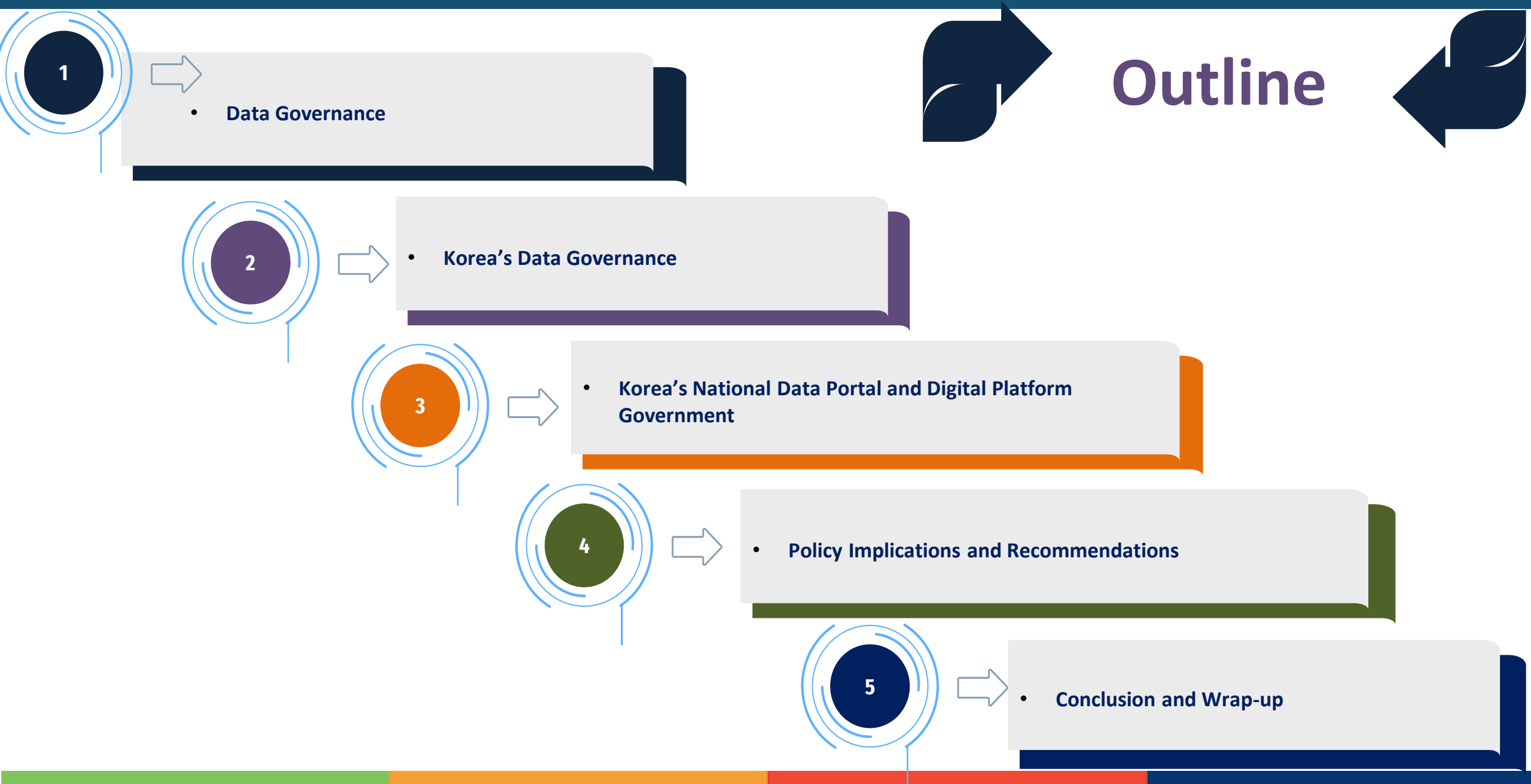
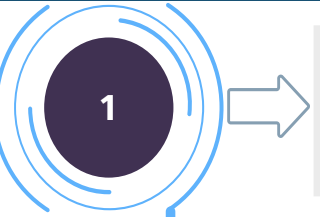




# Republic of Korea's Experience in Data Governance

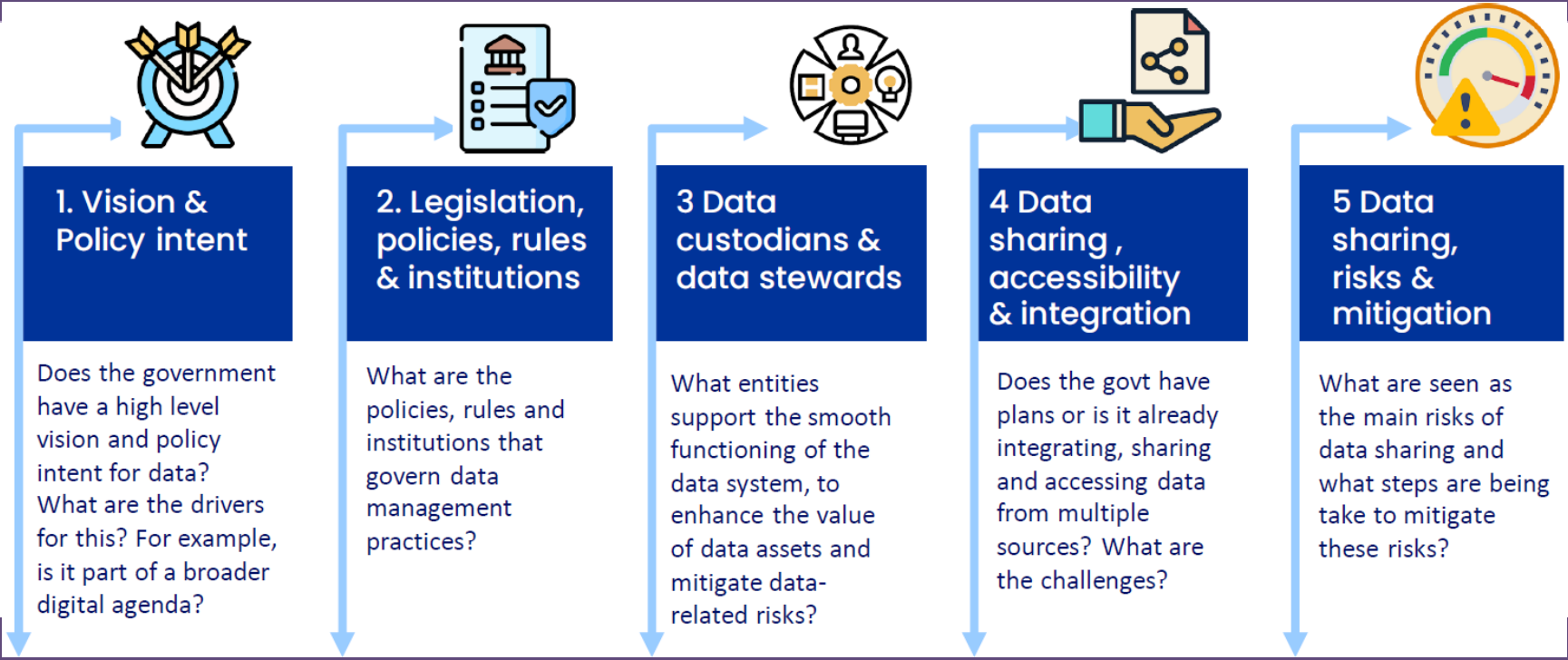




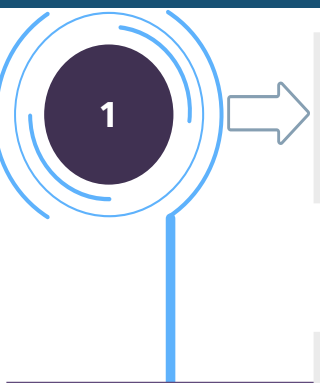
• **Data Governance**

**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**.*



(ESCAP, Expert Group on Data Governance, 2023)



- **Data Governance**

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

**Data Governance aims:**

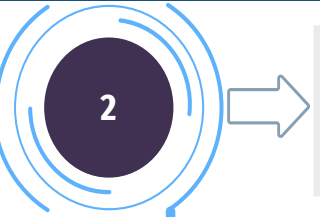
- *to secure and promote the availability, usability, integrity, quality, security, compliance and safety of data*

**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***





## • **Korea's Data Governance**

### ▪ **Status of Korea's Data Ecosystem**

#### e-Government and Digital Government

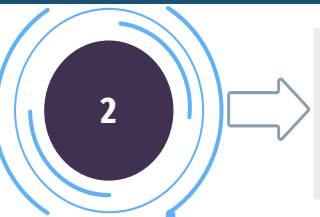
- Topped UN e-Government Survey in 2010, 2012, 2014
- Ranked second place on UN e-Government Survey in 2020
- Highest-evaluated in OECD open data evaluation in 2015, 2017, 2019
- Ranked second place on the Government AI Readiness Index 2020 by Oxford University and IDRC

#### 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

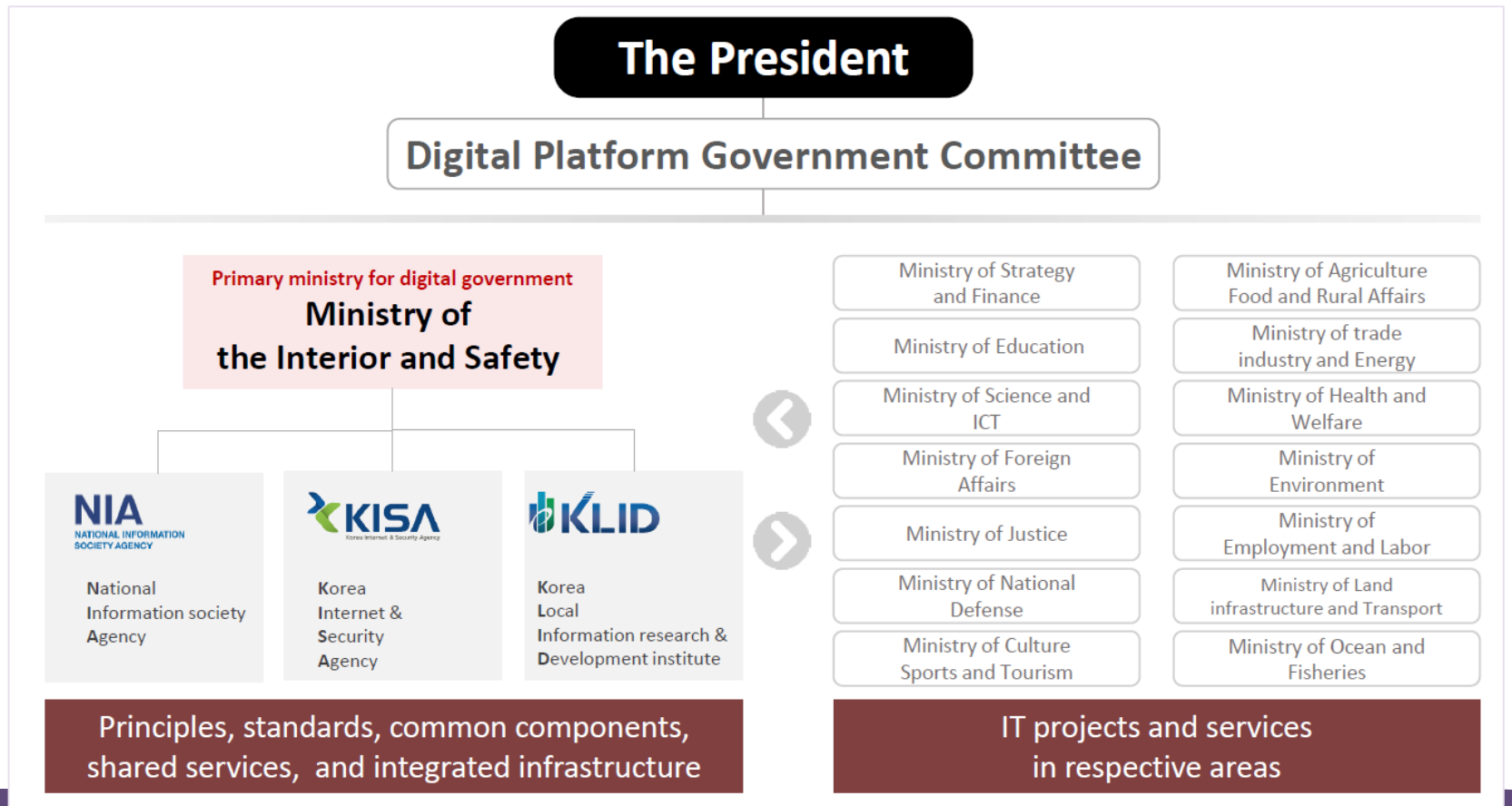
*(NIA, Korea's Data Ecosystem, 2022)*



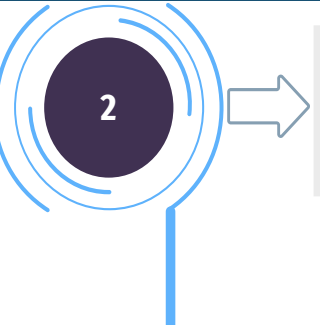


• **Korea's Data Governance**

▪ **Digital Government Organizations**



MOIS, Korea's Digital Govt Transformation, 2024)

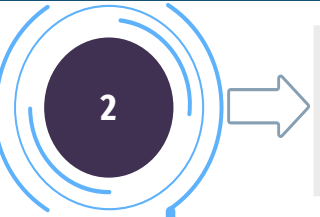


• **Korea's Data Governance**

▪ **Key Institutions and Laws for Data Governance Policy in Korea**

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

KLID, Data Governance Series, 2023)



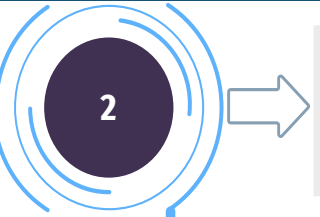
## • Korea's Data Governance

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

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

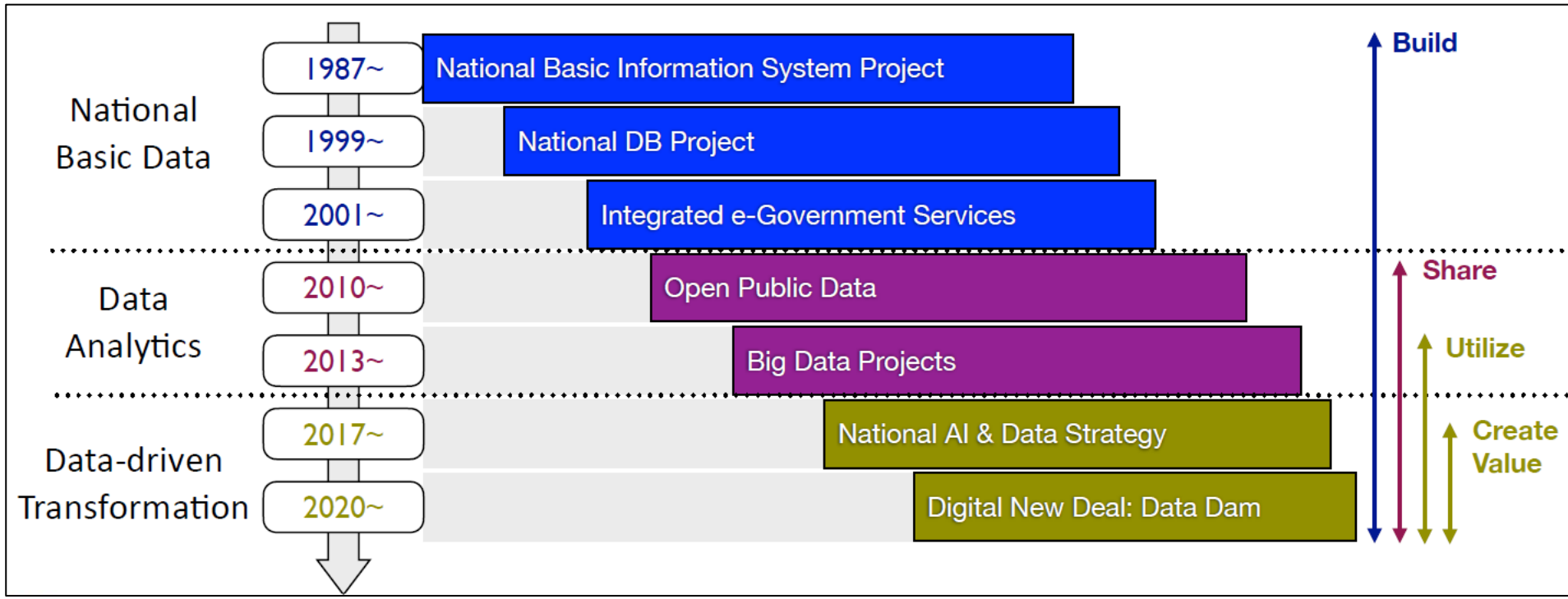
(NIA, Korea's Data Ecosystem, 2022)



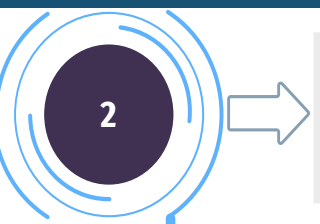


## • Korea's Data Governance

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

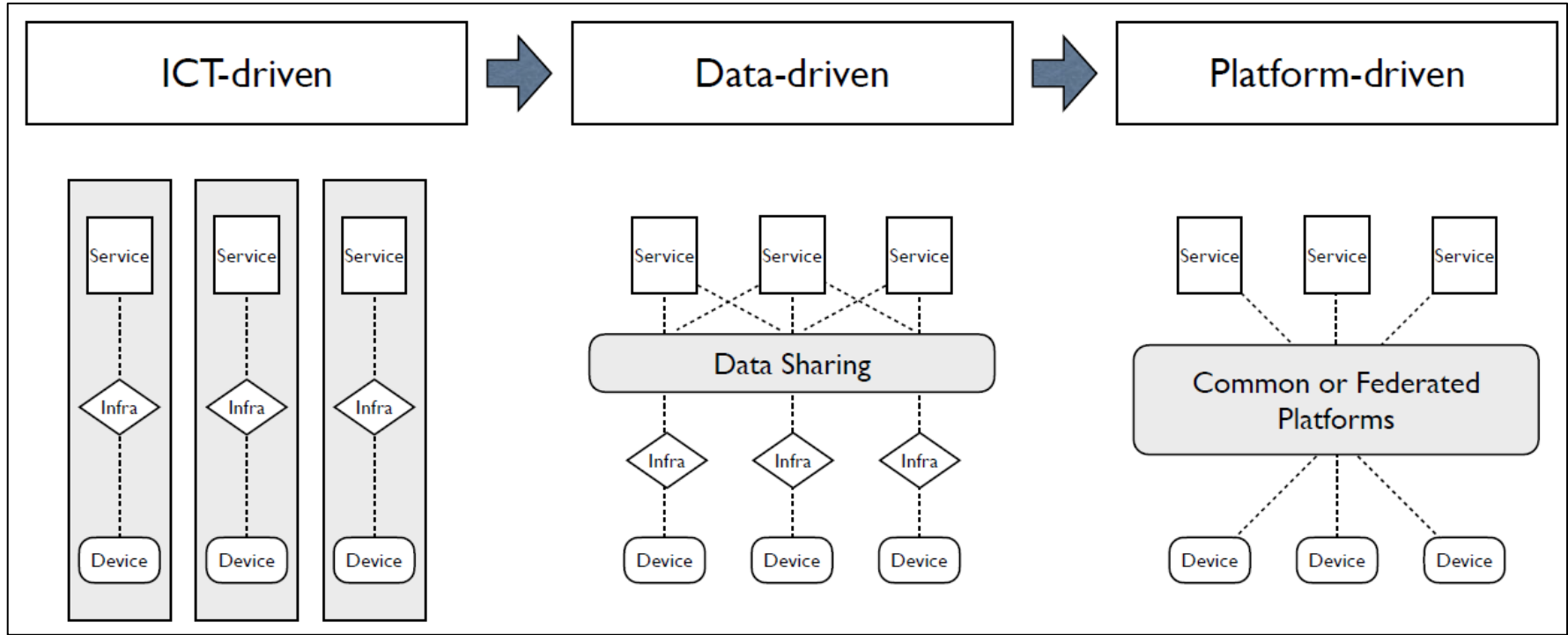


(NIA, Korea's Data Ecosystem, 2022)

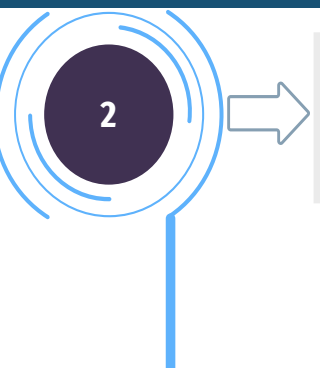


# • Korea's Data Governance

▪ **Future Direction for Data Ecosystems Development**



(NIA, Korea's Data Ecosystem, 2022)



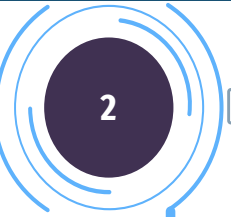
• **Korea's Data Governance**

▪ **Data Governance Framework of KOREA**

|              | Ministry of Safety and Interior                                      | Ministry of Science and ICT   |
|--------------|--|---|
| Area         | Public Data<br>(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<br>(Released by Public)                             | Big Data Platform<br>AI Hub Platform<br>(Released by Public-Private)                                |

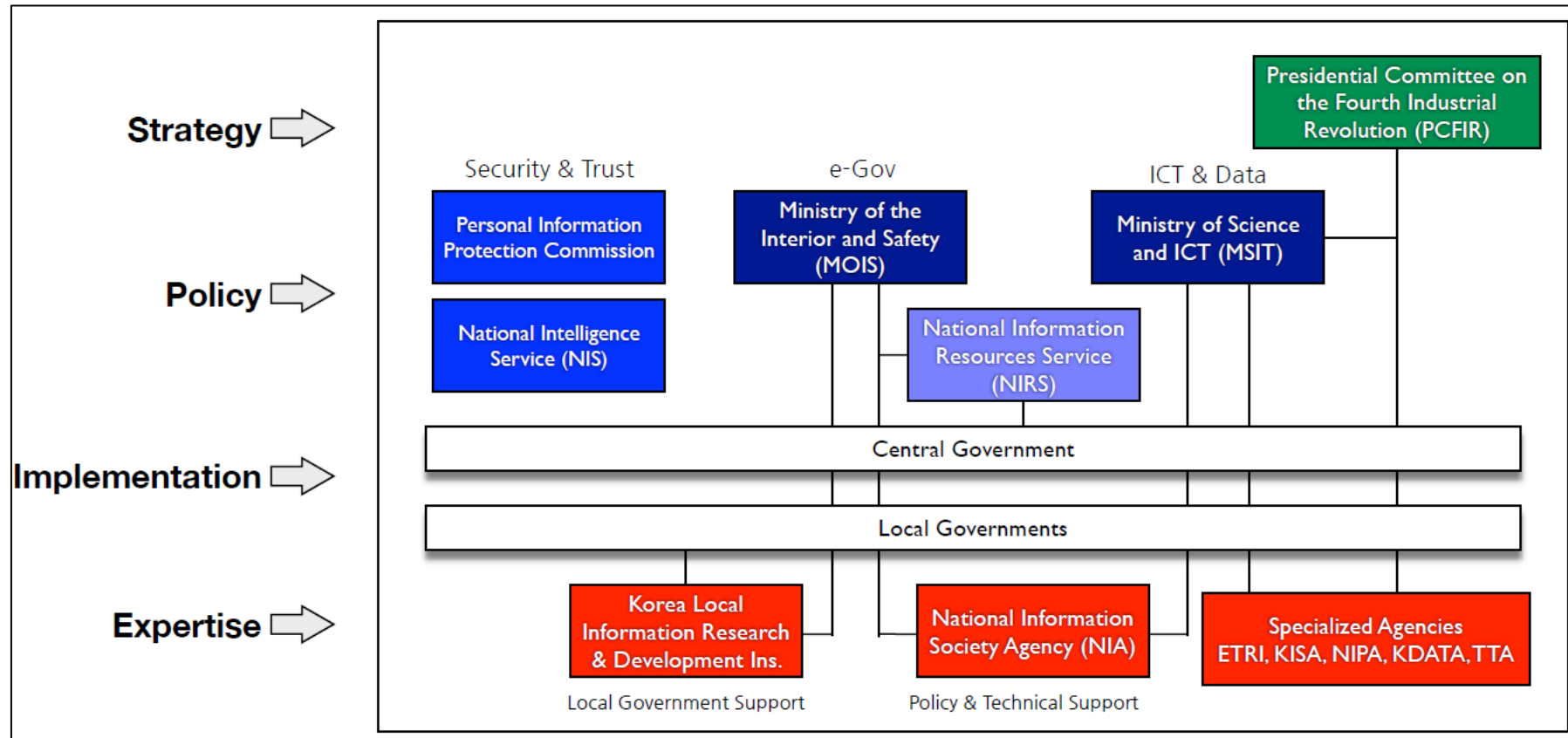
(NIA, Open Governance Date Policies, 2024)



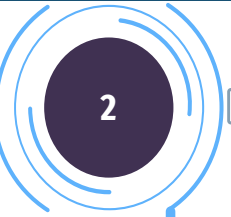


• **Korea's Data Governance**

▪ **Korea's Data Governance**



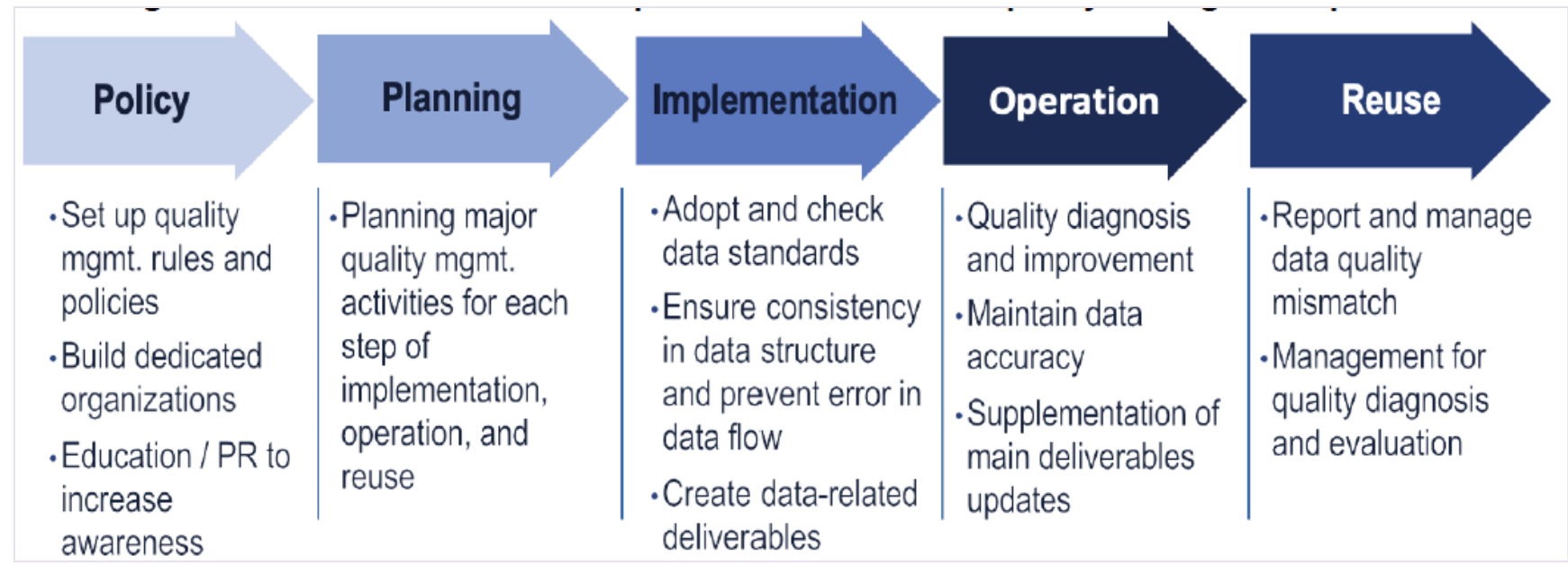
(NIA, Korea's Data Ecosystem, 2022)



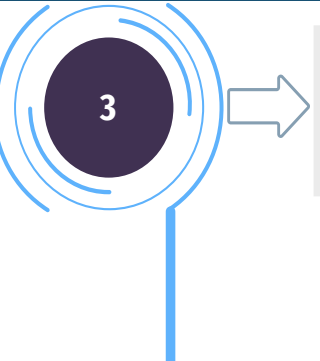
• **Korea's Data Governance**

▪ **Data quality management and evaluation**

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



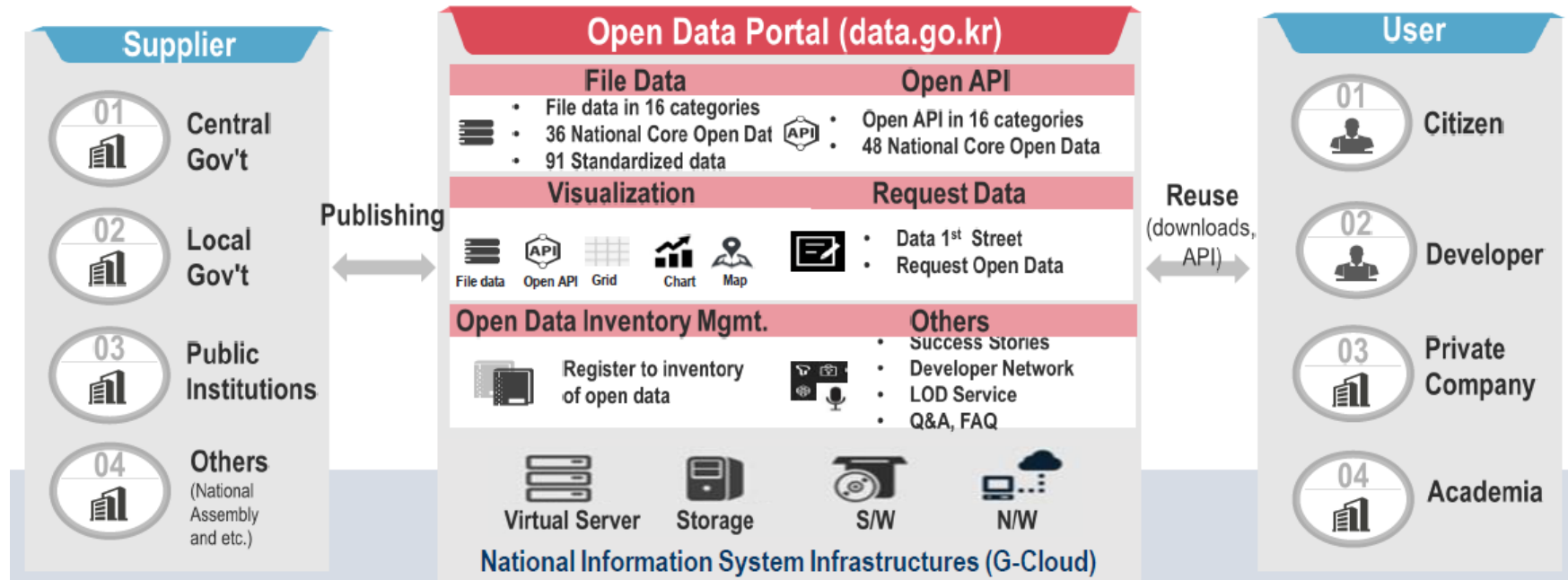
(NIA, 2019)



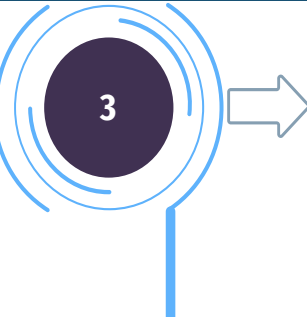
**• Korea's National Data Portal and Digital Platform Government**

**▪ National Data Portal**

**Integrated and central management platform for registering and publishing datasets for all governments and public institutions**



(NIA, Open Governance Data Policies, 2024)



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

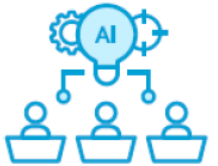
- **Digital Platform Government**

### Digital Platform Government Implementation Plan



**Government Dedicated to Each Citizen**

- One-stop access to all public services
- Proactive provision of benefits
- Inclusive digital public services for everyone



**Intelligent Government Working as a Whole**

- Scientific administration with data & AI
- Digital infrastructure innovation to work as a whole
- Silo-free data ecosystem



**Public-Private Partnership for Mutual Growth**

- Strategic collaboration with data & AI industry
- Fostering GovTech
- Supporting innovation of local governments



**Secure and Reliable Digital Government**

- 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

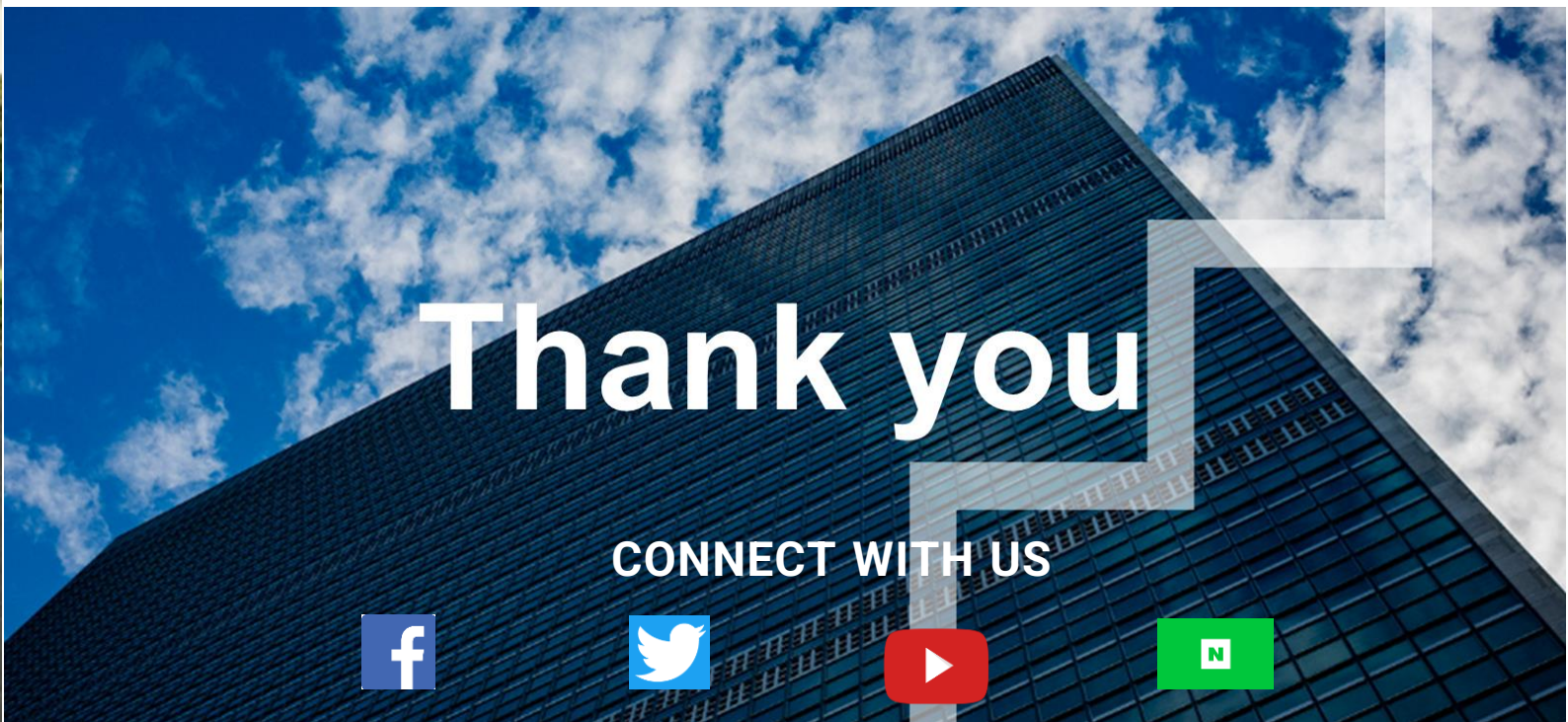
- 1. Data Governance is critical for ensuring data safety, security, privacy, usability and compliance with internal and external data policies.***
- 2. It is important to create a culture for data-driven administration by promoting policies to ensure that data-based administration spreads into institutions.***
- 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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