



**KGID
2025**

**Green Growth:
The Path to
Sustainable Jobs**

Korea's Data Framework to AI-Enabled Public Innovation

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CONTENT

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Open Government
Data('OGD')
Governance

2

Toward
Public AI Innovation

3

To Conclude

Open Government Data('OGD') Governance

Korea's Open Data Framework

Governance	Natl. Level	Coordination Body	Ministry Level	Supporting Agency	Dispute Res. Body	
Laws & Regulations	Open by Default	Org. Structure	Planning (basic, action)	Assessment (Mgmt & Quality)	Data Format	
	Data License	Data Mgmt.	Data List Registration	Data Standardization	Data Portal	
	Util. Support Activities	Usage Survey	Education & Training			
Standard	Common Standard Terminology	Open Data Provision	Metadata	Gov't Business Function	Quality Mgmt.	Code
System	Natl. Portal	Data List Mgmt.	Metadata Standard Mgmt.	Gov't Business Function Mgmt.	Code Standard Mgmt.	
Guideline	Data Mgmt.	Data Standardization	Data Quality Mgmt.	Code Standard Mgmt.		
Assessment	Data Mgmt. System	Data Value Management				
Util. Promotion	Education & Training	Challenges/Competitions/Events	Best Practice Sharing	Usage Survey		

World Bank(2024), Enabling Data-Driven Innovation: Learning from Korea's Data Policies and Practices for Harnessing AI

Key enablers of Korea's Open Data Infrastructure

Trust



Data should be certified and users, both human users and machines like AI should be reliable



Sovereignty



Managing history of data trade and transaction ensures the sovereignty of data Providers



Interoperability



Data should be readily available at any platform

K-National Data Infra.

Data Sovereignty

Subject rights, Interest distribution

- Trade & Trans. Traced
- AI Data Source Management

Data Usage

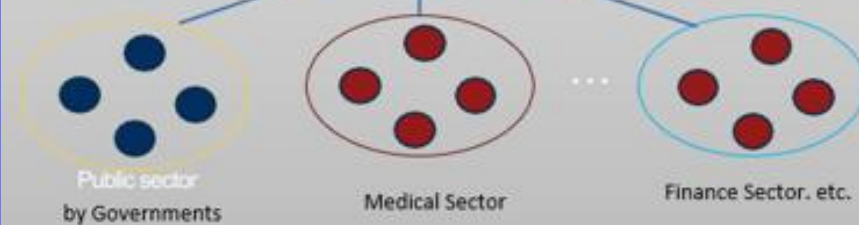
Human users + AI

- Data Catalogue
- Authenticated Users (Human & AI)
- Interoperability

Data Management

Trust

- Data Quality Mgmt
- Laws and Regulations



Mandatory Application

Access Rights of Public Data

Freely Available for Any Users(Human&AI)
at Any Platforms

Trust secured by institutionalization

Public data Infra in Korea

Data Sovereignty

Subject rights, Interest distribution

- Some Data Source Indicated
- (Public) Source Data Mgmt, (Private) Free of Charge

Data Usage

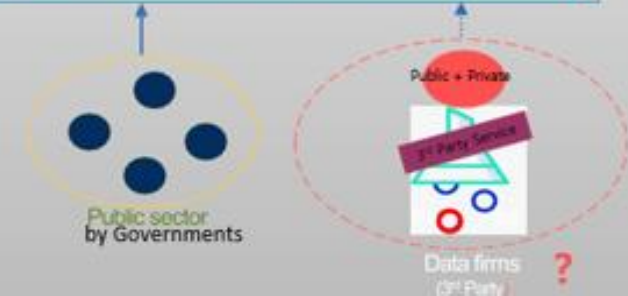
Human users + AI

- Metadata for Usages(Business, Operations, etc.)
- (Human) Using ID & PW or Private Auth. Methods
- (Machine) API-Service Keys
- Source Data Mgmt-Ind. Data Sharing Sys- National Data Sharing Sys.

Data Management

Trust

- Public Data Guidelines
- Act on Promotion of Providing and Use of Public Data & Public Data Standard Guidelines



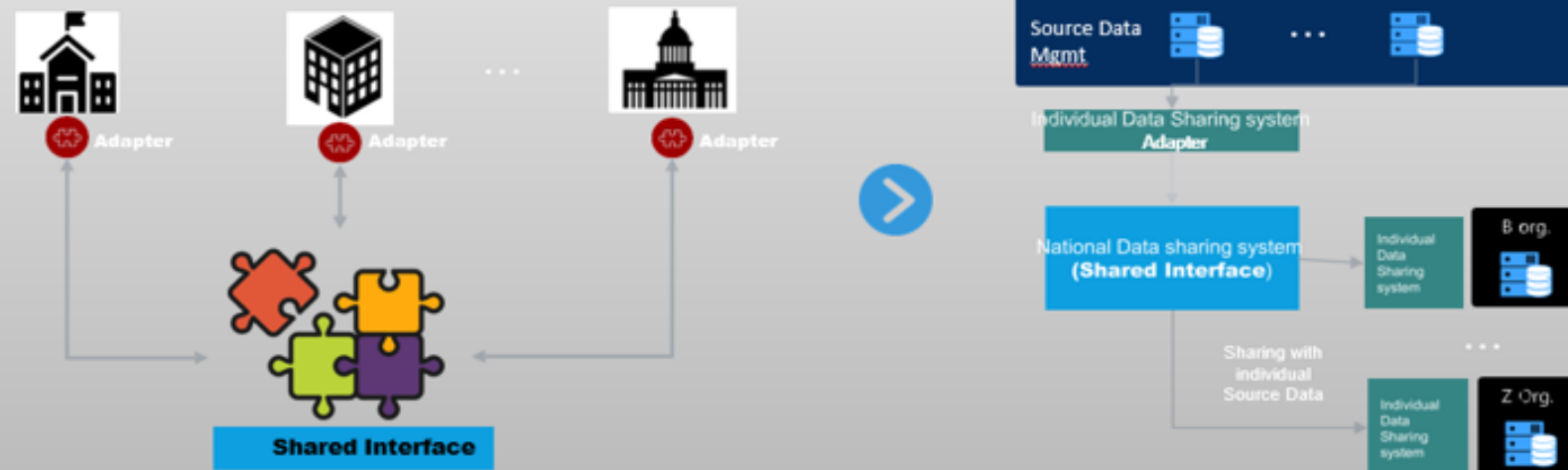
As-Is Standardization

In compliance with essential standards, individual organizations were able to standardization while transitioning from their legacy systems



To-Be Interoperability

Implementing the shared interface allowed individual organizations to achieve standardization without changing their legacy systems



Toward AI enabled Public Innovation

AI Roadmap by Gartner

+ Infrastructure
(Data Center)

AI roadmap at a glance



Source: Gartner
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Gartner

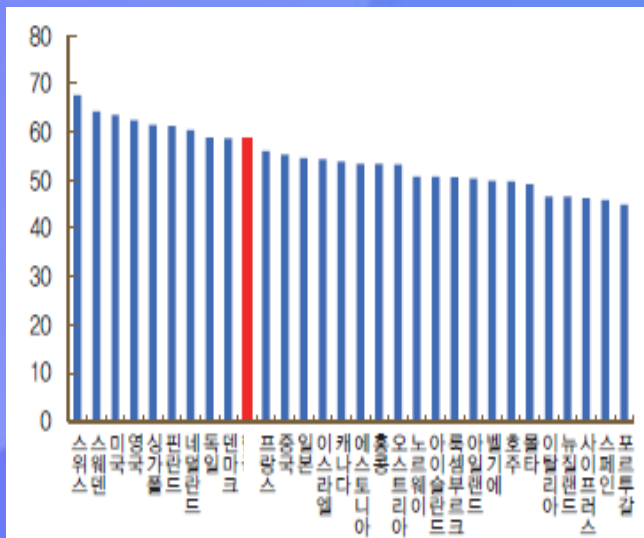
“ **Current AI is just cute tiger cub** by Jeffrey Hinton ”

The young tiger before us could grow into a fierce beast that devours us, or become a lovable “Duffy” like the one from *K-Pop Demon Hunters*. Likewise, the same knife can be a wonderful tool in the hands of a chef, bringing happiness to others, or a threatening weapon in the hands of a robber. In particular, AI is an invention that brings the most disruptive innovation across the entire process of knowledge and information management — and it can even make judgments and decisions on its own, like a human. Therefore, the kind of future that unfolds before us will depend entirely on how we choose to handle this tool called AI.



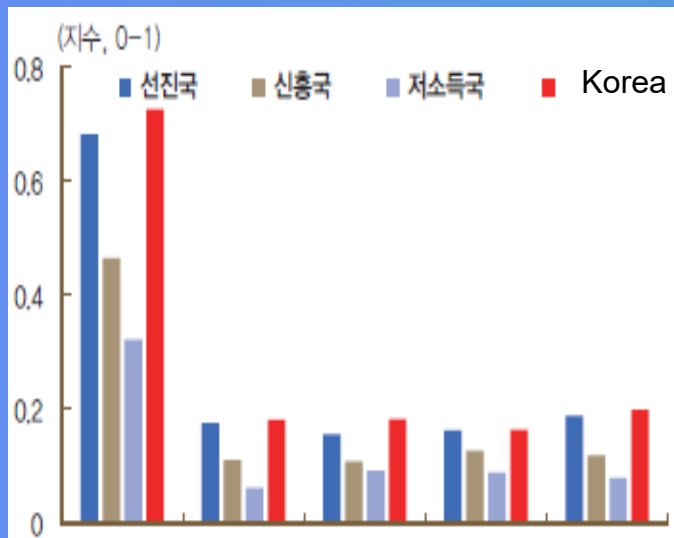
AI Preparedness Index

Global Innovation Index



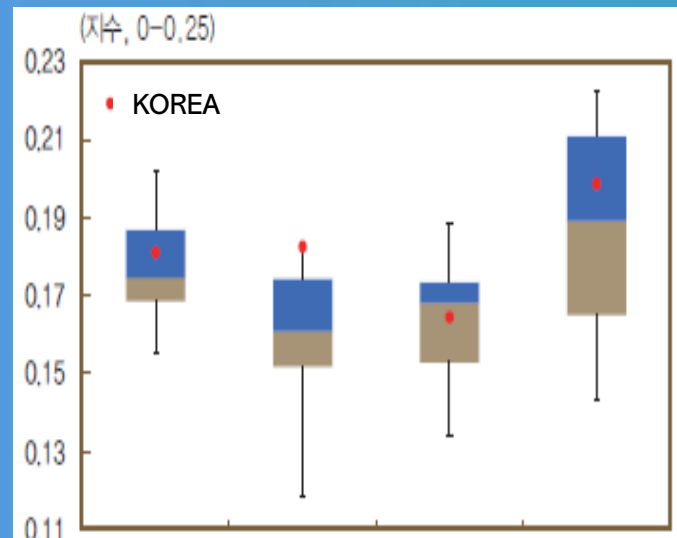
Korea

AI Preparedness Index ('API')



Bank of Korea(2025), AI and Korean Economy
Cazzaniga et al.(2024)

API Boxplot



Digital Infra. & Innovation Economic Integration Human Capital & Labor Mkt Policies Regulation & Ethics

AI Governance

National AI Committee

Activated !

- ❖ **Presidential Committee**
- ❖ **(Chairman) The President (VP) A private sector appointed by the President (# of Members) 45**
- ❖ **Mandate**
 - To issue **recommendations and opinions** to heads of government agencies and AI service providers on the **ethical implementation, safety, and reliability** of AI.
 - In cases involving **legal or institutional improvements and action plans**, the heads of relevant national agencies are required to **formulate and implement** corresponding measures.

Master Plan

- ❖ **Formulate and implement every 3 years**
- ❖ **Process Overview:**
 - ① **Minister of Science and ICT** collects opinions from **central administrative agencies and local governments** →
 - ② **The Minister of Science and ICT** drafts the **National Basic Plan for Artificial Intelligence**. →
 - ③ **The National Artificial Intelligence Committee** deliberates and approves the plan. →
 - ④ Upon approval, the plan is **established, revised (if necessary), and implemented**.

AI Act

Inacted on Dec. in 2024, and to be taken effect on Jan.22, 2026

Chapter	Article(s)	Main Contents
Chapter 1 General Provisions	1-1	Defines the purpose, key concepts (e.g., AI, AI business operators, influenced entities), scope of application, basic principles, responsibilities, and relationship with other laws.
Chapter 2 Promotion System for Sound AI Development and Trust-based Environment	6-12	Establishes the National Artificial Intelligence Committee (composition, functions, subcommittees), and supporting institutions such as the AI Policy Center and AI Safety Research Institute . Provides for the National Basic Plan and its implementation.
Chapter 3 AI Technology Development and Industry Promotion	13-26	Section 1 (Articles 13–15): Support for AI technology R&D , safe utilization, standardization , and training datasets . Section 2 (Articles 16–26): Promotion of AI technology adoption, support for SMEs, startup activation, industry-academia collaboration , and international cooperation . Includes legal and institutional improvements, professional workforce development, global market entry support, AI testbeds and demonstration projects, AI data centers , and Korea AI Industry Promotion Agency .
Chapter 4 Ensuring AI Ethics and Trustworthiness	27-26	Defines AI ethical principles ; establishes the Private-Sector AI Ethics Council ; promotes a trust-based AI ecosystem through self-regulation and capacity building. Provides measures for AI transparency, safety, accountability, and oversight (including specialized committees and advisory bodies). Designates a National Representative Agency for AI ethics.
Chapter 5 Supplementary Provision	37-41	Provides measures for funding, fact-finding surveys , and the collection of statistics and indicators . Grants the Committee authority to request reports and conduct investigations .
Addenda & Enforcement	42-43,1-3	Contains penalty provisions, enforcement details , and transitional measures , including preparatory committees and temporary arrangements for initial implementation.

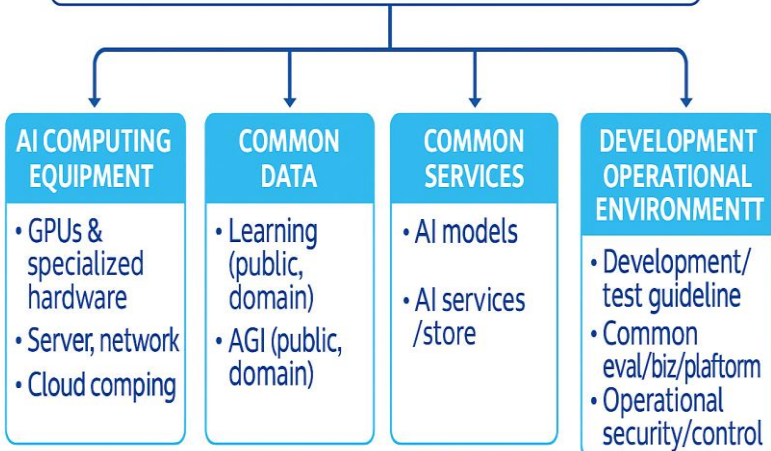
Infrastructure_ Whole-of –Government Public AI Platform



Under Construction!

WHOLE-OF-GOVERNMENT AI INFRASTRUCTURE

Public AI resources for use
by government/local authorities when plan
planning or implementing AI



PLATFORM FOR GOVERNMENT PUBLIC OFFICIALS TO SECURELY AND CONVENIENTLY UTILIZE GENERATIVE AI ERV

**Use
based**

**Whole-of-Government Shared Services &
Agency-Specific Specialized Services**
(AI Models Sharing via APIs)

Admin System
(Provides User Management, Service Catalog, Service)

**Tech
based**

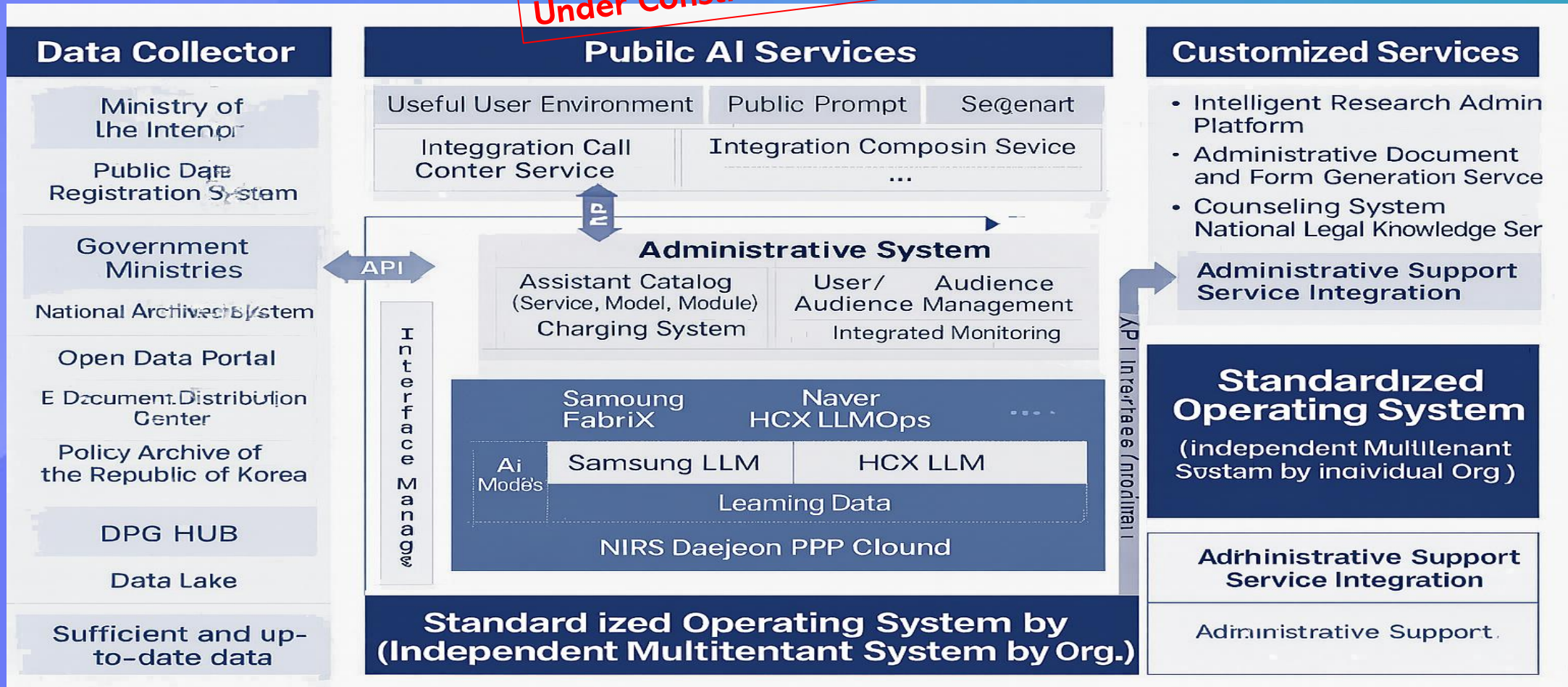
Private AI Platform
Private AI Mloodels platform)

Private LLM
Accommodates Multi LLM, sLLM

Cloud Infrastructure
NIRS Data Center PPP Cloud

Infrastructure_ Whole-of –Government Public AI Platform

Under Construction!



Infrastructure_ AI Data center



Just Agreed!



Talent Development

Being Trained



KAIST



Korea Univ.



Sungkyunkwan Univ.



GIST



POSTECH



UNIST



Yonsei Univ.



Hanyang Univ.



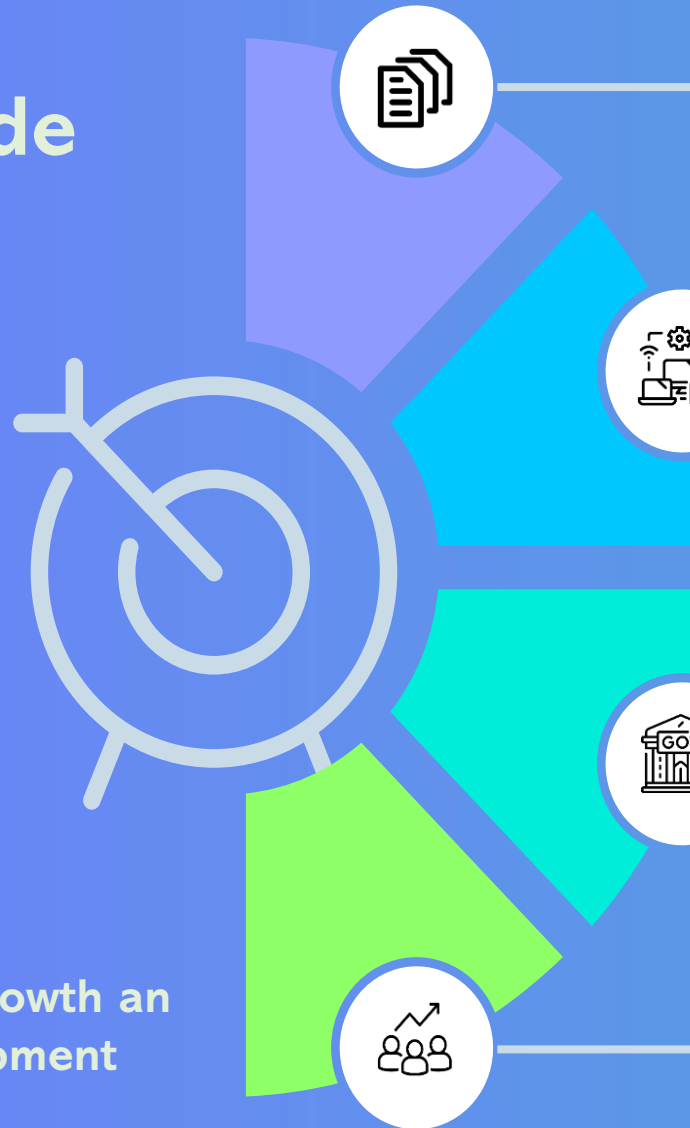
Seoul National Univ.



Chung Ang Univ.

To Conclude

For sustainable growth and resilient development



AI Data

Data should be reliable, readily be available at any platform, while ensuring the sovereignty of Data owners/ providers.

AI Enabled Infrastructure

- Data platform should be interoperable
- Data Infrastructure requires a holistic redesign of national infrastructure that is, AI-enabled one. The 1st thing to do is a setting meta data and classification standard

AI Governance

Though top down approach alone is not desirable, political will from the Government is critical to drive AI governance

AI Talent Development

Developing domestic talent, attracting global experts, or leveraging international cooperation might be available approaches

Q&A

For further inquiries,
Pls. feel free to contact at
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Thank you