



ECLAC

**NIA** NATIONAL INFORMATION  
SOCIETY AGENCY

# Digital Inclusion From Policy to Actions

For Ensuring the Rights of All people

**Dr. Jong Sung Hwang**

President of the National Information Society Agency (NIA) of the Republic of Korea



ECLAC

NIA  
NATIONAL INFORMATION  
SOCIETY AGENCY

# What we'll have **today**

Digital Inclusion From Policy to Actions For Ensuring the Rights of All people

- I Background
- II Korea's Digital Inclusion Policies and Projects
- III Time to think





ECLAC

NIA  
NATIONAL INFORMATION  
SOCIETY AGENCY

## Digital Inclusion From Policy to Actions

For Ensuring the Rights of All people

# Background

## Chapter. 01



## South Korea IT infrastructure Comparison



1995

Internet Users

**3.4%**

2000

Internet Users

**41.6%**

2005

Internet Users

**70.2%**

2025 est.

Internet Users

**95%**

1995

Mobile Subscriptions  
per 100**16.7**

2000

Mobile Subscriptions  
per 100**54.2**

2005

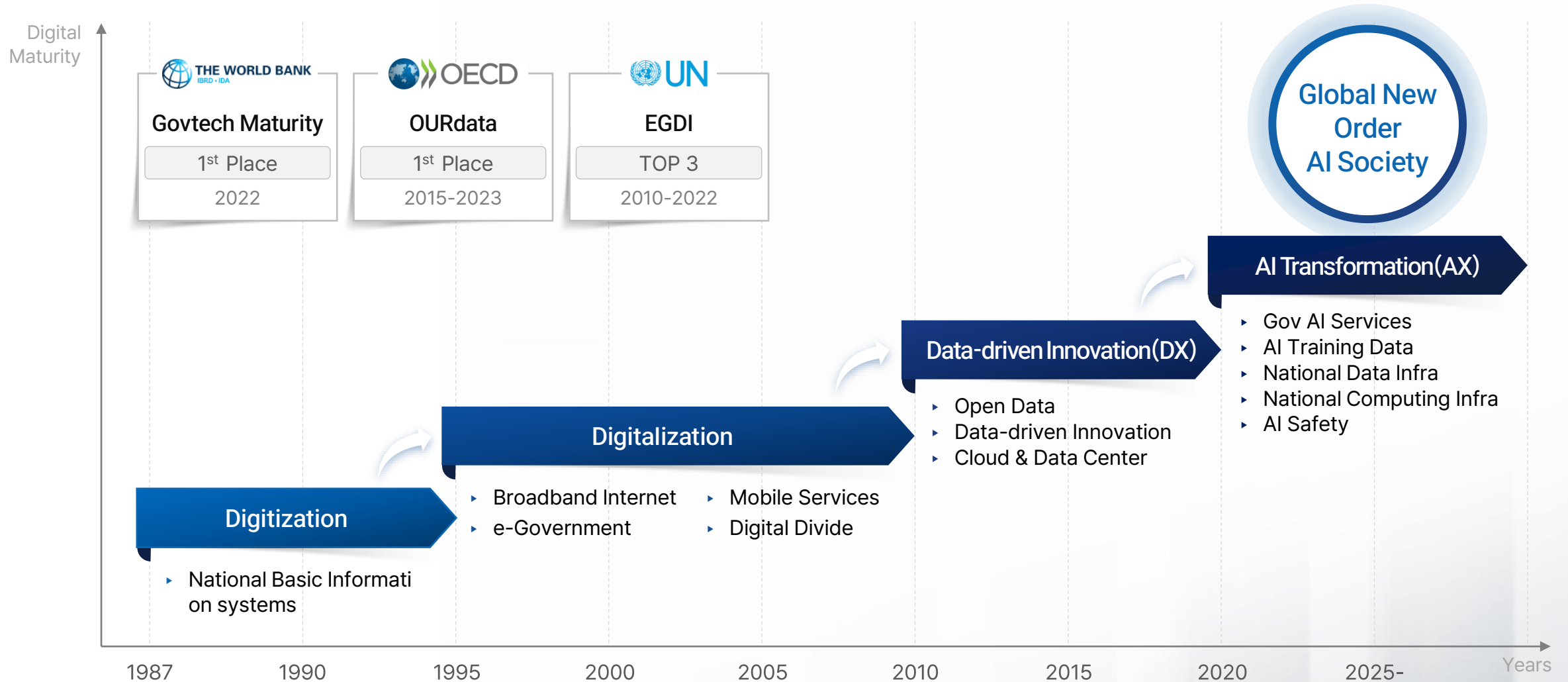
Mobile Subscriptions  
per 100**77**

2025

Mobile Subscriptions  
per 100**97.7**

Over three decades, Korea transformed from a low-connectivity nation to one of the most digitally connected societies globally.

# Korea's Digital Leapfrogging





# Need to ensure universal rights for all citizens



Due to rapid advances in AI and Digital,  
there is a pressing need to **ensure universal rights for all citizens**

news1  
KOREA



It's sad to get old...  
vulnerable people can't cope with  
the "digital transformation", such as  
calling a taxi, train reservation, etc.

## Transportation Sector

If you can't use a smartphone app  
**Can't use public transportation**

아시아경제

"Kiosk barriers" still too high  
for people with disabilities  
Look for a restaurant without a kiosk

아시아경제

"Out of reach... "Unattended Ordering"  
People with disabilities in front of it"

## Consumption Sector

Unmanned information terminals  
**Deprive the vulnerable  
from using services**

jtbc

"Can't ride without a card"...  
Seniors are stuck on "Cashless Bus"

헤럴드경제

"It is sad to be old"...  
"Elderly people are excluded from  
fee exemption in the financial sector."

## Financial Sector

Contactless financial services  
**Exclude people with disabilities**

## Digital Gap becoming social, economic Gap



Digital usage: No longer an option, now a necessity  
The digital Gap becoming social, economic Gap

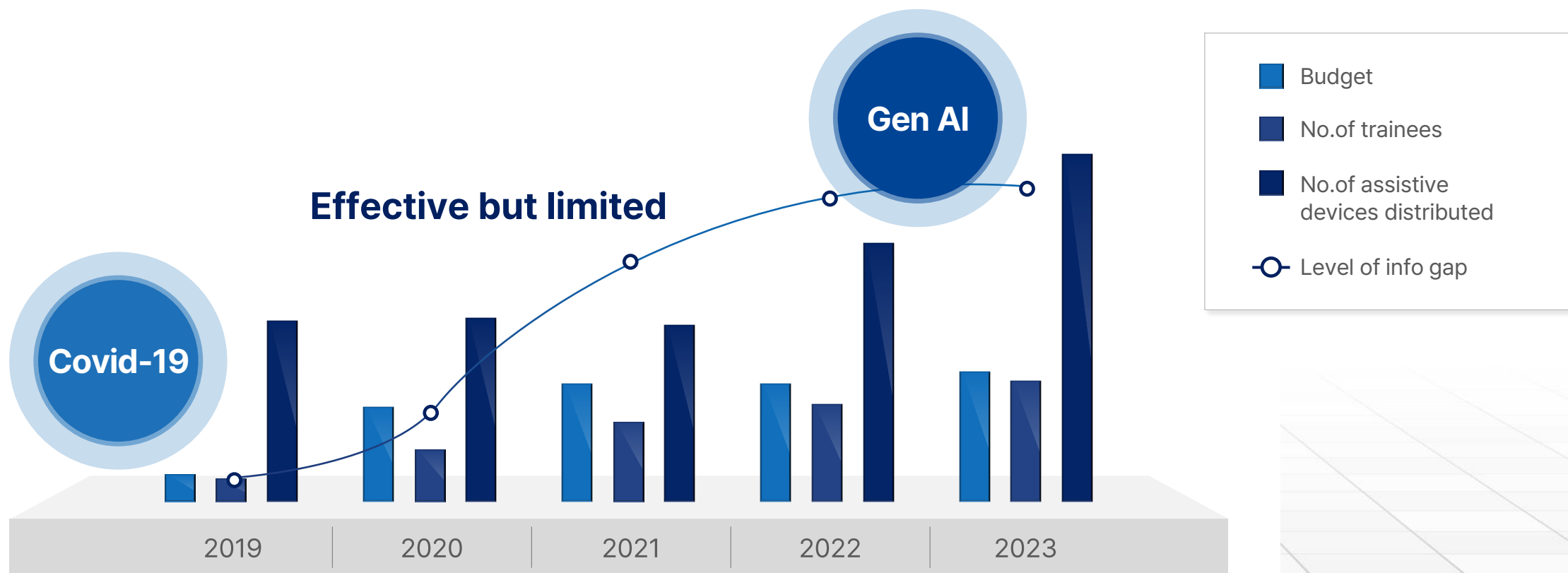


**In the past, economic, social, and cultural activities were possible without digital technology, but now digital technology exists as an interface for all activities, making ultimate activities impossible without digital technology.**

## Gaps are stuck at certain level



The **gaps** are being narrowed gradually **for years**,  
**but** seemingly are stuck **at certain level around mid-70%**





# AI Creates New Social Inequalities

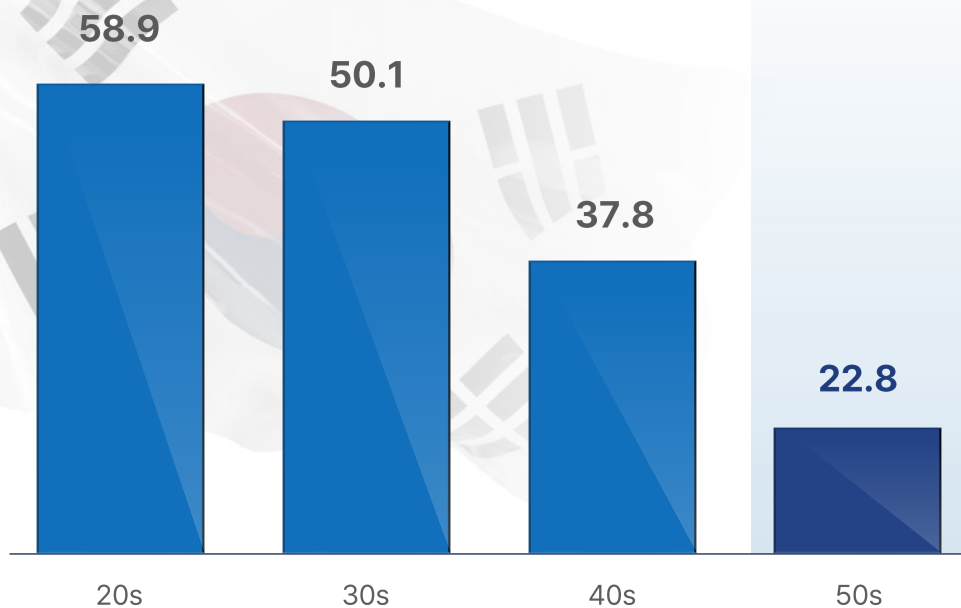
## KOREA

## Usage of generative AI by age group(%)

AI & digital tools are  
widely used in daily life

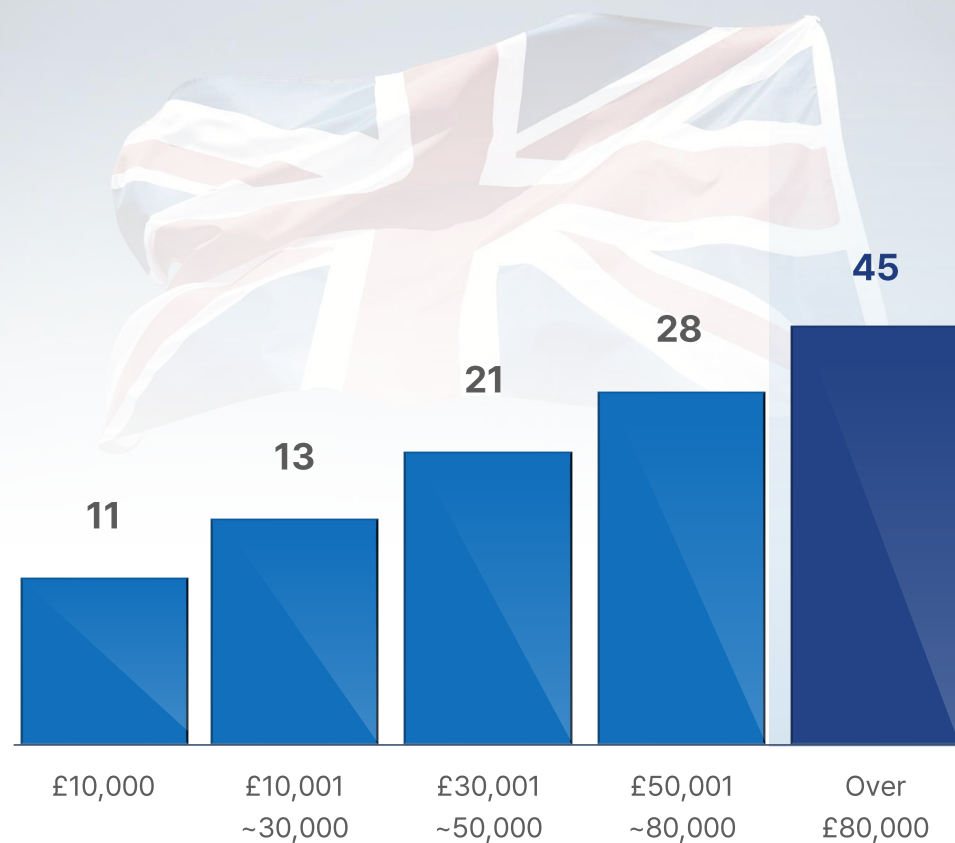


**Creates new  
social inequalities**



## UK

## Children's usage of generative AI by household income (%)





ECLAC

NIA  
NATIONAL INFORMATION  
SOCIETY AGENCY

Digital Inclusion From Policy to Actions

For Ensuring the Rights of All people

# Korea's Digital Inclusion Policies and Projects

Chapter. **02**

# Milestones in Digital Inclusion Policies & Projects

Long journey from acting law to close digital divide focusing on infrastructure and devices,  
to Digital Inclusion Act for brand-new strategies

Bridging the digital divide for the  
**Underprivileged**

Bridging the digital divide for  
**All Citizens**

## Introduction

1984~2009

## Development

2010~2019

## Transition

2020~2022

## New Revolution

2023~

- 1984 ICT Training Center
- 1988 Rural Computerization Project
- 2001 Digital Divide Law
- 2002 Internet Addiction Counselling Center  
→ Smart Rest Center
- 2007 Telecommunication Relay Service for the Disabilities

Initiation of Inclusive Policy Programs

- 2011 Public WiFi  
Expansion of High-Speed Broadband Network Project for Rural Areas
- 2017 Nationwide Wireless Network Infrastructure Project for Schools

Infrastructure Expansion & Targeted Support

- 2020 Digital Inclusion Strategy  
Digital Learning Centers
- 2021 Ensuring Access to Kiosk  
Revision of the Act on Disabilities Discrimination Prohibition

Nationwide Support for Enhancing Basic Digital Competencies

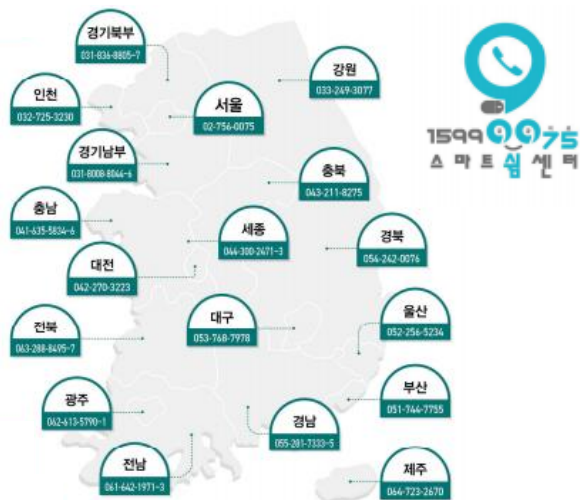
- Widely used ChatGPT
- Expansion of robot application
- Unmanned services, etc.
- ⋮
- A New Paradigm of Digital Inclusion Is Required

- 2023 Digital Bill of Rights
- 2024 Government-wide Master Plan for Digital Policies
- 2025 Digital Inclusion Act

## Phase 1 : ① Smart Rest Center

“ The Smart Rest Center is a specialized institution for the prevention and resolution of internet and smartphone overdependence. It aims to renew the negative image of addiction and **serves as an open space that provides a cozy and pleasant shelter for clients and citizens alike.** ”

### Operation status of smart Rest Center



- ✓ 18 centers are in operation across 17 metropolitan cities and provinces (2 in Gyeonggi Province)

### Addressing Dysfunction

Smart Rest Center

53k cases  
Counseling on  
excessive reliance

614k  
participants  
Prevention  
course

In 2024, **614k** participants of prevention courses & **53k** cases of counseling on excessive reliance were provided

## Phase 1 : ② Telecommunication Relay Service Center

“

A real-time relay service that enables individuals with **hearing or speech impairments to communicate freely via telephone.**

”



### Things You Can Do with the Real-Time Relay Service

**From general inquiries to job searches — with the relay service,**  
your daily life becomes even more convenient.



#### General Inquiries

Now you can ask about anything you're curious about.



#### Shopping & Reservations

I can order products from home shopping channels and even make hospital appointments.



#### Job Search

I contacted the company directly and scheduled an interview myself.



#### Business Calls

I no longer ask my colleagues to call clients for me — I do it on my own.



#### Contact with Family & Friends

While working away from home, I've been able to call my parents more often.



## Phase 2 : ① Public Wi-Fi and Rural Communication Networks

“

Bridging the Digital Divide through **Expansion of Public Wi-Fi** and **Advancement of Rural Communication Networks**

”

### Public Wi-Fi

2011~

<b>Bus Wi-Fi</b>	Nationwide installation with integrated security and quality control systems
<b>Public Wi-Fi</b>	Deployment and operation of public Wi-Fi in public areas nationwide, including underserved regions such as remote islands
<b>Foundation for Public Wi-Fi Expansion</b>	Establishment and operation of an integrated public Wi-Fi management center and implementation of pilot projects utilizing the public Wi-Fi platform



Bus



Traditional Market



Public Health Center



Community Center



Island Region

Public Wi-Fi is in operation at 58,000 public locations and 32,000 buses nationwide (2023)

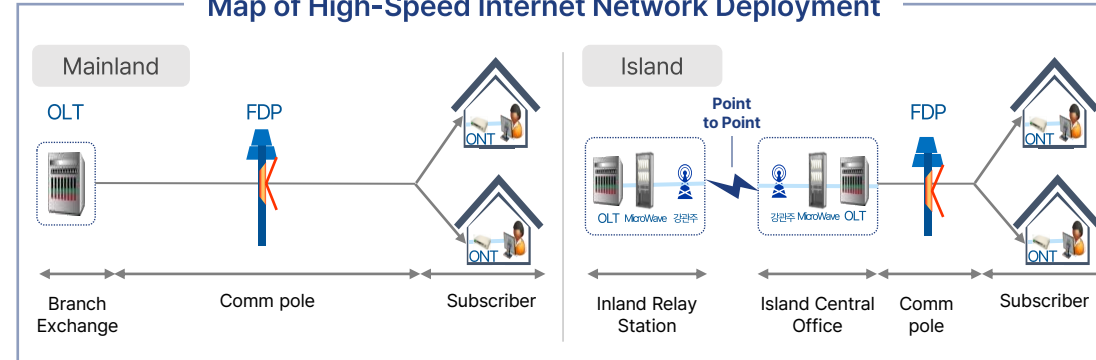
### Rural Communication Networks

2004 ~ 2024

**Deployment of 100Mbps high-speed internet in underserved rural and remote island areas**

Establishing high-speed internet networks to enable the use of broadcasting and telecommunication services such as online education and IPTV

#### Map of High-Speed Internet Network Deployment



Deployment of High Speed Internet Networks in 3,500 Villages  
Foundation for Expanding Remote Education and e-Government Services in Rural Areas

## Phase 2 : ② School Wireless Networks

“

To support a future-oriented learning environment using digital textbooks, **wireless APs and PoE switches are being deployed and operated in elementary and middle schools**

”

### 1 2017

Agreement signed between the Ministry of Education and NIA for the deployment of wireless infrastructure in elementary and middle schools

### 2 2018-2020

Phase 1 deployment of school wireless infrastructure (USD 100 million)

### 3 2021-2022

Phase 2 deployment of school wireless infra (USD 200 million)

### 4 2023

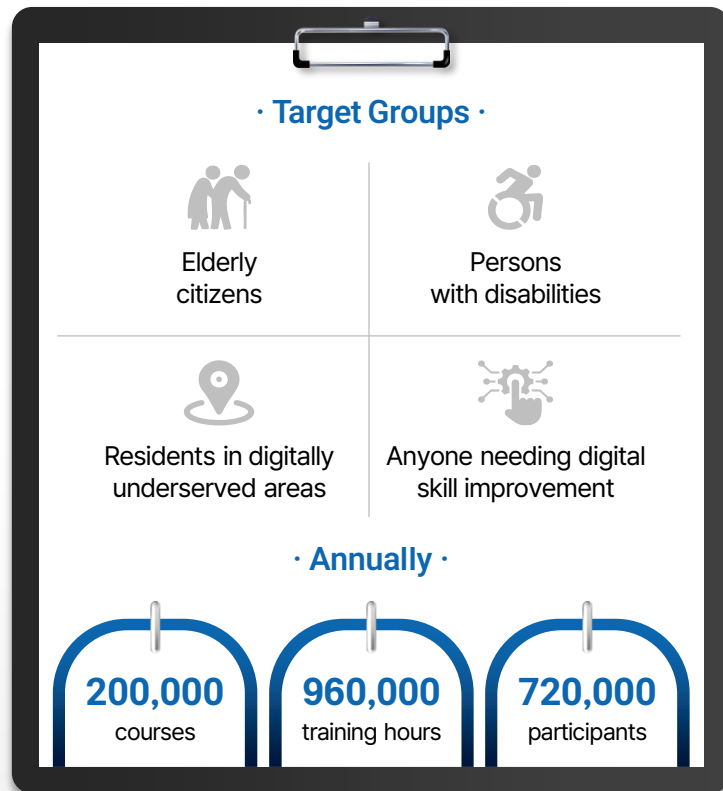
Technical Support Center for School Wireless Infrastructure / School Wi-Fi Integrated Management System (SWIMS)



Wireless communication equipment was installed in 251,979 classrooms nationwide and is maintained through the SWIMS system

## Phase 3 : ① Digital Learning Center

Government-led initiative by NIA to bridge the digital divide by offering region-based education hubs where citizens—especially those digitally underserved—can **develop digital skills and access essential services**



### Service Types

- ✓ Regional permanent education centers (Digital Learning Hubs)
- ✓ Mobile visiting education services
- ✓ Help desk support
- ✓ Deployment of digital guides in communities

### Contents

- ✓ How to use smartphone apps
  - ✓ Accessing online information and e-government services
  - ✓ Using kiosks and ATMs
  - ✓ Experiencing AI-based services and devices
- Practical digital literacy skills

#### Digital Learning Hub



#### Helpdesk



#### Digital Experience Zone

Try out AI devices and kiosks



## Kiosk UI Platform

- Promoting the adoption of user-friendly interfaces for all and foster a collaborative ecosystem between users and developers

## Disabilities &amp; Elderly

Providing a convenient user experience

## Developers

Enhancing development efficiency by providing UI guidelines and support tools

## Users &amp; Developers

Building a stakeholder collaboration framework



## Kiosk Committee

- Multi-stakeholder consultative body aimed at enhancing digital accessibility in kiosk services bringing together public institutions, private developers, and accessibility experts

- ✓ Development of policies to ensure information accessibility in kiosks
- ✓ Establishment of kiosk accessibility standards
- ✓ Awareness-raising initiatives to promote kiosk accessibility
- ✓ Capacity building program on kiosk usage for the disabilities and the elderly
- ✓ Application and expansion of kiosk UI platforms
- ✓ Training for kiosk developers
- ✓ Support for overseas export of kiosks





# Global Digital Inclusion Network

“

## Building a Global Digital Inclusion Network to Promote Global-shared Prosperity

”



**AI Development Center  
(AIDC)**

AI Workstation, AI Training  
Datasets, AI Education Facilities  
(Nigeria, Bhutan, Albania)



**Digital Government  
Cooperation Center (DGCC)**

Joint Project, Capacity Building,  
Policy Consulting, Knowledge  
Exchange  
(9 centers in 9 countries including  
Peru, Costa Rica, Honduras)



**NIA Global Academy**

Invitational & On-Site Training  
Program, Online Courses  
(12,000 participants from  
160 countries since 1998)



## Phase 4 : ① Establishment of the Digital Bill of Rights

“

Digital Bill of Rights was derived through extensive public engagement, including academic societies, CEOs, university presidents and younger generation leaders.

”



### Younger Generation Conference

Discussing digital order with younger generations, future leaders of the digital era

Aug



### Digital Society Conference

Gathering insights from scholars and experts of various fields on digital order

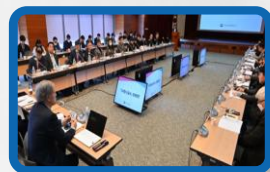
May



### 2nd Conference of the Consultative Body

Discussing the foundational direction and principles of Digital Bill of Rights

May



### Launch of New Order Consultative Body

Launching "New Order Consultative Body" to reach social consensus on a new digital order

Mar

2023

Aug

### Launch of Online Digital Forum

Launching of Digital Forum to provide a platform for open discussion and social consensus on key digital agendas and issues



Sep

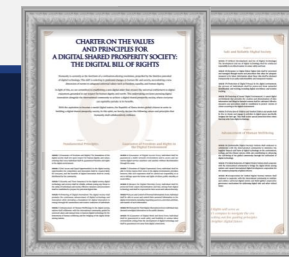
### Digital Bill of Rights Conference with Business Leaders

Opening the floor to digital businesses in AI, data and robotics to discuss their related rights and obligations in the digital era



Sep

### Declaration of Digital Bill of Rights



## Phase 4 : ① Establishment of the Digital Bill of Rights

“

### Digital Shared Prosperity Society

”

Society in which everyone pursues innovation brought by digital technology and simultaneously enjoys the benefits

#### 5 KEY PRINCIPLES



Guarantee of  
**Freedom and Rights**



Fair Access and  
**Equal Opportunity**



Safe and Reliable  
**Digital Society**



Promotion of  
**Digital Innovation**



Advancement of  
**Human Well-Being**



## Phase 4 : ② Government-wide Master Plan for Digital Policies

“

Identified 20 policy actions based on the 5 key principles of Digital Bill of Rights.

”

### 5 KEY Principles



**Freedom**



**Fairness**



**Safety**



**Innovation**



**Human Well-Being**

### 20 Policy Actions

- Right to be disconnected
- Right to be forgotten
- Improvement of digital access & alternative means
- Ensuring suitable labor rights
- Building suitable education system
- Establishment of suitable social systems
- Modification of Copyright law on the development & use of AI technology
- Ensuring a fair digital market
- Establishment of regulations on digital assets
- Establishment of regulations on metaverse economy
- Ensuring safety, reliability & ethics in AI technology
- Addressing fake news using deepfake technology
- Addressing digital crisis, cyber threats and crimes
- Protecting personal information and privacy
- Remote medical appointments
- Establishment of standards & principles on the use of AI
- Acceleration of open data
- Acceleration of digital innovation & conflict management
- Transition to low emission using digital technologies and addressing climate crisis
- Enhancing global collaboration on AI & digital



## Phase 4 : ③ Digital Inclusion Act

“ In January 2025, South Korea enacted Digital Inclusion Act to guarantee digital rights for all in the era of AI and Digitalization. ”

### • Economic •



### • Social •



### • Cultural •



Define the concept of digital inclusion as  
“ An environment where all members of society can equally enjoy the benefits of intelligent information technology without discrimination or exclusion. ”

## Phase 4 : ③ Digital Inclusion Act

“ **Enacted as a law to contribute to the improvement of the quality of each individual member's life and social integration** by building a foundation for the development of digital inclusion technologies and industries. ”

Reinforcing  
Systematic Policy  
Implementation



Digital Capability  
Support System



Legal Ground for Digital  
Accessibility System



Development of  
Digital Inclusion  
Industries





## Phase 4 : ③ Digital Inclusion Act

### 1 Systematic Policies for the Digitally Disadvantaged



#### Comprehensive Planning

Formulation of detailed master and action plans ensuring digital inclusion across all demographics



#### Alternative Services

Research on accessible digital alternatives for those with physical or cognitive limitations



#### Impact Assessment

Continuous evaluation of digital inclusion initiatives to measure effectiveness and adapt strategies



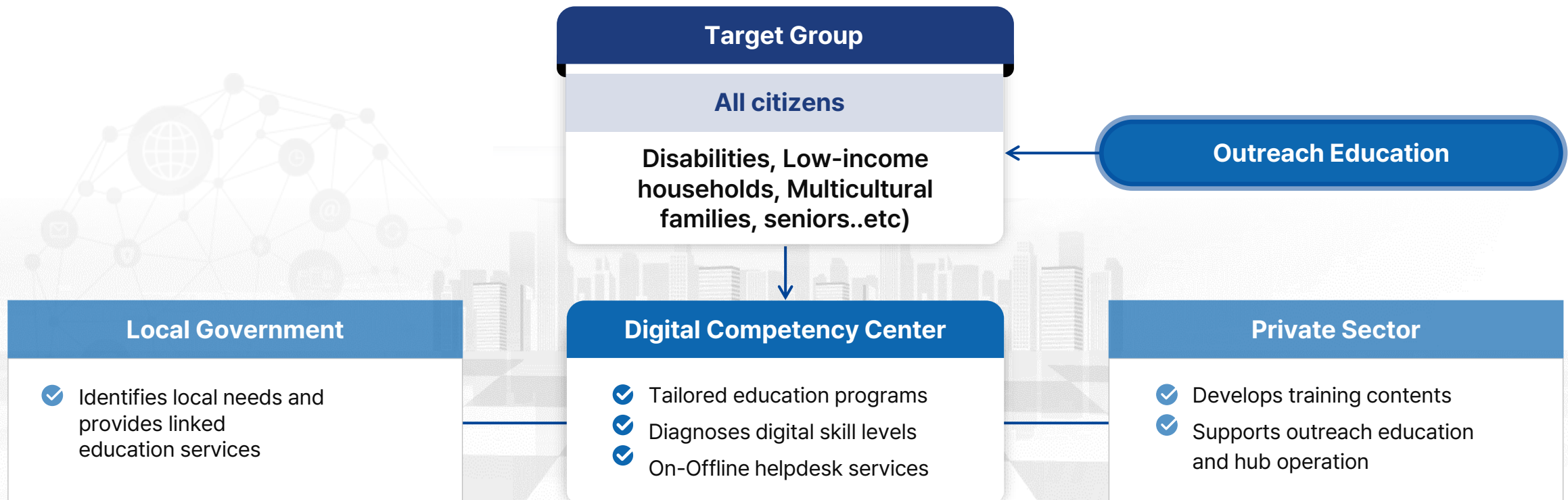
#### Bridging Access Gaps

Targeted programs addressing technological disparities in underserved communities

## Phase 4 : ③ Digital Inclusion Act

### 2 Digital Skills and Accessibility for the Disadvantaged

“ The AI·Digital Competency Hubs aim to provide digital training anytime and anywhere to anyone who needs to enhance their digital skills. ”



## Phase 4 : ③ Digital Inclusion Act

### 3 Legal and Institutional Support for Digital Accessibility

#### Policy & Regulation

- ✓ National standards for digital accessibility are being revised and promoted across sectors.
- ✓ Regular surveys track accessibility improvements and identify remaining digital divides.

#### Technical Support

- ✓ New certification system validates accessible websites and digital services.
- ✓ Priority purchase policies ensure accessible public kiosks and devices.

#### Awareness & Inclusion

- ✓ Public seminars raise awareness about digital accessibility needs.
- ✓ Public-private partnerships create sustainable inclusive digital ecosystems.

## Phase 4 : ③ Digital Inclusion Act

### 4 Development of Digital Inclusion Industries

“

South Korea is pioneering R&D that embeds inclusiveness in digital products and services.

By 2030, new technologies will support independent living and work for persons with disabilities.

”



#### Mobility Assistance

Advanced solutions for navigation in narrow and confined spaces.



#### Wearable Technologies

Work-supportive exoskeletons enhancing productivity and independence.



#### Posture Control

Support devices improving balance and stability for daily activities.



#### On-device AI

Intelligent systems enabling autonomous mobility and behavior recognition.

## Phase 4 : ③ Digital Inclusion Act

Digital inclusion policies suitable for the AI and digital era  
**Build a digitally inclusive society where everyone can coexist**

### Overcome socio-economic disparities

- ✓ Support care for vulnerable populations and decreasing the gap
- ✓ Address community issues and easing the gap
- ✓ Foster the growth of future generations and closing the gap

### Strengthen digital citizen competence

- ✓ Strengthen AI and digital adaptability across the nation
- ✓ Secure AI and digital safety in everyday life
- ✓ Ensure digital citizenship for all

### Foster inclusive social governance

- ✓ Create an inclusive ecosystem between citizens and companies
- ✓ Establish a pan-governmental support system for an inclusive society
- ✓ Strengthen global collaboration on AI and digital inclusion

Support the creation of a digitally co-prosperous society  
So everyone can enjoy the benefits of digital technology





ECLAC

NIA  
NATIONAL INFORMATION  
SOCIETY AGENCY

## Digital Inclusion From Policy to Actions

For Ensuring the Rights of All people

# Time to think

## Chapter. 03

“ Tech advancements has been remarkable but not always been human-centered.

Many technologies were introduced, only to be followed by measures to ensure user convenience.

We are now entering the age of artificial intelligence.

It is no longer acceptable for users to adapt to technology; instead, technology must adapt to users.

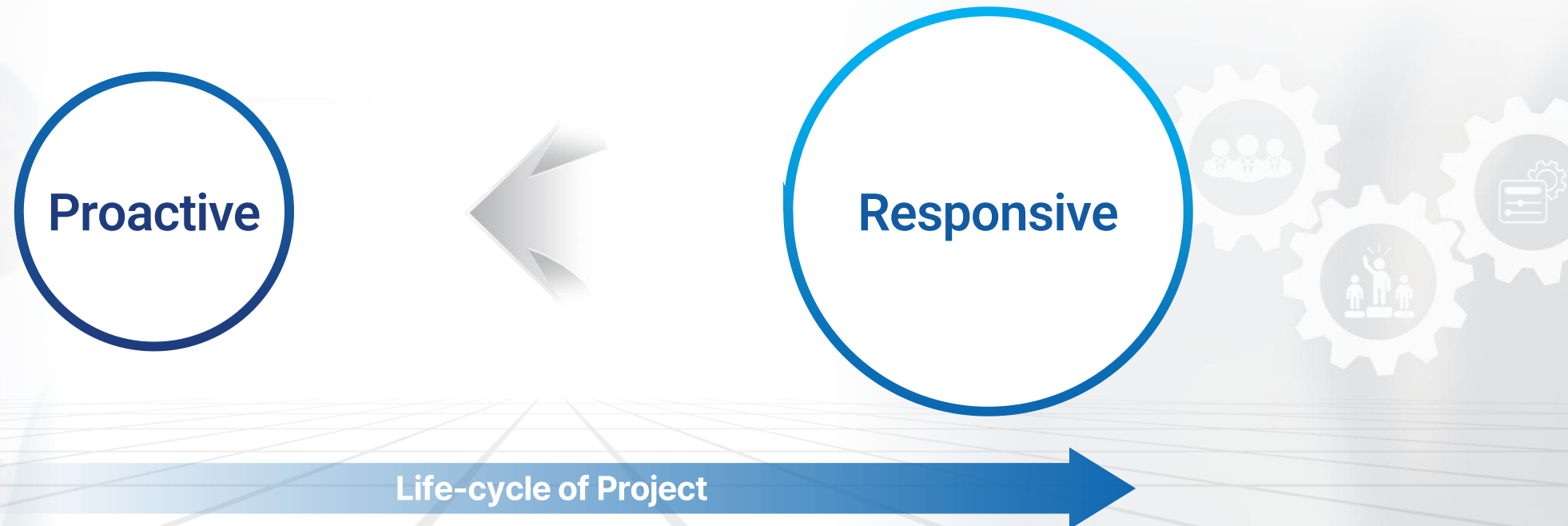


“

## We need to shift our digital policy paradigm:

”

Instead of creating complex tech and then teaching people how to use it, we must proactively build easy-to-use, intuitive services from the start





ECLAC

**NIA** NATIONAL INFORMATION  
SOCIETY AGENCY

# Thank you

