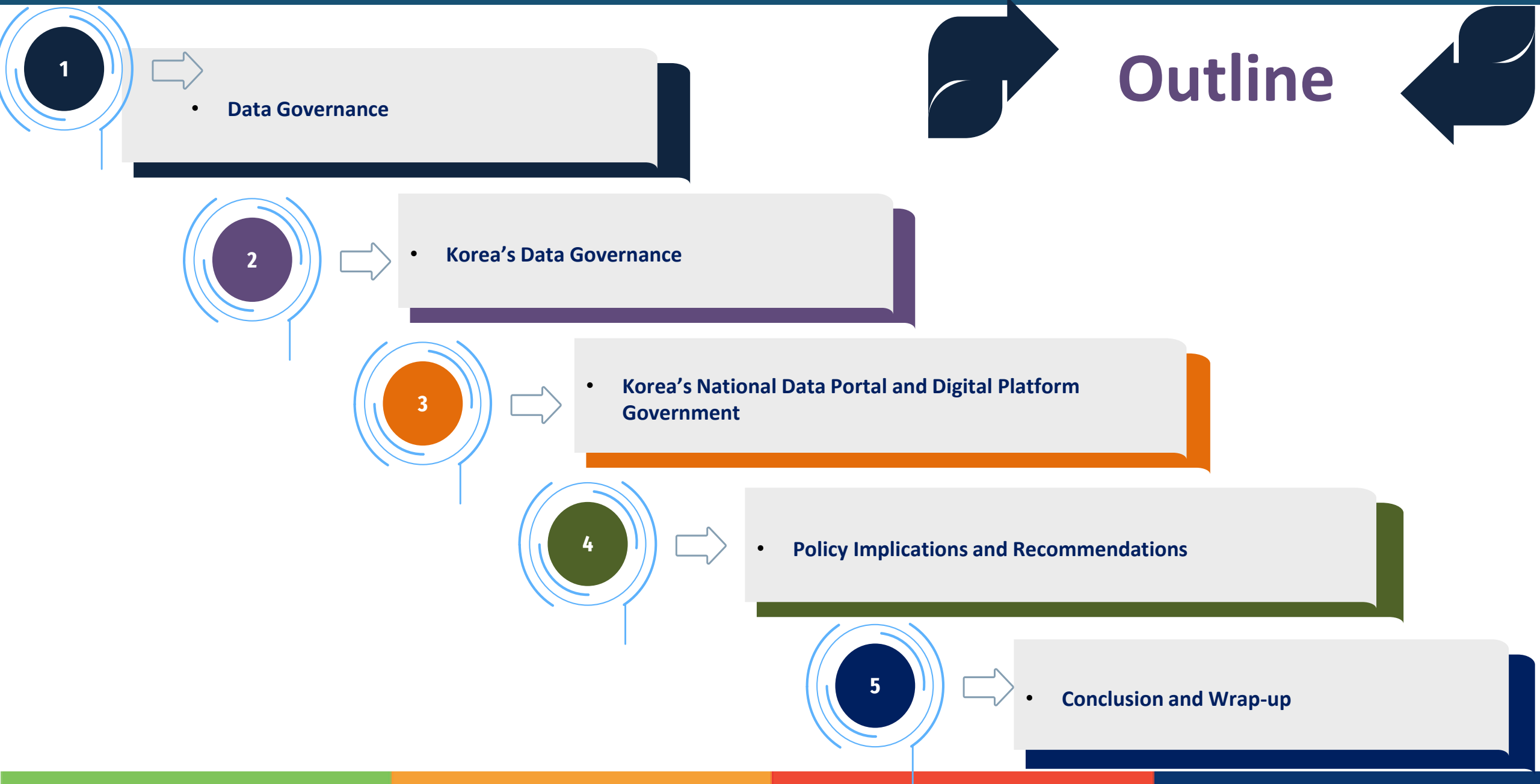




Republic of Korea's Experience in Data Governance

*Capacity Development and Consultation Workshop on a Samoa National Data Governance Framework
[8 - 9 May 2024]*

Mr. Samuel Danaa, Associate Capacity Development Expert, UNPOG/ DPIDG/UN DESA





• Data Governance

Data Governance:

- *defined as the exercise of authority and control over the management and transformation of data with the objective of enhancing the value of data assets and mitigating data-related risks.*



1. Vision & Policy intent

Does the government have a high level vision and policy intent for data? What are the drivers for this? For example, is it part of a broader digital agenda?



2. Legislation, policies, rules & institutions

What are the policies, rules and institutions that govern data management practices?



3 Data custodians & data stewards

What entities support the smooth functioning of the data system, to enhance the value of data assets and mitigate data-related risks?



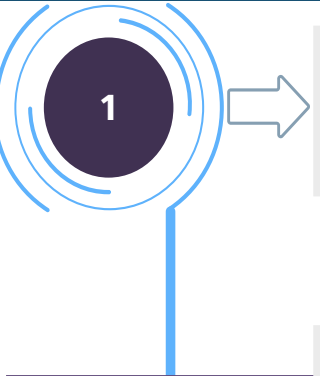
4 Data sharing , accessibility & integration

Does the govt have plans or is it already integrating, sharing and accessing data from multiple sources? What are the challenges?



5 Data sharing, risks & mitigation

What are seen as the main risks of data sharing and what steps are being take to mitigate these risks?



- **Data Governance**

- Data Governance includes data strategy, policy, data standards, data process, roles and responsibilities of the data organization

Data Governance aims:

- to secure and promote the availability, usability, integrity, quality, security, compliance and safety of data

Functions of Data Governance:

- increases access to data, makes smarter and more timely decisions, improves cost management, strengthen compliance, increases customer and supplier trust, easier risk management.

Data quality is generally assessed by six metrics: accuracy, completeness, consistency, timeliness, validity, and uniqueness

Data quality



Data protection



User trust



2

• **Korea's Data Governance**

■ **Status of Korea's Data Ecosystem**

e-Government and Digital Government

- Topped UN e-Government Survey in 2010, 2012, 2014
- Ranked second place on UN e-Government Survey in 2020
- Highest-evaluated in OECD open data evaluation in 2015, 2017, 2019
- Ranked second place on the Government AI Readiness Index 2020 by Oxford University and IDRC

Digital Infrastructure

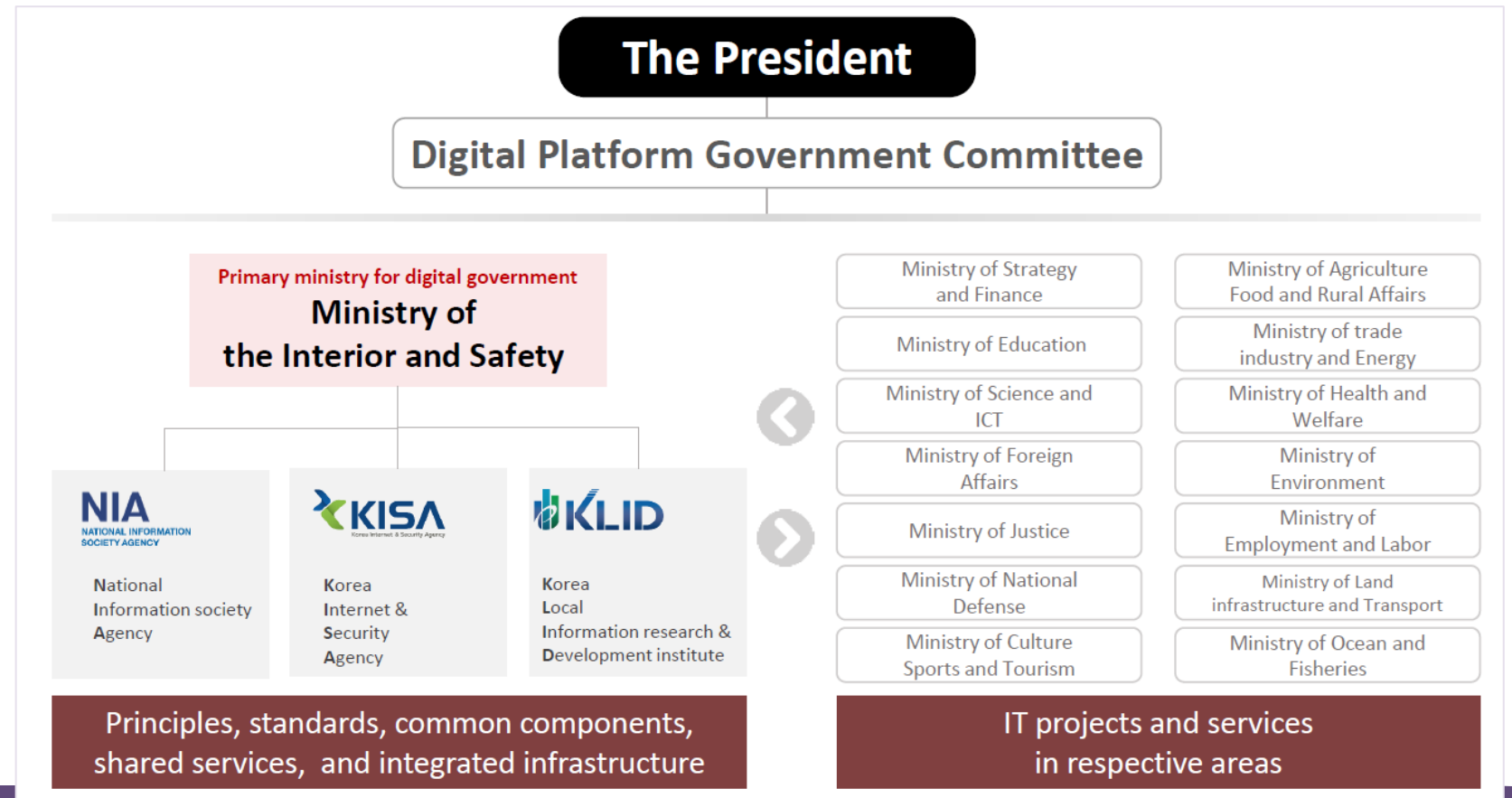
- One of the best broadband Internet penetration: 95.1% of the population using Internet and 97.6% owning a smartphone
- Korea's data industry has shown very rapid growth and produced highly innovative use cases such as big-data based bus route design

(NIA, Korea's Data Ecosystem, 2022)

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• Korea's Data Governance

▪ Digital Government Organizations



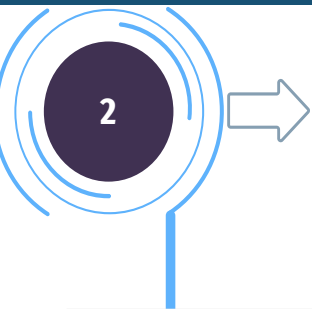
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- **Korea's Data Governance**

- **Key Intuitions and Laws for Data Governance Policy in Korea**

Institutions	Data type	Role	Existing law
Ministry of Interior and Safety	- Public data	- Public data planning - Public Data New Deal - Standardization of public data	Public data law
Public Data Strategy Committee	- Public data	- Public data distribution open control tower	Public data law
Statistical Office	- National Statistical data	- Statistical preparation and control - Statistical services provided	Statistical law
Ministry of Science and ICT	- Industry data - Research data	- Creating a DNA ecosystem - Creation of infrastructure	Civil law
Information and Communication Strategy Committee	- Industry data	- Promotion of information and communication technology and services - Industrial Data New Deal	Information and Communication Convergence Act
Personal Information Protection Committee	- Privacy	- Illegal activity monitoring (regulation) - Personal information infringement investigation	Personal Information Protection Act
Financial Committee	- Public data in the financial sector	- Overseeing open utilization of public data in the financial sector	Credit Information Act



• Korea's Data Governance

- **Efforts for digital governments have led the development of ICT infrastructure as well as data ecosystem**

	Period	Key Objectives	Key Organizations	Characteristics
e-Gov ↓ Smart Gov	1987-1995	<ul style="list-style-type: none"> Computerization of National Basic Data 	<ul style="list-style-type: none"> National Computerization Board under President National Computerization Agency 	<ul style="list-style-type: none"> Computerization of 5 key areas such as public administration, finance, education, national defense, security Lay the foundation for e-government and data era
	1995-2000	<ul style="list-style-type: none"> Information Superhighway (Broadband Internet) Digital & Online Service 	<ul style="list-style-type: none"> National Informatization Committee chaired by the Prime Minister establish of Ministry of ICT (MIC) 	<ul style="list-style-type: none"> Enact of Framework Law on National Informatization Integrated approach to digital government World first nationwide roll-out of broadband Internet
	2001-2007	<ul style="list-style-type: none"> e-Government Development (Integration) Ubiquitous computing 	<ul style="list-style-type: none"> special committees on e-Government under President National Informatization Committee 	<ul style="list-style-type: none"> Strong leadership from the President Upgrade to integrated e-Government and services Two separate governances for e-Gov and national ICT
	2008-2012	<ul style="list-style-type: none"> e-Government (governance) 	<ul style="list-style-type: none"> dismantle of MIC and distributed governance National Informatization Strategy Committee 	<ul style="list-style-type: none"> Weakening of ICT governance with distributed organizations Introduction of new ICT management such as CIO position and enterprise architecture
	2013-2016	<ul style="list-style-type: none"> Smart Government (Gov3.0) 	<ul style="list-style-type: none"> Government 3.0 Committee establish of Ministry of Science and ICT 	<ul style="list-style-type: none"> Focus on government innovation based on emerging technologies such as data analytics Two separate governances for e-Gov and national ICT
	2017-present	<ul style="list-style-type: none"> The Fourth Industrial Revolution (FIR) 	<ul style="list-style-type: none"> Presidential Committee on the Fourth Industrial Revolution National Data Policy Committee 	<ul style="list-style-type: none"> Focus on national ICT for FIR Development institutions and organization for data and AI
			<ul style="list-style-type: none"> Korea Digital Platform government committee 	

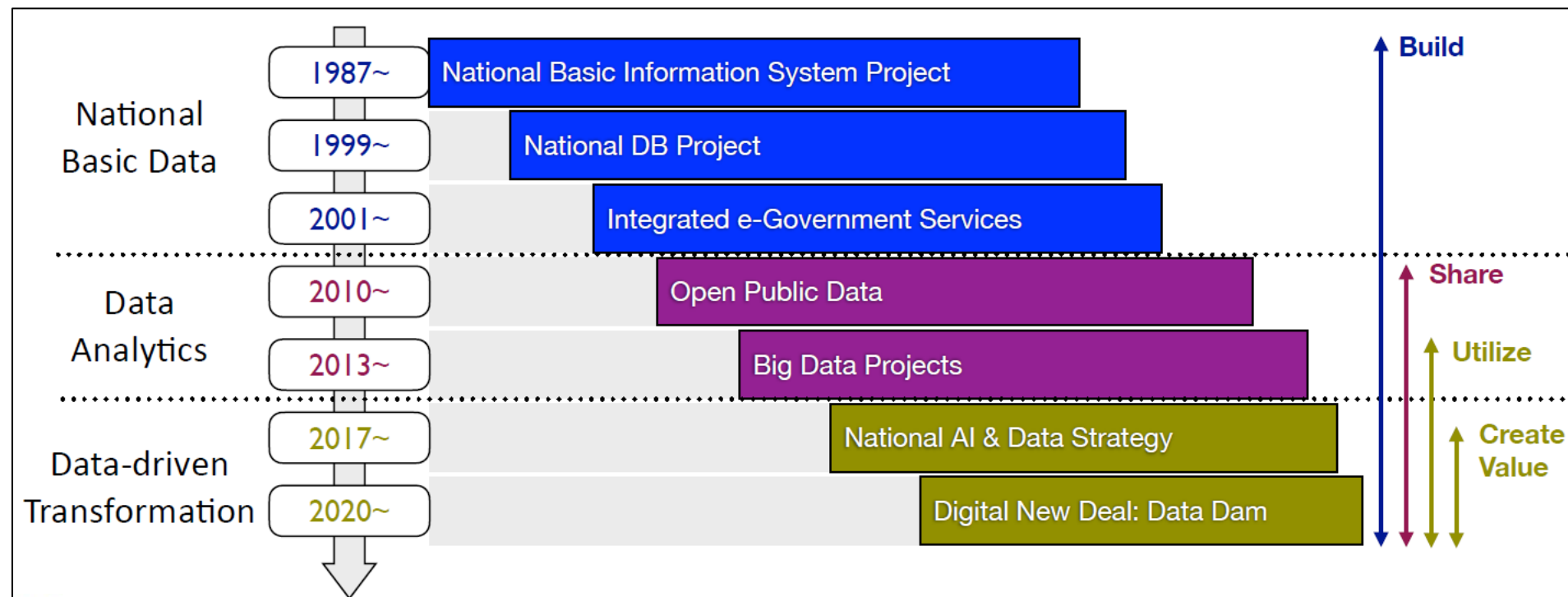
(NIA, Korea's Data Ecosystem, 2022)



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• Korea's Data Governance

- Korea's Data Strategy: Decades-long consistent data strategies have been implemented since 1987**



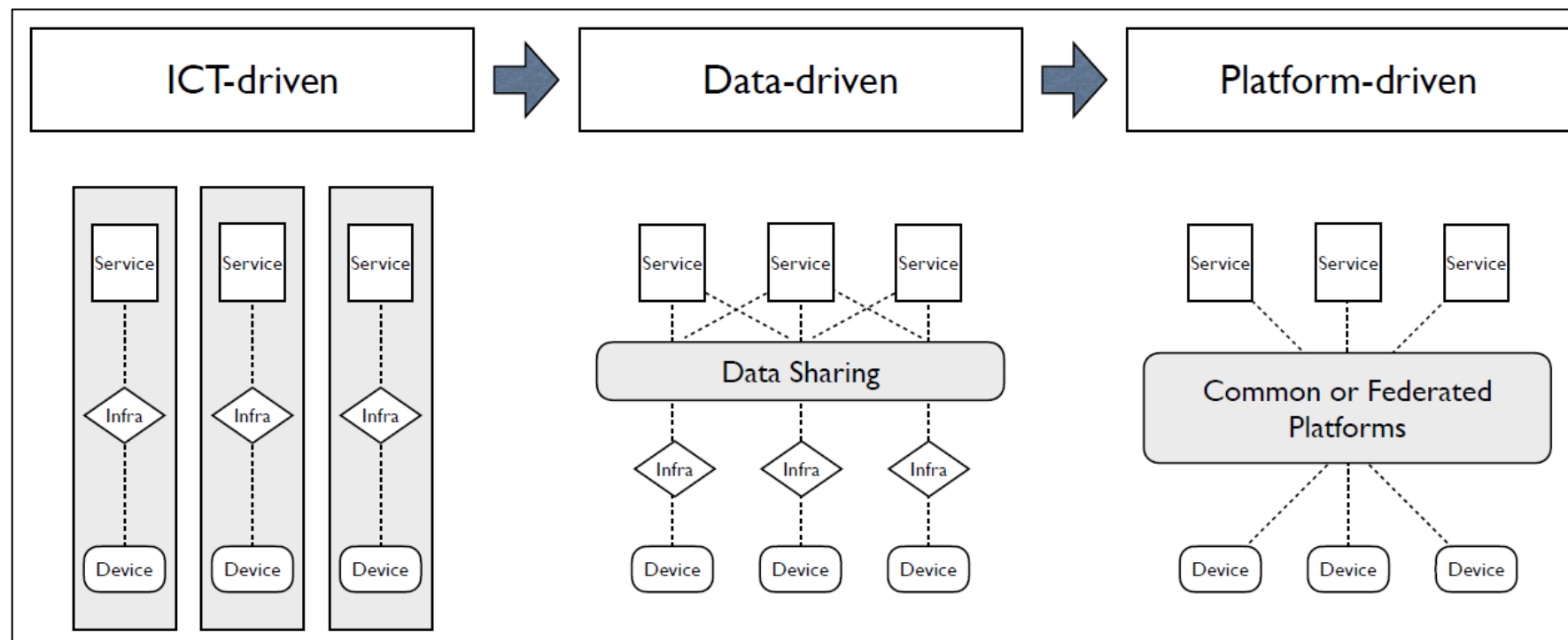
(NIA, Korea's Data Ecosystem, 2022)



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- **Korea's Data Governance**

- **Future Direction for Data Ecosystems Development**

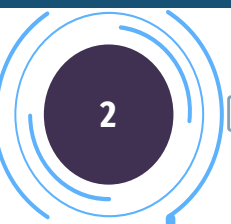


(NIA, Korea's Data Ecosystem, 2022)



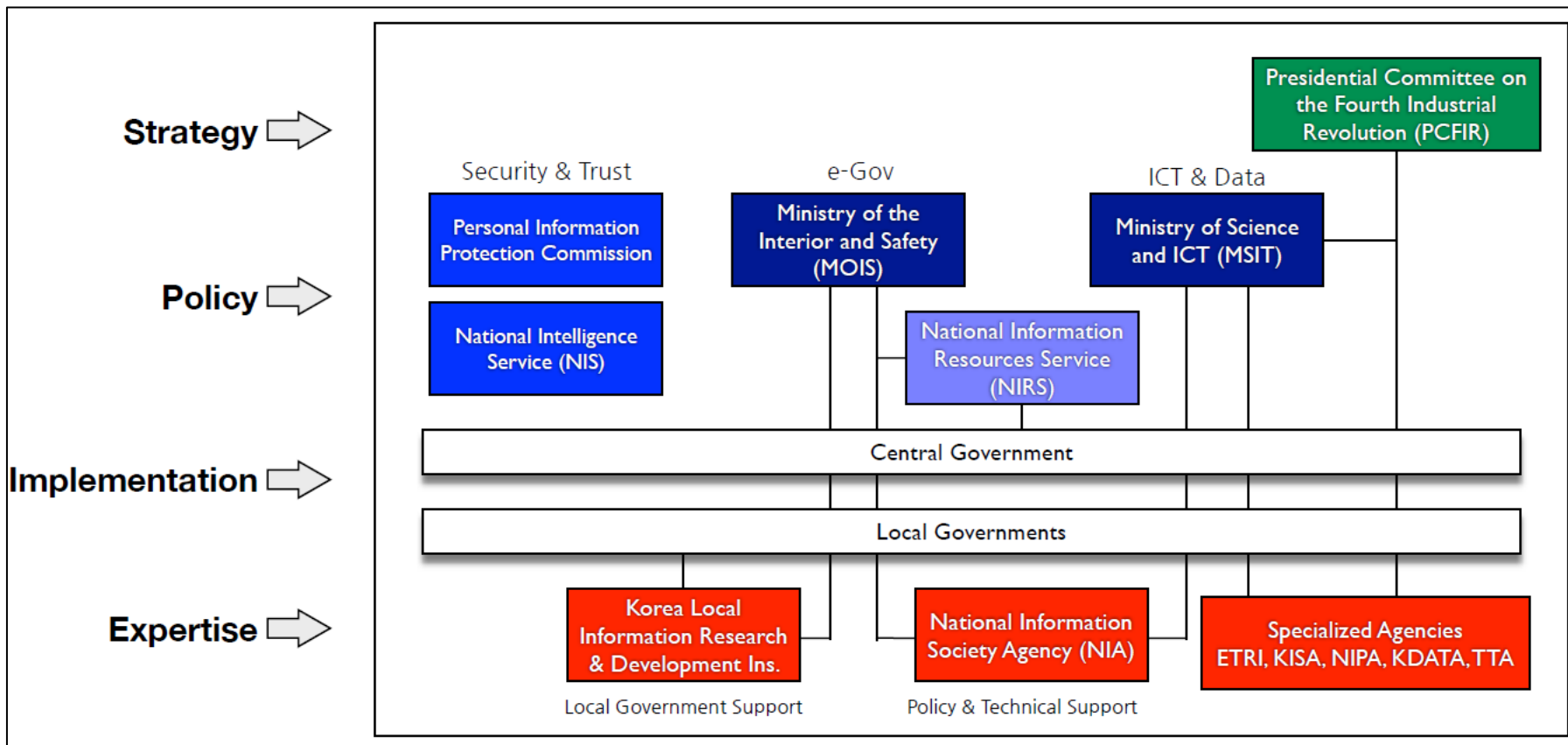
	Ministry of Safety and Interior	Ministry of Science and ICT
Area	Public Data (Open government Data)	Private Data
Committee	Open Data Strategy Council (ODSC)	National Data Strategy Council
Budget(Data)	\$ 80 million	\$ 150 million
Main Project	Release datasets contained by government bodies in a negative manner	Producing Artificial intelligence learning data(150 types) that are needed by businesses / big data
Portal	Open Data Portal (Released by Public)	Big Data Platform AI Hub Platform (Released by Public-Private)

(NIA, Open Governance Date Policies, 2024)

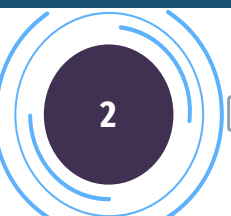


• Korea's Data Governance

■ Korea's Data Governance



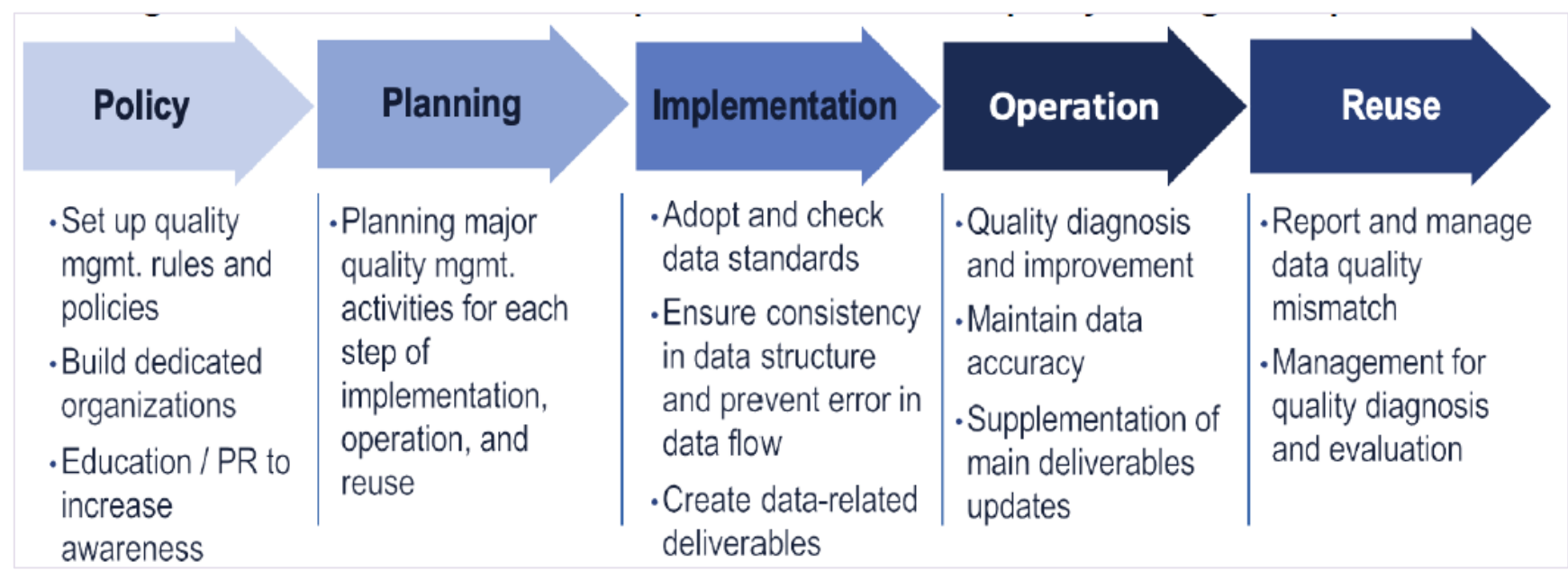
(NIA, Korea's Data Ecosystem, 2022)



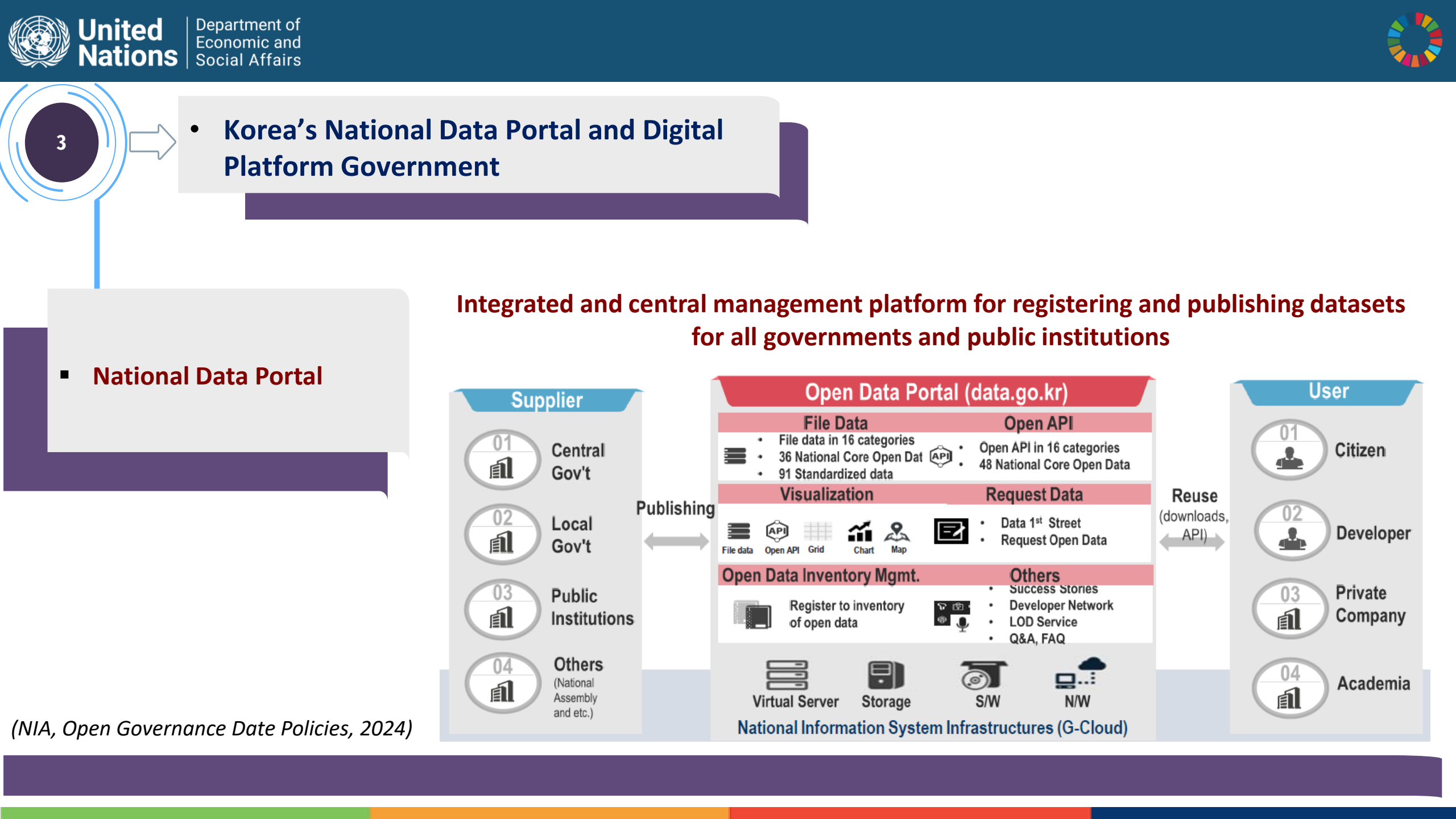
- **Korea's Data Governance**

- **Data quality management and evaluation**

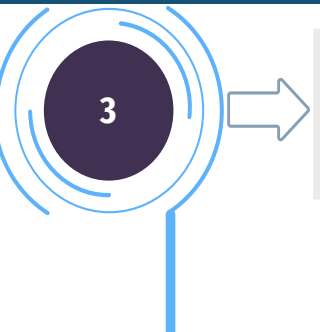
The Government of Republic of Korea's Data Quality Management Process



(NIA, 2019)







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- **Korea's National Data Portal and Digital Platform Government**

■ **Digital Platform Government**

Digital Platform Government Implementation Plan

	Government Dedicated to Each Citizen	<ul style="list-style-type: none">➤ One-stop access to all public services➤ Proactive provision of benefits➤ Inclusive digital public services for everyone
	Intelligent Government Working as a Whole	<ul style="list-style-type: none">➤ Scientific administration with data & AI➤ Digital infrastructure innovation to work as a whole➤ Silo-free data ecosystem
	Public-Private Partnership for Mutual Growth	<ul style="list-style-type: none">➤ Strategic collaboration with data & AI industry➤ Fostering GovTech➤ Supporting innovation of local governments
	Secure and Reliable Digital Government	<ul style="list-style-type: none">➤ Reinforcing data rights of citizens➤ Progressive security systems for new environment➤ Utilization of cutting-edge security technologies

MOIS, Korea's Digital Govt Transformation, 2024)



4

• Policy Implications and Recommendations

1. *Data Governance is critical for ensuring data safety, security, privacy, usability and compliance with internal and external data policies.*
2. *It is important to create a culture for data-driven administration by promoting policies to ensure that data-based administration spreads into institutions.*
3. *It is key to strengthen data-based government policy capacity through data quality management and training data personnel.*
4. *Data Governance considerations when using big data:*
 - *legislation and institutional mandate*
 - *privacy and confidentiality*
 - *data ethics and trust*
 - *partnerships and data sharing*
 - *accessibility and data integration*



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