for specified reasons, such as to open a bank account (Government of Korea, 2022[26]).

Another way to share government data is as open data, where the data is available for anyone to access, use, and reuse free of charge in machine-readable formats and subject only to minimal conditions, such as citing the source (OECD, 2024[23]). Open data can help businesses, in particular micro-, small-, and medium-sized enterprises (MSMEs), access data critical to developing new services, support academic research, and enable civil society to hold governments accountable (OECD, 2023[3]). One example in Korea is the National Priority Data Releasing Project led by MOIS (Box 4.2). It focuses on making high-value government datasets available to support innovation (OECD, 2024[23]).

Box 4.2. National Priority Data Releasing Project

The National Priority Data Releasing Project is a MOIS initiative to support dissemination of impactful open data. From the outset, the project identified data for release based on private-sector demand through comprehensive surveys to uncover new and relevant data sources. To ensure effective data dissemination, a collaborative body was established comprising citizens, public institutions, data companies, experts, and other stakeholders. This collaboration focuses on meeting the private sector's needs and demands.

The initiative made significant strides in improving citizens' quality of life by releasing open data related to everyday concerns such as real estate, weather, and transportation. This data is also easily accessible to companies for use in private applications and to enhance public services.

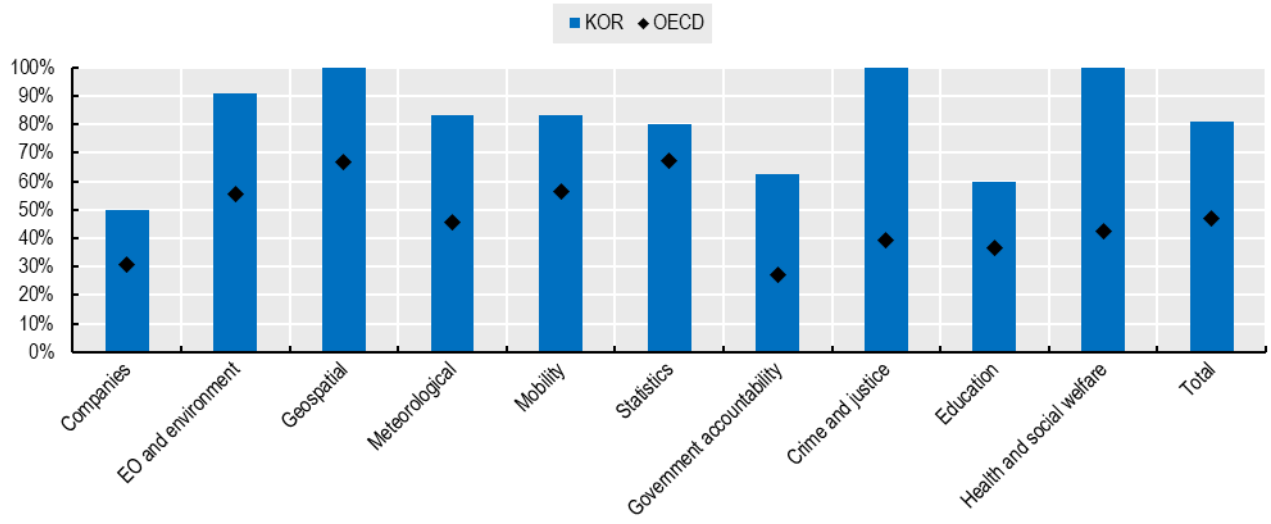
To date, over 11,000 Open APIs and 217 datasets of National Priority Data are available through www.data.go.kr. Further, more than 3,100 known mobile applications and web services leveraging this data were developed and are in operation.

Since 2013, MOIS has operated the Open Data Portal (www.data.go.kr) to enable citizens to conveniently use public data, with 103,000 data provided by 1,100 institutions including central, local, and public entities. Areas with the highest disclosure rate include public administration (14.9%), culture & tourism (12.1%), industry employment (9.3%), transport & logistics (8.3%), environment & weather (7.8%).

Source: (OECD, 2024[23])

According to OECD research, Korea provides 81% of high-value government datasets as open data, well above the 47% OECD average (Figure 4.7) (OECD, 2023[3]). This list, based on the original G8 Open Data Charter, includes ten categories such as company data, meteorology, geospatial information, statistics, environment, health, education, and government finances and accountability (which covers public procurement, budgets, spending, and election data, among others). Korea performs above the OECD average in all ten categories, highlighting its commitment to open data and data prioritisation (OECD, 2023[3]; OECD, 2022[29]). Most of these data are provided in accessible formats using methods such as APIs, with clear, standardised descriptions, simplifying data discovery and re-use (OECD, 2023[3]).

Figure 4.6. Availability of government datasets as open data



Source: (OECD, 2022[29]; OECD, 2023[3])

Accessing external data for use in the public sector

Accessing non-public-sector data is important to inform policies and deliver public services. As discussed, some Korean public-sector institutions make use of external data, though to a lesser extent than data from within the public sector. Under Articles 14 and 15 of the Electronic Government Act, public agencies in Korea may request data from private companies, organisations, or individuals to support data-driven government operations These requests are made through contracts or formal agreements. MOIS facilitates data-sharing partnerships with the private sector and signs agreements on behalf of other government bodies when needed. The procedures for these agreements are laid out in a Presidential Decree. Once a government agency receives private-sector data, it is only allowed to use it for the agreed purpose and may not share it with third parties. When the data is no longer needed – whether the purpose was fulfilled or the retention period expired – it must be securely destroyed with steps taken to prevent recovery. Agencies are required to have strong security measures to protect the data from tampering, loss, or unauthorised access (Government of Korea, 2022[26]).

Using data to unlock value for citizens and businesses

The use of data across Korea's public-sector institutions is extensive. All thirteen of the institutions surveyed reported using data to support evidence-based policy-making (OECD, 2024[8]). However, there is room for growth in applying data to the design of public services (46%) or developing a deeper

understanding of citizen needs (46%). Also, fewer organisations use data to predict outcomes (38%) or explore alternative future scenarios (38%).

While the use of data to improve public services in general is comprehensive (100%), more-targeted use remains limited (OECD, 2024[8]). Only 31% of institutions use data to free-up government capacity, and just 38% use it to improve crisis response or public engagement, meaning there is an opportunity to promote data use in these areas. MOIS shares structured and unstructured disaster- and safety-management data through the Public Disaster and Safety Portal (Ministry of the Interior and Safety, 2025[30]). This lets public servants and other users easily find and analyse information. The platform is used to develop and implement predictive models for disaster response. These support the identification and removal of wildfire risk factors, real-time detection of river flooding, prevention of fire outbreaks, and forecasting of urban flood risks.

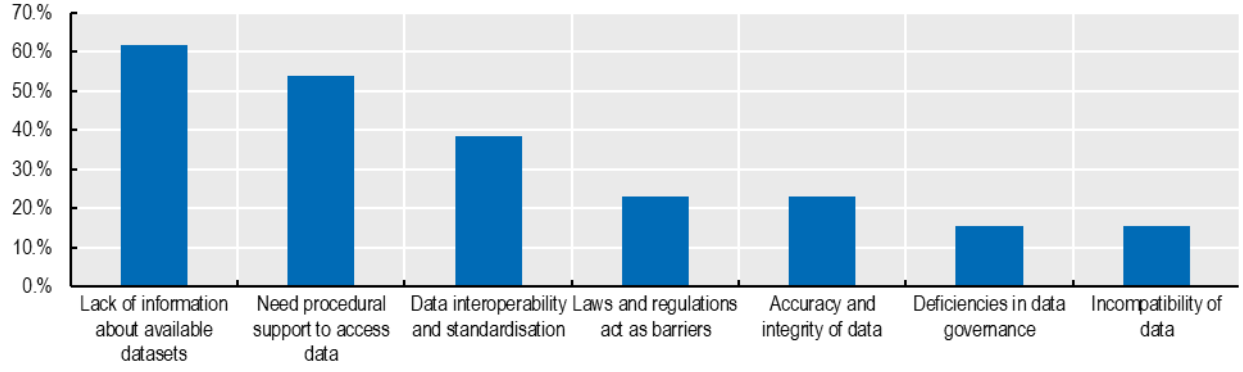
When evaluating and monitoring government interventions, public-sector institutions focus on tracking operational performance (92%), with fewer using data to evaluate policy outcomes (31%) or demonstrate return on investment (8%) (OECD, 2024[8]). Notably, no institutions reported using data to ensure accountability through audit trails. Perceived barriers to using data among public-sector institutions in Korea could explain why data is not used to its full potential. According to the survey (Figure 4.7), the main perceived barriers are:

1. Lack of information about available data sets (62% of public-sector institutions say this is one of their top three barriers)
2. Need for procedural support to access data (54%)
3. Data interoperability and standardisation (38%)

On a positive note, relatively few organisations see current laws and regulations, data governance, or the accuracy, integrity and incompatibility of data as barriers to its use.

Figure 4.7. Perceived barriers to use of data by public-sector institutions

% of 13 institutions that ranked the issue as one of their top 3 barriers



Source: OECD (2024[8])

Data and trust

In Korea, fewer people, on average, believe that public agencies would use their personal data appropriately (Figure 4.8) (OECD, 2024[31]). The government is currently taking steps to strengthen public

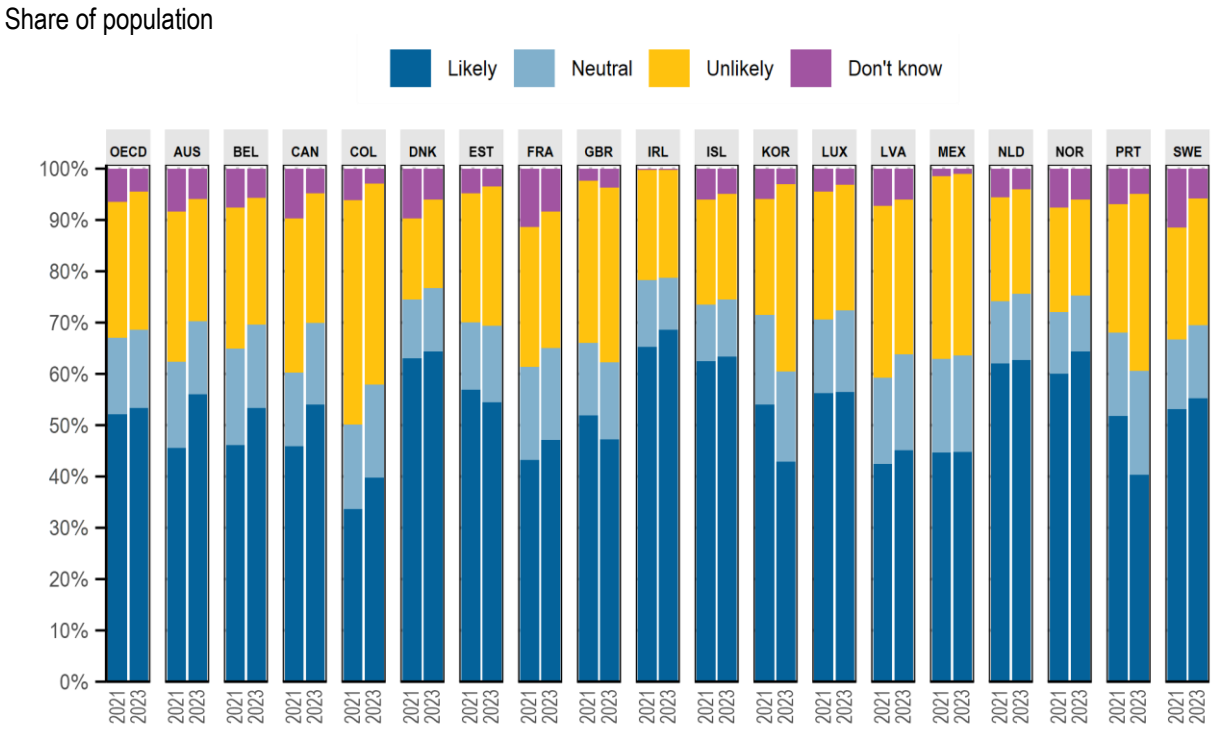
confidence, including prioritising privacy and consent reforms and mechanisms, transparency, and digital security in data practices.

Importantly, in recent years, Korea strengthened its data-protection framework by amending the PIPA and laws regulating the use of the national identification number. These reforms are part of an effort to align with global privacy standards, enhance data security, and reinforce individual rights. Key amendments include:

- **Stricter conditions for using the national resident number (national ID number)**, which may no longer be used freely across government agencies for data matching unless specific legal grounds exist
- **Expansion of anonymisation and pseudonymisation requirements**, especially when personal data is shared between institutions. These requirements are now more strictly enforced, limiting how identifiable information can be processed
- **Increased oversight and accountability**, with the PIPC playing a stronger enforcement role
- **Enhanced individual rights**, such as the right to data portability (via MyData) and stricter consent requirements

While these reforms align with OECD practices, they also reinforce, as noted earlier, the need to support public servants in meeting new requirements and ensuring that data is shared to its full potential in a secure, privacy-protecting, and efficient manner.

Figure 4.8. Confidence in public agencies' use of personal data



Note: The figure presents in-country distribution of responses to the question "If you shared your personal data with a public agency/office/department, how likely do you think it is that it would be used for legitimate purposes only?". The "likely" proportion is the aggregation of responses from 6-10 on the scale; "neutral" is equal to a response of 5; "unlikely" is the aggregation of responses from 0-4; and "Don't know" was a separate answer choice. "OECD" presents the unweighted average of responses across countries.
Source: (OECD, 2024[31])

Korea's digital security priorities are anchored by the 2024 National Cybersecurity Strategy, complemented by the National Master Plan for Cybersecurity, which focuses on expanding technical capacity, enhancing inter-agency co-ordination on cybersecurity threats, and reinforcing protection of critical infrastructure (OECD, 2025[12]).

Institutional oversight for digital security is led by the National Intelligence Service (NIS), which manages public-sector cybersecurity through regulatory and operational functions. The NIS oversees information sharing, threat assessments, incident response, and the technical evaluation of ICT systems, as well as ensured co-ordination of Cyber Security Centres within government bodies (OECD, 2025[12]). Legal instruments such as the Regulations on Cybersecurity Services (Government of Korea, 2013[32]) and PIPA ensure a structured governance framework, outlining clear responsibilities of public sector institutions for incident reporting, data protection, and inter-agency co-operation.

Korea performs above the world average in de facto and de jure government data transparency, as measured by the 2024 European Research Centre for Anti-Corruption and State-Building (ERCAS) Transparency Index (Alina, Mungiu-Pippidi, 2024[33]). Korea's strength in open data shows that the government has invested considerable efforts in ensuring that citizens and businesses have easy access to data about government decisions and data underlying those decisions. Korea could still increase transparency about the use of algorithms and AI inside the public sector, including the data they use or are trained on (Chapter 5).

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5 Leveraging AI for government transformation

This chapter examines how Korea leverages artificial intelligence (AI) to enhance government productivity, responsiveness, and accountability. It identifies opportunities for reforms to help Korea meet its goal of being a global leader in public sector AI developments. Particular attention is paid to enablers such as data, digital infrastructure, a skilled workforce, guardrails, and stakeholder engagement.

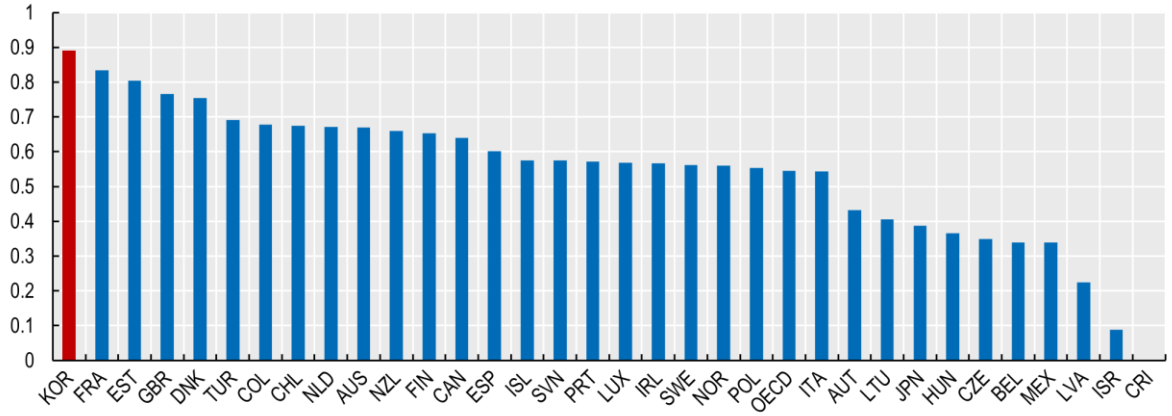
Introduction

Use of artificial intelligence (AI) in the public sector can enhance the efficiency of internal operations, the effectiveness of policy-making, the responsiveness of public services, and the transparency and accountability of government. However, governments face unique contexts and challenges that can hinder the uptake of AI, including skills shortages, risk aversion, legacy systems, data availability, and difficulty prioritising investments in AI in a fiscally constrained environment.

Korea is a global frontrunner in AI. According to the 2023 OECD Digital Government Index (DGI), Korea scores 0.89 out of 1.00 in government AI-maturity, well above the OECD average of 0.53 (Figure 5.1). Korea ranks first among the 33 OECD countries assessed, followed by France, Estonia, the United Kingdom, and Denmark (OECD, 2022[1]). The government AI-maturity component of the DGI assesses how well central or federal governments are prepared to use AI strategically and responsibly in the public sector. It measures the presence and development of key enablers, such as national public-sector AI strategies, the inclusiveness of their design (such as stakeholder collaboration and public consultation), the existence of certain guardrails such as oversight bodies and monitoring, and the implementation of transparency instruments for algorithm use (OECD, 2025[2]). It also evaluates the extent to which AI is used to improve government operations, policy-making, and public services.

While Korea is off to a strong start, there remain opportunities to refine and advance its approach to AI in the public sector. As AI technologies continue to evolve and their use in government becomes more widespread, ensuring a coherent, transparent, and accountable framework will be critical (OECD, 2025[3])This includes strengthening ethical oversight, expanding transparency mechanisms, and increasing across sectors.

Figure 5.1. Government AI-maturity in Korea, 2023 OECD DGI



Source: (OECD, 2022[1])

The OECD (2025[3]) has published the flagship report *Governing with Artificial Intelligence: The State of Play and Way Forward in Core Government Functions* that explores the use of AI in government. Its findings are based on in-depth research of AI in 11 functions of government across 200 use cases. The report looks at governments as developers and users of AI, rather than solely as regulators and funders. Through years of research on the topic and working with governments around the world, the OECD identified three opportunities for government use of AI:

- **Enhanced government productivity,** using AI to support more-efficient internal operations and more-effective policy design, decision-making processes, and service delivery
- **Improved responsiveness and inclusiveness,** using AI to design policies and deliver services that better meet needs of citizens, businesses, and communities and to enhance public-participation mechanisms
- **Stronger government accountability,** using AI to enhance oversight and transparency, and empower independent oversight institutions, such as through real-time monitoring

Based on this analysis, the OECD developed the **OECD Framework for Trustworthy AI in Government**, with three pillars that governments should seek to put in place, which will support implementation of the OECD AI principles (figure 5.2):

- **Strengthening enablers** to overcome implementation challenges and deliver expected results
- **Establishing guardrails** to anticipate and manage associated risks
- **Engagement with stakeholders,** including the public, to develop AI systems that take the needs of all actors into account

Figure 5.2. OECD Framework for Trustworthy AI in Government

Source: OECD (2025[3]) *Governing with Artificial Intelligence: The state of play and way forward in core government functions*

Use of AI in government

Institutions across Korea's public sector demonstrate strong interest in leveraging AI and offer several examples of AI development and deployment. Among thirteen public-sector institutions surveyed, eight use AI to improve internal operations, and the same proportion apply AI to enhance public service delivery and policy-making (OECD, 2024[4]). However, none reported using AI to support the core government functions of financial management or procurement, or to strengthen government accountability through measures like fraud prevention and internal controls.

Boosting government productivity

Public-sector institutions in Korea increasingly leverage AI to enhance internal processes and boost productivity. These efforts focus on reducing administrative burdens, improving decision-making, and increasing the efficiency of routine tasks across government functions. The AI Support System for Work Supervisors uses generative AI, predictive analytics, and interaction-support tools to assist labour inspectors. The system helps summarise and analyse statements from employers and employees in labour complaints, allowing inspectors to quickly identify important issues. It thus improves the productivity of supervisors, strengthens their accountability, and ensures better protection for vulnerable workers through more-effective enforcement of labour laws (OECD, 2025[2]).

Another initiative is an AI-based patent examination support service. This service, built on large language model (LLM)-based generative AI, helps patent examiners manage growing volumes of applications. It includes an interactive Examination Chatbot that provides legal and procedural guidance, helps identify grounds for rejection, and tracks the entire examination process. It also facilitates the search for prior or similar patents, enabling higher-quality and more-efficient examinations (OECD, 2025[2]).

Increasing the responsiveness and effectiveness of public policies and services

Korea uses AI to make public policies and services more responsive and inclusive, enhancing citizens' safety, access to information, and participation in public administration. The AI-driven Flood Safety Network is a joint initiative between the Ministry of Environment and the Ministry of Science and ICT(MSIT), that won Korea's Best Government Innovation award in 2024 (The Korea Herald, 2024[5]). The system uses AI to improve flood-prediction and -response capabilities across the country. Real-time analysis of data from over 670 observation stations enables swift detection of flood risks, while integration with navigation apps provide immediate alerts to drivers in flood-prone areas. The system's coverage expanded from 75 to 223 monitoring points, including smaller streams and tributaries, and now includes urban flood forecasting in cities like Gwangju, Pohang, and Changwon. Developed with support from the Korea Institute of Civil Engineering and Building Technology, the system uses LSTM models to predict river levels with greater accuracy, improving the government's ability to protect vulnerable populations during extreme weather events.

Korea is also advancing AI-powered policy intelligence to design smarter and more-inclusive public policies. Through integration of machine learning, data visualisations, and virtual simulation, the government uses large-scale socioeconomic data to support the proposal and validation of national fiscal and public policies (OECD, 2025[2]). This AI-based framework is recognised internationally, with its data-management interface adopted as a global standard. The project includes collaboration with the International Institute for Applied Systems Analysis (IIASA) to address global issues like climate change and aging populations, and features the development of a Multi-Agent-Based Modeling (MABM) system that simulates behaviours and interactions in economic and social systems to inform policy decisions.

For AI in service delivery, Korea introduced a Generative-AI-based Co-Pilot Service tailored to architectural law, administration, and civil complaints (OECD, 2025[2]). This LLM-based system improves access to legal and administrative information, especially in specialised domains like military architecture and construction. It includes AI modules for administration (handling permits and approvals), design (providing regulatory information), and public complaints (offering legal interpretations and case access). More examples of AI in public-service design and delivery can be found in Chapter 6.

Strengthening government accountability

While none of the thirteen institutions surveyed reported using AI in fraud detection, oversight or impact evaluation, initiatives are found elsewhere in the Korean public sector. For example, the e-RFP Assistance

System applies natural language processing, generative AI, and machine-learning-based error diagnostics to streamline public procurement processes (OECD, 2025[2]). By analysing large volumes of procurement data and learning from accumulated public software procurement information, the system successfully reduced document preparation time by 70% while maintaining 99.9% accuracy in regulatory compliance. Developed as part of a KRW 1.7 billion digital transformation project, this tool demonstrates the productivity gains AI can deliver in public administrative processes and detecting anomalies in procurement processes.

Enablers of trustworthy AI in government

The adoption of AI in Korea's public administration is enabled by a range of conditions that create the foundation for effective and responsible use. These include institutional arrangements for policy co-ordination and governance, investments in digital infrastructure and data availability, efforts to strengthen public sector skills and capacity, and mechanisms for funding and procurement. They reflect Korea's strategic approach to integrating AI into government operations while addressing challenges related to data protection, interoperability, and evolving technology.

Policy and governance

The main policy instrument for AI in government in Korea, beyond the Basic AI Act (Box 5.4) and Electronic Government Act, is the *National AI Strategy Policy Direction*, released in 2024. Its goal is to position Korea among the world's top-three AI leaders. The strategy is built around four flagship AI projects: a 15-fold expansion of GPU capacity to exceed 2 exaflops by 2030 through the establishment of a National AI Computing Center; mobilising KRW 65 trillion in private AI investments between 2024 and 2027; enabling an AI-driven transformation across society and the economy (with target adoption rates of 70 % in industry and 95 % in the public sector by 2030); and reinforcing AI safety, security, and global governance frameworks including the enactment of the AI Basic Act and the launch of a national AI Safety Research Center (National Artificial Intelligence Commission, 2024[6]).

In June 2025, the new government designated AI as the top national priority and adopted the country's first AI Future Planning Chief in the Presidential Office. Two months after, the government announced a new economic growth strategy that set a target of 3% potential growth by applying AI across all sectors. Fifteen leading projects were identified across four areas: businesses, the public sector, citizens, and infrastructure. In the public sector, three priority projects will focus on using AI to enhance welfare and employment services, tax management, and new drug reviews (Ministry of Strategy and Finance, 2025[7]; Korea.kr, 2025[8]).

The responsibility for governing the use of AI in Korea is shared between the National AI Committee, the Ministry of the Interior and Safety (MOIS), the MSIT, the National Information Society Agency (NIA), the National Intelligence Service (NIS), the Personal Information Protection Commission (PIPC), the Korea Information Society Development Institute (KISDI), and the National IT Industry Promotion Agency (NIPA) (OECD, 2025[2]).

The MOIS, based on the Electronic Government Act, oversees government-wide digital transformation efforts, including AI adoption. It does so by designing AI policies for the public sector and promote their implementation by central ministries, agencies and local governments. For example, they are currently revising the Act on the Promotion of Data-Based Administration to enable data use for AI adoption, and leading the rollout of a "Pan-Government AI Common Infrastructure" (OECD, 2025[2]).

Digital infrastructure and data

Korea invests in digital infrastructure to support growing use of AI in government. The National AI Strategy Policy Direction focuses on developing advanced infrastructure and making large-scale computing power available, also for public institutions. This includes support for high-performance computing and hardware accelerators to train large AI models, and the rollout of the Pan-Government AI Common Infrastructure (National Artificial Intelligence Commission, 2024[6]). In the fourth national cloud strategy, the government promotes widespread adoption of cloud technologies in the public sector, and commits to create large-scale, national, AI computing centres (Box 5.1) to expand access to powerful training resources for public institutions (Ministry of Science and ICT, 2025[9]).

Box 5.1. Shared data centres and government cloud in Korea

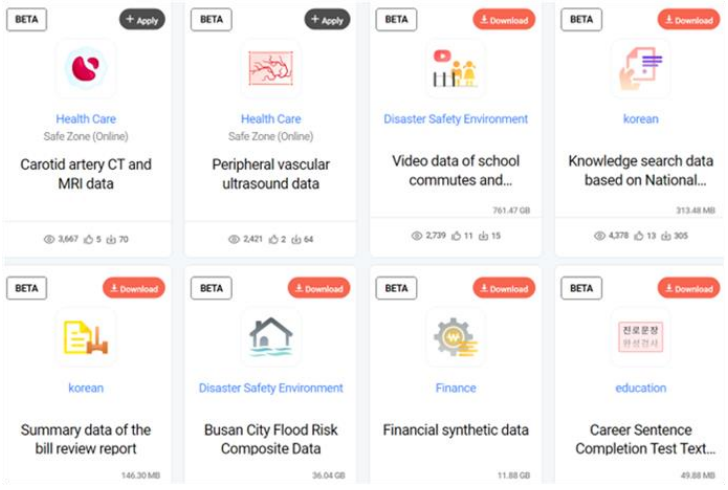
Korea's National Information Resources Service (NIRS) works with MOIS to upgrade hardware, networks, and management tools to modernise Korea's technology and enable migration to the cloud. A critical part of this is the construction of government data-centres, which can ensure compliance with government requirements, cost-efficiencies through a reduced technology footprint, and job creation and local investment in target areas.

These data centres are available to the government's main partners in the private sector, which helps ensure that companies holding or handling sensitive data do so in an environment that meets the government's requirements for security, back-up, and redundancy, among others. With measures around sustainability and renewable energy, the data centres reduce the environmental impact of Korea's digital government, particularly with greater use of AI solutions.

Source: (OECD, 2024[10])

Korea recognises data recognised as an enabler of AI strategies and plans including the development of national-scale AI data resources that emphasise Korean-language and public domain data. A notable example is the AI Hub website, developed by the MSIT and the NIA, which features an AI Data Finder tool (Figure 5.3). The Hub provides access to AI training data through the Hyper Scale AI Expansion Ecosystem Project, and to datasets held by domestic and international institutions and companies. It includes 14 categories of data, such as Korean language, video and images, healthcare, law, and disaster and safety.

Figure 5.3. AI Data Finder tool



Source: (Ministry of Science and ICT; National Information Society Agency, 2025[11])

In addition, Korea is strengthening tools to manage and use data for AI. It is improving data-centre capacity and efficiency, supporting the growth of the AI data-centre industry, and building systems to ensure data is interoperable and of high quality. The open-data portal offers a National Data Map to integrate datasets, while version 3.5 of the national AI training-data quality guidelines standardises how to create and manage training data (National Information Society Agency, 2025[12]). The fourth cloud plan for 2025-27, named the "AI Era Cloud Strategy"," highlights the importance of data interoperability, aiming to make it easier for government services and systems to share and use data (Ministry of Science and ICT, 2025[9]).

To ensure data is used responsibly and in compliance with regulatory requirements when training AI in the public sector, Korea has a policy in place to govern the use of sensitive data by designating "Data Safe Zones." The Data Industry Act provides the basis for the Minister of Science and ICT (MSIT) and the heads of relevant central administrative agencies to establish criteria for designation based on the "Guidelines for Designation and Operation of Data Safe Zones" and the "Security Measures for Data Safe Zones". A zone that meets these criteria is designated as a secure area for data analysis. Within this designated area, sensitive, non-disclosed data is protected, while allowing the use of data necessary for AI development (Ministry of Science and ICT, 2025[13]).

Moreover, PIPC is developing guidance with the Public-Private Policy Council to direct public institutions on how best to treat personal data in relation to the use of AI systems (OECD, 2025[2]), including on;

- Using atypical data, including biometric and image-based data
- Using data already available online to train AI models (Box.5.2)
- Privacy of data collected from portable imaging devices (e.g., drones, robots, self-driving cars)
- Using synthetic data

However, the technology and its governance are evolving rapidly. As such, PIPC plans to take a principles-based approach to the guidance to offer flexibility and ensure that AI use remains fit-for-purpose.

Box.5.2. Guidelines on Processing Publicly Available Personal Data for AI Development and Services

In July 2024, Korea's Personal Information Protection Commission (PIPC) published the Guidelines on Processing Publicly Available Personal Data for AI Development and Services. While not legally binding, the guidelines serve as an authoritative interpretation of Korea's Personal Information Protection Act (PIPA) in the context of AI.

The guidelines clarify how AI developers and service providers (including the public sector) may lawfully process publicly available personal data – such as that collected via web scraping – to train AI models, particularly large language models (LLMs). Publicly available data is broadly defined to include information disclosed by data subjects and data published by law or included in media and publications.

Korea's approach hinges on "legitimate interest" under PIPA Article 15(1)(6), permitting processing where the controller's interests outweigh data-subjects' rights. The guidelines outline a three-part test:

1. the existence of a legitimate interest, including commercial and societal benefits
2. the necessity and proportionality of processing
3. a rights-balancing assessment that favours the data controller only when data-subject harm is minimal or effectively mitigated

The guidelines emphasise that AI training qualifies as personal-data "processing" under Korean law, and thus triggers compliance obligations. They distinguish between AI training and AI service-delivery phases, the latter carrying greater risk of data-subject harm (e.g., through memorisation, re-identification, or prompt attacks).

To manage risks, the guidelines detail technical and organisational safeguards: data source validation, tokenisation and de-duplication to reduce memorisation, use of differential privacy, prompt/output filtering, and "machine unlearning" techniques. They recommend privacy-focused red-teaming and documentation of data processing. Emphasis is placed on the risks of open-source models and API-based service delivery, with recommendations for licensing, monitoring, and contractual safeguards.

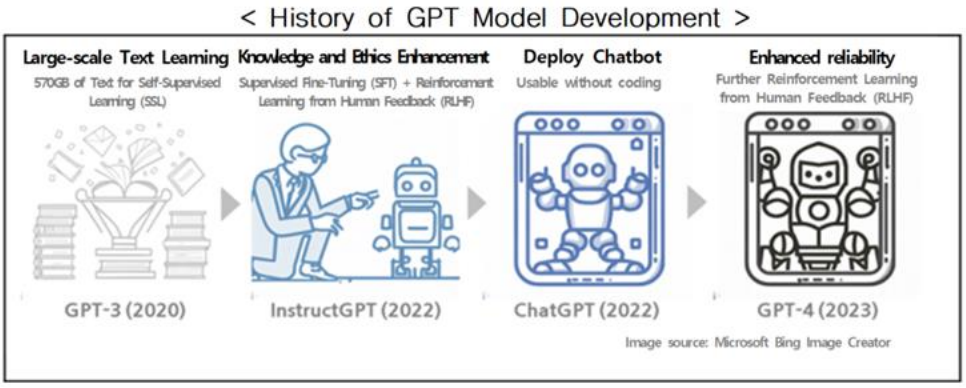
Source: (Personal Information Protection Commission, 2024[14])

Skills and talent

Korea fosters skills and talent to support the strategic and responsible use of AI in the public sector. In 2023, MOIS published the Civil Servants' Guide to the Safe Use of ChatGPT (Figure 5.4) to help public servants use the platform in their daily work. The Guide provides an overview of the development history of Generative Pre-trained Transformer (GPT) technology and summarises its benefits and limitations for civil-service use (Ministry of the Interior and Safety, 2023[15]). It offers concrete examples of how civil servants can use the technology, including sample prompts. These cover tasks such as information retrieval, support for drafting and translation, code generation, and the use of software like Excel. Additionally, the Presidential Committee on the Digital Platform Government released guidelines for the use of hyper-scale AI in the public sector, providing procedures and case examples to facilitate the integration of generative AI across government entities (Presidential Committee on the Digital Platform Government, 2025[16]).

To enhance more-practical AI skills among public officials, MOIS and NIA conducted training in 2024 on the introduction and use of AI-based services in the public sector. This equipped public servants with the competencies to implement AI solutions in their domains (OECD, 2025[2]).

Figure 5.4. Korean Civil Servants' Guide to Safe Use of ChatGPT



Source: (Ministry of the Interior and Safety, 2023[15])

Furthermore, the National Research Council of Science & Technology (NST) launched an integrated AI-training program in 2022 for government-funded research institutes. This program targeted researchers at government-affiliated institutions and those under the MSIT to build a talent pool capable of advancing AI research and applications in the public sector (Electronic Newspaper Internet, 2025[17]). At the same time, public institutions in Korea highlight the need for greater skills and talent to make the most of data and AI in their work, noting that competition with the private sector makes it difficult to build internal capability. This aligns with the findings in Chapter 3 about digital skills.

Investing in and procuring strategic and responsible AI

Public procurement represents an average of 13% of GDP in OECD countries, making government the primary buyer in some sectors (OECD, 2025[18]). Investment and procurement policies are powerful tools to ensure responsible and effective deployment of AI across government because they allow public authorities to set clear requirements for ethical, transparent, and secure AI systems. Public procurement represents an average of 13% of GDP in OECD countries, making government the primary buyer in some sectors (OECD, 2025[18]). By embedding standards such as fairness, explainability, and data protection into procurement processes, governments can shape market incentives, drive innovation in trustworthy AI, and mitigate risks. Strategic investment supports capacity building in the public sector and ensures that AI adoption aligns with policy goals such as inclusion, sustainability, and public trust.

Government agencies in Korea have two primary funding mechanisms for AI projects: general agency budgets and the central Information and Communication Promotion Fund (ICPF). Although the ICPF does not offer dedicated funding for AI, it provides financial support within broader allocations for digital and ICT-related initiatives. ICPF funded the development of 142 types of AI training datasets in 2023. In 2024, three rounds of public calls under the Hyper-scale AI Ecosystem Expansion Program supported the creation of 70 types of datasets in the private sector (Ministry of Science and ICT, 2023[19]). In the same year, financial assistance was extended to the Public Sector AI Service Development Support Program (National Information Society Agency, 2024[20]).

Government investment decisions in AI projects are informed by two considerations. First, feasibility studies and proof-of-concept assessments evaluate the technical and operational viability of proposals. Second, the government's participatory budgeting system enables agencies to submit project proposals, which if selected, are incorporated into agency budgets for implementation in the following fiscal year. This mechanism supported the development of an AI-enabled mobile counselling application using GPT technology in 2023.

To procure AI, the Korean government established a Digital Service Support System to facilitate rapid and convenient adoption and use of digital and AI services. This system improves the convenience of contracting and service delivery between AI service providers and users. Currently, third-party AI services such as NAVER, CLOVA Studio, iConnect, and KakaoTalk are available through this platform. In addition, the government supports procurement of services that combine intelligent information technology with cloud computing through the Digital Service Specialized Contract System and the Digital Service Marketplace platform. This is facilitated by the Digital Service Review Committee, allowing negotiated contracts, and the catalogue-based procurement mechanism (Ministry of Science and ICT, 2025[21]).

Guardrails and engagement for trustworthy AI in government

Korea has several non-binding policies to encourage the secure and safe use and management of AI in the public sector, especially generative AI. In 2020, while not specifically addressed to the public sector, MSIT released the National AI Ethics Standards (Box 5.3) to serve as a foundation for evolving sector-specific norms and practices in line with technological and societal change. In 2023, NIA and the Korea Communications Commission published an AI Ethics Guidebook specific to Generative AI (National Information Society Agency, 2023[22]). This guide offers advice on key issues such as copyright, misinformation, and protecting users' rights.

To manage risks associated with the development and use of AI, the Korean government has adopted a multi-faceted approach, including guidelines, institutional oversight, regulatory frameworks, and certification systems. NIS published Security Guidelines for generative AI tools like ChatGPT, focusing on safe and secure use (OECD, 2025[2]). In 2025, NIS launched an initiative to survey all AI-related projects across central ministries, metropolitan governments, and public institutions over 2023-27 to assess planned and ongoing AI efforts, including local-level R&D, automation, and AI model use (etnews, 2025[23]). The effort is part of a push to strengthen AI security policy amid concerns about data protection and the use of foreign AI models like DeepSeek (The Korea Bizwire, 2025[24]). Findings from the survey will inform updates to national AI security guidelines.

Box 5.3. National AI Ethics Standards in Korea

In 2020, Korea introduced national AI Ethics Standards to guide the responsible development and use of AI in all sectors. Aimed at government, industry, and users, the standards promote "AI for Humanity": ensuring that AI enhances human dignity, public welfare, and ethical technological progress.

The framework is built around three core principles:

- **Human dignity –** AI must respect the inherent value and well-being of individuals
- **Public interest –** AI should serve societal benefit and inclusion, especially for vulnerable groups
- **Purposefulness –** AI should be ethically aligned with and designed for human prosperity

To operationalise these principles, the framework outlines ten requirements, including respect for human rights, privacy, safety, accountability, transparency, and the minimisation of bias and harm.

Rather than imposing binding rules, Korea's approach fosters voluntary adoption and ongoing multi-stakeholder dialogue. The standards serve as a platform for evolving sector-specific norms and practices in line with technological and societal change.

Source: (Ministry of Science and ICT, 2020[25])

Outside of NIS, the Board of Audit and Inspection (BAI) runs annual audit plans, including focused assessments on the development of the AI ecosystem, to ensure government AI initiatives meet public-

interest standards and risk-management protocols (OECD, 2025[2]). Complementing this, the Basic AI Act (Box 5.4) mandates transparency and accountability, notably through Article 30, which supports testing and certification of AI safety and trustworthiness.

Box 5.4. Basic AI Act

Korea's Basic AI Act enacted in January 2025 and set to take effect in January 2026 establishes a comprehensive legal and policy framework to ensure the safe, ethical, and innovative use of AI. The Act aims to safeguard human rights, foster public trust, and strengthen Korea's global competitiveness in AI development.

The Act regulates based on risk, classifying AI systems based on their potential impact, including:

- **High-impact AI** used in sensitive areas such as healthcare, transportation, energy, and public services subject to strict safety and oversight requirements
- **Generative AI** systems that create text, images, or audio, which must clearly disclose AI-generated content to users
- **High-compute AI models** exceeding large-scale computational thresholds and subject to enhanced scrutiny

To promote transparency and accountability, the Act requires developers and operators to:

- notify users when they interact with AI
- implement risk management and human oversight mechanisms
- conduct impact assessments for high-risk applications to safeguard fundamental rights

Source: (Securiti, 2025[26]), (fairnow, 2025[27])

Additionally, Korea has introduced specific technical guidelines and evaluations to address emerging AI risks. The AI Safety Institute (AISI) leads research to foresee AI-related risks and conducts comprehensive safety assessments, while the Korea Information Society Development Institute (KISDI) conducts annual AI Ethics Impact Assessments (AIEIA) to identify and evaluate the ethical impacts of AI services. In 2024, KISDI conducted an AIEIA targeting AI-based video synthesis services (Korea Information Society Development Institute, 2024[28]). On top of this, the Korea Institute of Science and Technology Evaluation and Planning (KISTEP) performs annual technology-impact assessments (TIA) to evaluate how emerging science and technology affect the economy, society, culture, and the environment, where, in 2024, the TIA focused on safe and trustworthy AI technologies (Korea Institute of Science and Technology Evaluation and Planning, 2024[29]). On the policy side, Korea's Digital Order Implementation Plan includes measures such as mandatory watermarking of AI-generated content to counter misinformation and deepfakes (OECD, 2025[2]).

Korea demonstrates a strong commitment to ensuring safe and secure AI, particularly through comprehensive monitoring and risk assessment measures. Yet in contrast to some OECD countries such as the United States, Korea does not keep an exhaustive, up-to-date, publicly available, repository of public sector AI projects and initiatives. While the AI Hub includes use cases, it is not mandatory for public agencies to record and publish theirs. Public registries of AI systems are increasingly common, serving as centralised repositories that consolidate information about AI systems being used in government (OECD, 2025[3]). Examples include the:

- **United Kingdom**'s Algorithmic Transparency Records
- **United States** government's AI use-case inventory, which must be updated at least annually
- national government public algorithm inventories in **Chile**, **France**, and the **Netherlands** (Box 5.5).

Box 5.5. Netherlands' Algorithm Register: Promoting transparency and accountability in government AI use

To enhance transparency and trust in the use of algorithms by public institutions, the Government of the Netherlands launched the Algorithm Register (*Algoritmeregister*) in 2021. Developed by the Ministry of the Interior and Kingdom Relations, and maintained by the City of Amsterdam, the Register serves as a central, publicly accessible repository of algorithmic systems used in the public sector.

The Register provides structured information on each algorithmic system, including:

- purpose and functional description
- data sources and types of data used
- decision-making impact, such as whether the algorithm is advisory or automated
- risk assessments, including human oversight measures
- responsible authority and contact details

Participation in the Register is voluntary, but the Dutch government is working to expand its use across national, regional, and municipal levels. By making algorithm-use visible and comprehensible to the public, the Register supports democratic accountability, encourages responsible innovation, and facilitates risk management.

Source: (Overheid.nl, 2025[30])

The Korean government involves a range of public institutions in shaping national AI policies. More than 20 ministries and agencies such as the MSIT, MOIS, and the Ministry of Economy and Finance (MOEF) collaborated to design and implement cross-sector AI strategies. These efforts include policy frameworks such as the Implementation Plan for AI in Everyday Life for All Citizens and the AI-Semiconductor Initiative, which define strategic priorities and reflect the input of civil servants and public sector experts through inter-ministerial co-ordination (OECD, 2025[2]).

Beyond the public sector, Korea has platforms to engage a broad ecosystem of stakeholders including service users, civil society, and the private sector. The AI Strategy Summits – regular, high-level forums hosted by major AI companies in co-operation with the government – bring together experts from academia, research, and industry to explore policy directions for hyper-scale AI and digital innovation (Ministry of Science and ICT, 2023[31]). Furthermore, the AI Legal and Regulatory Reform Task Force co-ordinated by MSIT serves as a mechanism for inclusive dialogue, engaging stakeholders such as large corporations, SMEs, startups, and civil-society organisations in the design and refinement of AI regulations (OECD, 2025[2]). These initiatives complement public consultations and outreach activities, including the collection of citizen feedback via national forums.

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6 Delivering human-centred and proactive public services

This chapter explores Korea's progress in delivering human-centred and proactive public services, guided by the OECD's Recommendation of the Council on Human-centred Public Administrative Services and Good Practice Principles for Public Service Design and Delivery in the Digital Age. It highlights strengths in accessibility, scalability, and transparency, while identifying opportunities to deepen user engagement and improve integration. Korea's experience offers lessons for responsive, future-ready service delivery.

Introduction

Service delivery is at the heart of a government's relationship with citizens, shaping trust in institutions and access to opportunities. High-quality, reliable public services strengthen confidence in government integrity and ensure policies achieve their intended goals. In an era of digital transformation, external pressures demand continuous improvement in service efficiency, while driving innovation in citizen-centred design. Meeting these expectations is about operational success and reinforcing trust, fostering satisfaction, and ensuring that government remains responsive to the evolving needs of the people it serves (OECD, 2024[1]; OECD, 2020[2])

It is critical to continually evaluate and improve how public services are designed and delivered, and in a holistic way that considers the technical elements of delivering a service as well as broader historical, socio-economic, political, cultural, and environmental factors. To this end, the OECD adopted the Recommendation of the Council on Human-centred Public Administrative Services to support countries to ensure reliable and trusted public administrative services (Box 6.1) (OECD, 2024[3]).

Box 6.1. OECD Recommendation on Human-Centred Public Administrative Services

The Recommendation provides a policy framework for the development and implementation of services that put people's needs at the centre of policy design and delivery. It has four pillars.

Pillar 1: Strategic vision, values, and rights

- **Whole-of-government strategy:** develop services aligned with government-wide goals.
- **Foster a human-centred culture:** prioritise user needs and public engagement.
- **Protect rights:** respect the rule of law, providing procedural guarantees and transparency.

Pillar 2: Core foundations

- **Leadership and roles:** clearly define leadership and co-ordination responsibilities.
- **Skills and competencies:** build public servants' capacity to design and deliver services.
- **Digital infrastructure:** develop scalable, secure, and interoperable digital infrastructure to support service delivery.

Pillar 3: Seamless and accessible services

- **User-centred design:** based on user needs, ensuring inclusiveness and accessibility.
- **Omni-channel approach:** provide consistent, high-quality service across all channels.
- **Simplified services:** streamline processes, reduce administrative burdens, anticipate needs.

Pillar 4: Measurement, engagement, improvement

- **Measure user experience:** track user satisfaction and service performance.
- **Data-driven improvement:** use data and feedback to continuously enhance services.
- **Public engagement:** involve users in the co-design and evaluation of services.

Source: (OECD, 2024[3])

To complement the Recommendation, the OECD's Good Practice Principles for Public Service Design and Delivery in the Digital Age provide a policy tool for achieving the four pillars. The three fundamentals and nine principles offer practical guidance on translating the ambitions of the recommendation into concrete action (OECD, 2022[4]; OECD, 2020[2]).

Figure 6.1. Good Practice Principles for Public Service Design and Delivery in the Digital Age

Fundamental 1: Build accessible, ethical and equitable public services that prioritise user needs, rather than government needs	Fundamental 2: Deliver with impact, at scale and with pace	Fundamental 3: Be accountable and transparent in the design and delivery of public services to reinforce and strengthen public trust
Principle 1: Understand users and their needs	Principle 4: Create conditions that help teams to design and deliver high quality public services	Principle 7: Be open and transparent in the design and delivery of public services
Principle 2: Make the design and delivery of public services a participatory and inclusive process	Principle 5: Develop a consistent delivery methodology for public services	Principle 8: Ensure the trustworthy and ethical use of digital tools and data
Principle 3: Ensure consistent, seamless and high-quality public services	Principle 6: Curate an ecosystem of enabling tools, practices and resources	Principle 9: Establish an enabling environment for a culture and practice of public service design and delivery

Source: (OECD, 2022[4])

These Good Practice Principles reflect a growing consensus on the priorities for governments in delivering effective public services in the digital age. They embody shared values and align with emerging trends in digital government worldwide. By setting clear guidelines, the principles support strategic, coherent approaches to service design and delivery, driving improvements in accountability, outcomes, and public sector innovation across OECD Members and Partner countries (OECD, 2022[4]; OECD, 2020[2]).

The principles have been applied to understand Korea's approach to delivering user-centred and proactive public services, as well as its progress towards the effective implementation of the pillars of the recommendation. The first two pillars of the recommendation focus on having the right governance, capabilities and enabling environment in place to facilitate human-centred public administrative services, which have been covered extensively in Chapter 3. This chapter will therefore focus on Pillars 3 and 4 of the recommendation to understand how these factors come together to contribute to the effective and user-driven design, delivery and oversight of public services in the digital age.

Building accessible, ethical and equitable public services that prioritise user needs, rather than government needs

The first fundamental pillar of the Good Practice Principles focuses on offering users a seamless experience to address their needs and expectations. Omni-channel availability and connected data help ensure that services are accessible, personalised, and effective, while user engagement ensures that the services are inclusive, responsive, and empower users through continuous feedback and personalisation.

Korea focuses on delivering human-centred and inclusive public services at all levels of government to meet user needs. The government implements many of the policy levers that the OECD believes enable more inclusive, accessible, and effective services, including:

- **Omni-channel strategy to deliver public services**, which implies the integration of all channels available to deliver public services. Allowing citizens to move fluidly between contact points and the service to offer a comfortable experience.
- **Mechanisms to implement the 'once-only' principle**, which refers to the right of citizens and business to provide data to public-sector organisations only once (OECD, 2024[5]), calling on the public sector to establish governance, standards, and infrastructure to share and reuse data while respecting data-protection and other regulation.
- **Standards for public-service design and delivery**, which include principles for shared definitions of the quality and behaviours associated with public-service design and delivery. Such principles provide the basis for setting expectations of delivery partners (whether public servants or non-governmental suppliers) and can be the criteria to formally assess performance.
- **Varied methods to engage and consult with diverse users**, to give stakeholders the opportunity and the resources (e.g., information, data, and digital tools) to collaborate during all phases of the policy-cycle and in service design and delivery.

Korea's legislative and governance frameworks ensure that accessibility of services is front-of-mind in its omni-channel approach to delivering public services. Articles 16 and 19 of the Electronic Government Act require that government services are easy to access by diverse user groups, and require each agency "to ensure that citizens do not have difficulty accessing or utilising electronic government services due to their economic, regional, physical, or social conditions." (Government of Korea, 2022[6]) This is complemented by the 2nd Master Plan for Electronic Government, which includes an objective of service delivery through citizens' preferred channels, and ensures that steps address the digital divide among vulnerable groups by providing customised services and improving access to technology (Government of Korea, 2021[7]).

Regarding its implementation of the 'once-only' principle, Korea has a rich ecosystem of administrative data-sharing, as highlighted in Chapter 4. These practices align with the E-Government Act requirement that administrative agencies not make people provide information that can be verified through data sharing between agencies, which reduces administrative burden and cuts red tape (Government of Korea, 2022[6]).

Further, Korea has mechanisms to leverage implementation of the 'once-only' principle in service delivery, including through approval or funding of new projects. In the budget-approval process for government projects, adherence to the principle is examined during the preliminary review process (Chapter 3), which means approval can be affected by how well a project integrates data sharing (Government of Korea, 2025[8]). Further, before a Request-for-Proposal can be released to the market, there is a review of whether the 'once-only' principle has been properly included in the tender (Government of Korea, 2025[9]). In addition, during development of project plans, the MOIS reviews how administrative data-sharing is factored into a project's delivery and will request that agencies revise their proposals if this has not been addressed sufficiently.

To ensure a consistent and citizen-centric approach to public-service delivery, the Korean government applies a robust framework of laws, regulations, and guidelines that set clear service standards across all administrative bodies. The Administrative Procedures Act underpins transparency and participatory governance, requiring agencies to foster innovation and facilitate co-operation with citizens (Government of Korea, 2022[10]). The Presidential Directive on Service Charters mandates that each agency develop a service charter based on principles such as customer-centricity, quality, and cost-effectiveness (Ministry of Science and ICT, 2023[11]). However, agencies often adopt the MOIS Regulation on Service Charters, which includes guidance on service performance evaluation, customer engagement, and accountability. Operational performance is then supported by the *2024 e-Government Performance Management Manual*, which enables agencies to assess compliance and service impact throughout the digital service lifecycle (Government of Korea, 2025[8]) In addition, the *Government-wide* User Interface/User Experience (*UI/UX*) *Design System* ensures accessibility and consistency in user-facing systems, aligned with quality standards (Box 6.2).

Box 6.2. Korean Government-wide UI/UX Design System (KRDS)

The KRDS provides guidance and resources to encourage more-inclusive UI/UX design and more-consistent digital public services. It covers principles, guidelines, and code to design and build government web-app digital services. It offers specific guidance based on different role types, including for designers, developers, and government officials.

As part of the KRDS, Korea's Design Principles advise those working on digital services that:

- all decisions about digital government services should be user-centred
- services should embrace all users, especially those with different abilities, circumstances, and situations, including people with disabilities, the elderly, children, and foreigners
- users have a common service experience that is tailored to their individual circumstances
- decision-making should be minimised to ensure fast and simple digital public services
- digital public services should be easy to understand and designed to be concise and intuitive, with familiar content and interfaces so users can use them without assistance
- service design should consider users' purposes, skills, and frequency of use
- services should be reliable, trustworthy, and accurate

In addition to these principles, the KRDS, includes guidance on digital inclusion, visual style, UI components, basic patterns that can be replicated for streamlined and consistent service design.

Source: (Ministry of the Interior and Safety, 2025[12]), (Ministry of the Interior and Safety, 2025[13])

To embed public participation in service design, the government administers the Citizen Participatory Design Group (CPDG) (Box 6.3), supported by formal guidelines and a collection of best practices. This initiative strengthens collaborative design processes and promotes innovation by drawing on real-world examples of citizen engagement (Koo, 2025[14]). Collectively, these instruments reflect Korea's commitment to delivering high-quality public services that are transparent, inclusive, and outcome driven.

Box 6.3. Korean Citizen Participatory Design Group (CPDG)

Korea's CPDG is the national public-service design group, operated by MOIS in collaboration with the Korea Institute of Design Promotion (KIDP). Launched in 2014, CPDG institutionalises structured citizen-participation for policy development and service. It brings together public officials, users, service designers, and subject-matter experts to co-create solutions to complex policy challenges.

The Group employs human-centred design to address complex social issues across varied domains, including healthcare, welfare, regional development, and environmental challenges. This approach facilitates the identification of user needs and the development of innovative solutions.

CPDG follows a five-stage, human-centred design process, from understanding problems and discovering needs to developing, prototyping, and refining policy solutions. This approach ensures that diverse, user-informed perspectives are embedded at every stage of the policy cycle. Internationally recognised, CPDG improves both the responsiveness and trustworthiness of Korea's public services by fostering a more inclusive, participatory, and user-centred model of governance.

Source: (Koo, 2025[14])

Finally, Korea uses varied methods to engage and consult with diverse users in the design and delivery of public services. Public institutions strongly endeavour to engage users up-front to gather requirements for service improvements, particularly from feedback and complaints about the use of services. From CPDG, there is engagement and consultation of a broad range of actors – including users, experts, and those involved in frontline service delivery – in the design and development phases for new services. There is growing awareness of the value of user-centred design across the public sector, even if it focuses for now on UX and UI (instead of on user testing throughout the service lifecycle). It is clear from fact-finding interviews that champions of user-centred design across public institutions recognize Korea's long-term journey towards embedding these practices for more human-centred services.

In addition, legislated measures ensure that the UX of digital solutions is considered, including that:

- Heads of administrative agencies review user testing approaches outlined in a project plan and Request-for-Proposal before they can be finalised (Ministry of the Interior and Safety, 2025[15]).
- Annual surveys analyse the performance of major digital government services, including user satisfaction and demand, which inform service improvements (Government of Korea, 2001[16])
- Reports by the National Design Group be submitted to analyse the obstacles encountered by stakeholders, including citizens, businesses, and government officials, who participated in the design of digital government services (Ministry of the Interior and Safety, 2017[17])

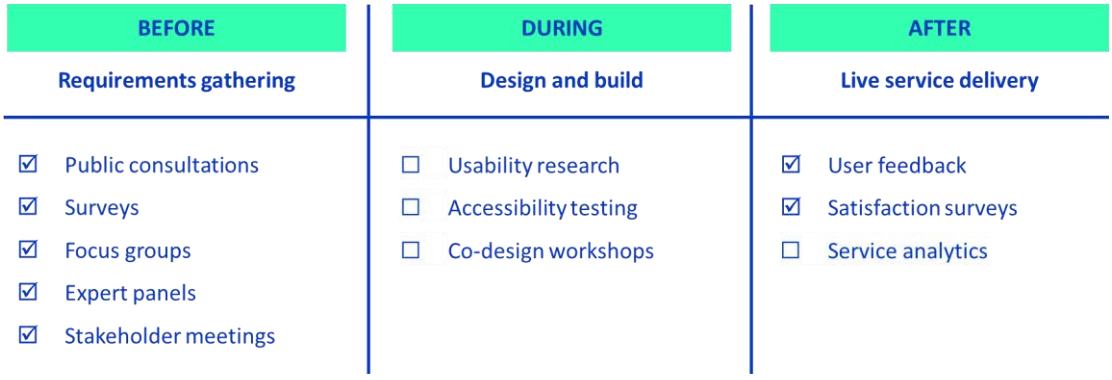
While not exhaustive, these give attention to user needs throughout the service design and delivery cycle and in assessment after the launch of a service.

As Korea looks for opportunities to strengthen its approach, it could encourage greater and more-direct engagement with users during the design and building of digital public services, and more-comprehensive measurement and monitoring of service performance across the public administration.

Despite engagement and consultation of users when designing services, there could be more consistent and standardised user testing at all stages of service design and delivery (Figure 6.2). OECD fact-finding interviews and survey revealed good user-engagement practices in the requirements-gathering phase before the design of a service, with public consultations, surveys, focus groups, expert panels, and stakeholder meetings happening across the public administration. However, it should be noted that requirements-gathering is often done with frontline staff about their understanding of users' problems or needs instead of engaging with users directly. In addition, while there are practices to monitor user feedback and satisfaction after a service goes live, this was often described as capturing specific problems with a service instead of more-comprehensive service performance indicators.

Figure 6.2. User research and testing in Korea

Methods for user research and testing before, during, and after the development of a digital service



Source: (Paul, 2024[18])

Findings from the OECD fact-finding interviews and survey highlighted a gap in user engagement during the design and build of a service, with no practices around regular usability research, accessibility testing, or co-design workshops. Addressing this gap would allow designers and developers to test and iterate with users before the service goes live, which can reduce the risk of launching a service that is complicated to use, has bugs, or does not meet the needs of all users. It can also minimise the need to address issues or rework services that are already live, which can be costly and create additional friction in users' experience.

Furthermore, many public institutions noted that the user experience would improve with better training instead of concentrating on enhancing the design of services to make them more intuitive. This highlights a need to shift attitudes towards design a service that is more intuitive and user-friendly in the first place rather than putting the onus on the user to interact with a service better.

To address these points, the Korean government could take inspiration from several approaches in the OECD to user engagement during the design and build of services (Box 6.4).

Box 6.4. Approaches to user engagement in the design and build of services in the OECD

United Kingdom: **Government Digital Service (GDS)**

The GDS promotes user-centred design by embedding user research throughout the service lifecycle. The GDS Service Manual mandates that digital services be shaped by actual user needs, not assumptions. Through user interviews, usability testing, and accessibility reviews, GDS ensures that services are intuitive and inclusive. All government services must meet the GDS Service Standard before launch, emphasising simplicity, clarity, and speed.

Denmark: **User Involvement in Service Design**

Denmark prioritises user involvement in digital-service design by incorporating co-creation workshops, usability testing, and feedback loops. The Danish Agency for Digital Government partners with citizens throughout development to ensure that services address real-life needs. Projects pilot in municipalities before scaling nationally, allowing for iterative refinement.

Canada: **Digital Standards and User Research**

Canada's Digital Standards place user needs at the core of public-service design. The Canadian Digital Service (CDS) guides departments in conducting user research, journey mapping, and usability testing throughout the development process. Emphasising inclusion, CDS encourages teams to engage with diverse user groups and iterate frequently. The standards promote services that are simple, accessible, and continuously improve. This approach leads to successes like the COVID-19 support portal, where real-time feedback and testing ensured clarity, equity, and usability across populations.

New Zealand: **Service Innovation Lab**

New Zealand's Service Innovation Lab pioneered collaborative digital service design by involving users, public agencies, and private partners in co-design efforts. Focused on inclusion, the Lab emphasised Māori-engagement and user-driven approaches to complex life events like childbirth or relocation. It championed agile methods, prototyping, and shared ownership of solutions across agencies.

Source: (Government Digital Service, 2025[19]), (Government of Canada, 2025[20]), (Digital Agency of Denmark, 2025[21]), (New Zealand Government, 2025[22])

Finally, the OECD fact-finding interviews revealed limited approaches across public-sector institutions in the monitoring and analytics of service performance to inform improvements, despite the existence of requirements. This might signal a potential issue with the requirements' implementation across agencies and/or agencies' capacity and capability to comply.

Delivering with impact, at scale and with pace

The second fundamental pillar of the Good Practice Principles focuses on empowering public administration with the conditions, methodologies, tools, practices and resources to deliver high-quality public services to people and business. Korea shows progress here, raising its digital capability, consistent methodologies for engaging users in service design and delivery, and especially service modernisation with the Digital Government Platform initiative and private-sector channels to support service delivery. To harness the potential of AI in public service, Korea embeds data and AI competencies across its civil service through a strategic, structured approach. As mentioned in Chapter 3, the Digital Civil Servant Competency Framework defines the skills in technology use, data-driven policy-making, and digital engagement critical for trustworthy and effective AI adoption (Tuan and Hai, 2025[23]). Government guidelines promote strong data governance, inter-agency collaboration, and upskilling officials through targeted training and leadership roles like Chief Data Officers. By fostering a culture of data-informed decision-making, Korea ensures its public sector is equipped to deploy AI effectively.

Further, to ensure consistent, high-quality public-service delivery, Korea has a robust framework that integrates project-management methodologies, service standards, and structured user-engagement practices. The survey highlighted how a nationally mandated, standards-based project-management approach guides digital and ICT initiatives, supporting effective planning, early risk detection, ongoing monitoring, and active stakeholder participation throughout the project lifecycle. Complementary laws, regulations, and guidelines such as service charters, UI/UX standards, and performance manuals reinforce transparency, citizen involvement, and service quality across government agencies. User engagement is central to service design, supported by tools like the Easy Guide to Public Service Design, which helps identify problems and co-develop user-centric solutions. National guidelines require rigorous testing, including usability testing, expert reviews, security assessments, and performance evaluations to ensure services are secure, functional, and aligned with public needs. Additionally, Korea promotes standardised approaches that can be adopted across agencies to improve user engagement (Table 6.1).

Table 6.1. Methods to engage users in service design in Korea

	Ministries, agencies, officials	Sub-national government	Citizens	Civil society	Academia	Businesses
Physical public meetings	Yes	Yes	Yes	Yes	Yes	Yes
Virtual public meetings	Yes	Yes	Yes	Yes	Yes	Yes
Online consultation platforms	Yes	Yes	Yes	Yes	Yes	Yes
Proactive engagement of selected groups (e.g., private and civil)	Yes	Yes	Yes	Yes	Yes	Yes
Advisory group/committee with actors from diverse communities	Yes	Yes	Yes	Yes	Yes	Yes
Informal consultation with selected groups (e.g., consumers' association)	Yes	Yes	Yes	Yes	Yes	Yes
Ad hoc feedback transmissions (e.g., user feedback, social media)	Yes	Yes	Yes	Yes	Yes	Yes
User research required in the design process	Yes	Yes	Yes	No	No	No

Source: Data provided to the OECD from the MOIS, April 2025.

Korea's strengths with regard to its ecosystem of enabling tools, practices, and resources appear to be its unified digital gateway with the Digital Platform Government initiative, its use of digital identity for secure access to services, and its integration of private-sector channels for service delivery.

Efforts underway will integrate all government services onto one platform with a better, more-consistent user experience. The Digital Platform Government initiative (Box 6.5) consolidates all Korea's services onto a single platform, which will offer a tailored user experience based on user profile and needs. The platform leverages citizen data to provide a seamless experience with a single sign-on, and a simple and standardised UI. This unified platform will likely address the complication of over 670 government apps, which could confuse users who might not know where to go or how to access a service.

Box 6.5. Korea's Digital Platform Government (DPG)

Korea's DPG initiative is a transformative strategy to modernise public administration by leveraging advanced digital technologies. It creates a unified digital infrastructure that enhances collaboration among citizens, business, and government agencies, based on four missions:

- **Citizen-centric government** for integrated services on a unified platform focused on the life events of the users, enabling personalised and proactive service delivery
- **One-team government** without silos among Ministries or between public and private sectors, driven by data, AI, and innovation
- **Public-private collaborative government** that treats data and AI as strategic, nurturing the development of the technology industry, and expanding DPG to all levels of government
- **Trustworthy government** that is transparent, secure, and reliable, including by strengthening citizens' rights over their personal data, introducing new security systems, and improving the global competitiveness of Korea's security industry

DPG is expected to integrate 1,500 types of public services into the existing portal and implement over 3,000 benefit-notification services. It removes the need to re-submit documents already accessible by agencies and introduces a MyData system to give individuals more control over their personal data.

In practice, it means users will have an enhanced, personalised experience accessing services through the GOV24 platform, with a UI tailored to their circumstances and proactive outreach as services become available. Users may also conduct public-service transactions through private-sector channels like NAVER and Kakao, delivering access to services through the channels users prefer (Box 6.7).

DPG is expected to deliver value by enhancing the efficiency, inclusiveness, and transparency of public services by delivering proactive, cost-effective digital solutions. It intends to support data-driven policy, foster innovation, grow the local industry, and ensure equitable access and development, positioning Korea strongly in secure, citizen-centric, digital governance.

Source: (Presidential Committee on the Digital Platform Government, 2025[24])

For digital identity, the Korean government offers a federated, digital-authentication platform that allows citizens to use their choice of certified and secure, private, authentication solutions to access digital channels for public services. Looking ahead, it plans to introduce a single sign-on solution for public services on GOV24. Korea also has a Mobile Resident Registration Card, a digital credential with the same legal validity as the physical national ID card, and a "digital document wallet", where citizens can store electronic documents needed to access public services (Box 6.6). This aligns with trends across OECD members to invest in digital credentials and wallets usable online and offline.

Box 6.6. Digital identity and credentials in Korea

Korea implemented a robust digital-identity system as a cornerstone of its digital-government strategy, to enhance the security, efficiency, and accessibility of public services, leveraging private-sector solutions.

As of March 2025, all citizens can obtain a **Mobile Resident Registration Card**, a fully digital credential version of the national ID card. Issued via the **GOV.KR portal** or through local government offices, the mobile ID holds the same legal validity as a physical ID card and is accepted across a range of services, including public administration, financial institutions, and healthcare providers.

This digital credential leverages secure technologies to safeguard user data and ensure transaction integrity. In the event of identity theft or the loss of a physical card, the digital and physical ID can be deactivated instantly, reducing the risk of unauthorised use. Another feature is integration of a digital document wallet, enabling citizens to store and manage official certificates and electronic documents.

Strengthening Korea's approach to digital identity is central to the **Electronic Government Master Plan 2021-2025**. By offering a secure and user-friendly identity infrastructure, the government is improving service delivery and promoting inclusion and digital participation across the population.

Source: (Government of Korea, 2024[25])

Korea established a strategic partnership with the private sector to diversify service delivery channels to meet users where they are (Box 6.7). The fact-finding interviews made clear that a key feature of Korea's service delivery is integration with private-sector channels, namely NAVER and Kakao, which have strong uptake across the population to access private services. This is based on the integration with Application Programming Interfaces (APIs) to connect to services, allowing for convenience while minimising risks around data protection and cybersecurity – aligning closely with the government's digital platform initiative to enhance accessibility of services. The success of this approach is likely due to the role these platforms already held in Korean society, and users' preference to engage with government services via private channels.

While this context might be unique to Korea and hard to replicate, it is an interesting example for other countries. As the use of private-sector delivery channels increases, it is important to assess and mitigate risks associated with dependence on these platforms, particularly regarding data security and service reliability. Governments' approaches might mitigate much of the risk by linking services through APIs to minimise the data held on private platforms, and by maintaining the option to access services through an interface managed by the public administration – thus also maintaining service availability if other channels are disrupted.

The fact-finding interviews highlighted that these digital platforms are underpinned by infrastructure that must be reliable, secure, and scalable. The National Information Resources Service (NIRS) is working with MOIS to upgrade hardware, networks, and management tools to modernise Korea's technology and enable migration to the cloud. A critical part of this is the construction of government data-centres, which ensure compliance with government requirements, cost-efficiencies with a reduced technology footprint, and job creation and local investment in target areas. These data-centres are available to the government's main partners in the private sector, which helps ensure that companies holding or handling sensitive data do so in an environment that meets the government's requirements for security, back-up, and redundancy, among others. With measures around sustainability and renewable energy, the data-centres reduce the environmental impact of Korea's digital government, particularly as it prepares to make greater use of AI.

Box 6.7. Use of private-sector channels for public-service delivery in Korea

MOIS is opening Korea's digital public services to support from the private sector, leveraging its strengths in improving user experience with tailored suggestions, a single location, and access to products or services with a single click (compared to the public sector, which often requires multiple transactions across agencies). Opening public services to private-sector channels enables a one-stop for integrated service – meeting users where they are and how which they prefer to access services.

The services are made open through a form of API linking private channels with public platforms, so that users can access services through websites or apps they are familiar with. Under this model, agencies develop and register specific service modules, which are then integrated into the private-sector platforms according to their chosen UX/UI.

In addition to improving the convenience of services and aligning with the needs and preferences of users, leveraging APIs in this way ensures that minimal data is stored on private-sector channels, minimising the risk of the misuse or leakage of private data. Furthermore, should a private-sector channel suffer disruption, access remains through the public sector's platforms.

Through these private-sector channels, users already perform key government transactions, including retrieving and issuing e-certificates, checking and paying taxes, booking vehicle inspections, accessing customs information, booking public transport, and renewing their passports. MOIS aims to expand this approach to 220 services by 2026.

Source: Information presented to the OECD during the fact-finding interviews, June 2024.

The fact-finding interviews highlighted opportunities to strengthen Korea's approach to delivering with impact, scale, and pace by addressing service integration, including with sub-national governments. The interviews found examples of isolated or inconsistent service delivery, which will be addressed by ongoing efforts towards service integration. While public institutions tend to align with the government's emphasis on integrated service delivery, some instances were observed of public institutions wanting to preserve autonomy or maintain the solutions they have.

This applies predominately among local and metropolitan governments, which have varying levels of maturity but can sometimes move faster than central government agencies. This poses a risk because users often expect a seamless and consistent experience of government services, regardless which public institutions deliver them. While this risk will be mitigated through the Digital Government Platform initiative and the modernisation program of the Korea Local Information Research & Development Institute (KLID), the government will need to continue engaging public institutions for collaboration and alignment.

Box 6.8. Co-ordinated approaches to multi-level digital governance in Denmark and Norway

Denmark built one of the most co-ordinated digital public-administration systems among OECD countries by establishing structured collaboration between national, regional, and municipal governments. This multi-level governance model is anchored in formal partnerships between the central government, Local Government Denmark (KL), and Danish Regions, which jointly define and implement digital strategies. These eGovernment strategies prioritise improving digital services, enhancing administrative efficiency, and ensuring consistent service delivery across levels of government.

Notable initiatives include *borger.dk*, a portal that presents public information and self-service across national and local governments; *MitID*, the Danish digital ID that can be used for various purposes, including transferring money in online banking or logging into public self-service solutions; and *NemHandel*, a secure, standardised platform enabling digital invoicing and transactions between businesses and public authorities. Together, these efforts demonstrate Denmark's commitment to citizen-centric services and seamless interoperability across administrative layers.

Norway adopts a similarly integrated approach through its National Joint Solutions initiative. This framework promotes the co-development of digital public infrastructure by national and sub-national governments, often in collaboration with non-governmental actors. By pooling expertise and resources, Norway ensures that digital services are interoperable, cost-effective, and tailored to local needs.

The initiative also supports long-term sustainability by aligning digital service development with broader public sector goals. This co-operative model enables all levels of government to share responsibility for planning, implementation, and governance of digital tools, reinforcing trust and accountability.

Denmark and Norway exemplify how structured, multi-level governance can enable more effective, responsive, and resilient digital public services.

Source: (European Commission, 2021[26]; OECD, 2024[27])

Being accountable and transparent in the design and delivery of public services to reinforce and strengthen public trust

The last fundamental pillar of the Good Practice Principles focuses on the ethical use of tools and data to strengthen public trust in digital public services, and enabling an environment where leadership, performance indicators, user-focused policies, and cross-sector collaboration join to promote inclusion, resilience, and continuous improvement. The Korean government promotes accountability, transparency, and ethical digital services, including through its use of the GOV24 platform for transparent service delivery and the protection of personal data, reporting on service performance, and implementation of ethical standards with its Digital Bill of Rights and Ethical Standards for AI.

First, GOV24 serves as Korea's central digital platform for public-service delivery, ensuring transparency, ethical data use, and user accessibility. Established under the Electronic Government Act, the platform provides a unified interface where online and offline public services are catalogued and made accessible to citizens. It also facilitates a lifecycle-based approach to service provision, ensuring citizens can easily locate and access relevant services at each stage of life (Ministry of the Interior and Safety, GOV.KR[28]). To enhance openness and public accountability, MOIS operates GOV24 with the Integrated Information Disclosure System, which consolidates and publishes information shared across public institutions (Ministry of the Interior and Safety, 2025[29]).

Internally, the Information Resource Management System (IRMS) supports effective management of digital infrastructure by maintaining an inventory of information systems used across government (Ministry of the Interior and Safety, 2025[30]). This system prevents duplication, supports integration and interoperability, and provides detailed records of technical and security specifications. Role-based access controls are in place to ensure sensitive information is appropriately protected.

To uphold ethical standards and safeguard personal data (beyond what is described in Chapter 4), citizens need to provide informed consent when applying for services via GOV24. A "*Consent to Use of Administrative Information and Personal* Information" form outlines the specific data to be used and the purposes for which it will be processed. For example, in the integrated childbirth support service, called Happy Childbirth, users are informed that data such as the number of children or disability status will be used solely for eligibility assessment (Ministry of the Interior and Safety, 2025[31]). This approach ensures that Korea's digital government services are integrated, transparent, and grounded in ethical practices.

The Korean government also takes measures to promote transparent reporting on the performance of its digital public services. The government runs the e-Government Service Usage Survey to collect data on service indicators such as awareness of digital government services, awareness channels, usage rate, usage purposes, frequency of use by purpose, access devices and channels, overall results by major websites, awareness by service category, usage rate by category, intention to use by category, and mobile application usage rate (National Information Society Agency, 2024[32]). This, along with other data collected, informs the development of the Publication of Performance Reports on IT Projects, which provides publicly available information on the operation of apps, information systems, and delivery of the IT Business Plan.

Another feature of Korea's accountability in service design and delivery is the inclusion of clearly defined rights and ethical considerations. The Korean government leads in developing the Digital Bill of Rights (Charter on the Values and Principles for a Digital Society of Mutual Prosperity) to establish a global digital order grounded in shared values and ethical principles. It comprises a preamble and six chapters encompassing 28 articles, outlining comprehensive rights and responsibilities in the digital realm. The intent is to guarantee freedoms and rights for all individuals, promote fair competition and equal opportunities, ensure security and trust, foster digital innovation, and advance human well-being (Ministry of Science and ICT, 2023[33]; Ministry of Science and ICT, 2023[11]). Specific to AI, the Korean government developed ethical standards for the use of AI, and a strategy and action plan for the ethical and trustworthy use of AI. These measures help address the ethical and trustworthy use of digital public services.

As Korea looks for opportunities to strengthen accountability in service design and delivery, it could reinforce its enabling environment by incentivising adoption of shared digital platforms and continue the government's efforts to drive the development and use of AI across the public administration.

While progress on shared digital infrastructure has been substantial, some areas require attention. Budget allocation should be prioritised to ensure that these platforms are sustainably funded. The OECD fact-finding interviews highlighted that current budget structures enforce a cap that limits the pace with which the government can explore and migrate to new technologies, especially given the rapidly developing technological environment in which countries find themselves. As discussed in Chapter 3, stakeholders believe more-flexible budget allocations would enable an environment that drives more-rapid digitalisation of Korea's public administration. Additionally, structured incentives are needed to encourage wider adoption and integration of shared platforms.

The use of AI and data will enable continued evolution of Korea's public-service delivery. This area is not lacking in Korea's public sector but retains potential to drive more human-centred and proactive service delivery. The Korean government is already piloting an AI-powered telephone outreach system to identify and support vulnerable individuals more effectively (Box 6.9).

Box 6.9. AI-enabled telephone outreach to strengthen welfare-service delivery in Korea

In 2023, MOIS launched a pilot initiative using AI to enhance early-detection and support for vulnerable populations. The solution uses an AI-based telephone monitoring system that automatically contacts individuals at potential risk, including elderly residents living alone, low-income households, and socially isolated individuals.

The pilot was run with the private sector, bringing NAVER and SKTelecom together with and four municipalities: Suwon, Bucheon, Jeonju, and Gyeongju. The pilot started by targeting 4,000 individuals and developing scripts for the AI solution to dialogue with individuals during welfare consultations.

Building on the pilot's success, the programme expanded to 16 more municipalities in 2024. As the programme expanded, each municipality customised the AI solution to their welfare needs, such as monitoring seniors living alone, individuals who dropped out of welfare services, and other groups at risk of exclusion.

The system uses AI to conduct scheduled calls and analyse vocal cues, response patterns, and levels of engagement to assess well-being. Where concerns are identified, such as non-response or indications of distress, the system alerts local welfare teams for timely follow-up. This enables targeted, proactive intervention, reducing reliance on manual outreach while improving the precision and responsiveness of public-welfare services.

The initiative aligns with the Korean government's Digital Platform Government, which seeks to modernise service delivery through data integration, intelligent automation, and citizen-centric design. Privacy safeguards are embedded through informed consent protocols and strict data-handling standards. The pilot also improves the effectiveness and efficiency of the public sector with:

- **proactive monitoring,** enabling timely risk-identification and interventions by welfare officers
- **reduced administrative load,** with automation to let staff focus on direct support
- **local adaptability,** where municipalities tailor services to their demographic profiles and needs
- **data-driven decision-making,** where AI-generated insights guide targeted welfare-outreach and resource allocation

This approach exemplifies how Korea leverages AI for administrative efficiency and to enhance equity, inclusion, and accessibility in social protection. It represents a scalable model for adaptive, tech-enabled welfare systems in an ageing and digitally connected society.

Source: (Ministry of the Interior and Safety, 2025[34])

The OECD's fact-finding interviews found strong interest and enthusiasm across the public sector for leveraging digital solutions to enhance service delivery. The interviews and survey findings show widespread use of data and automation to provide more seamless user experience by expediting processes and personalising services, such as by using mobile geolocation data, pre-filled fields, rule-based chatbots, and keyword searches.

This effort will be enhanced further as Korea explores how to augment its service delivery with AI solutions, particularly with Generative AI. The government could encourage public institutions to explore the use AI technologies to deliver better services, including through the dedicated funding and innovation projects mentioned in previous sections; developing specific guidance; and integrating this into the delivery of the Digital Platform Government initiative. In these ways, Korea could take full advantage of the potential of AI to create an even more proactive and human-centred services.

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OECD Digital Government Studies

Digital Government Review of Korea

Harnessing Digital and Data to Transform Government

The digital transformation of government helps countries respond to complex societal challenges, meet rising public expectations, and harness digital technologies and data for the public good. Korea has been at the forefront of this transformation, embedding digital in its governance and service delivery for decades. This OECD Digital Government Review assesses Korea's progress and future priorities in building an agile, human-centred and trustworthy digital government. It emphasises the role of digital government in enhancing social well-being and supporting sustainable economic growth. The report focuses on four key areas: strengthening governance, investment and skills; improving data governance and sharing; leveraging artificial intelligence for public sector transformation; and delivering more human-centred and proactive public services. The review also provides recommendations to help Korea consolidate its achievements and respond to new opportunities and risks.

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