Digital Government Strategy
of the Republic of Korea

Ministry of
the Interior and Safety

CONTENTS

1. Overview of Korea's Digital Government

Korea's Digital Government in Numbers

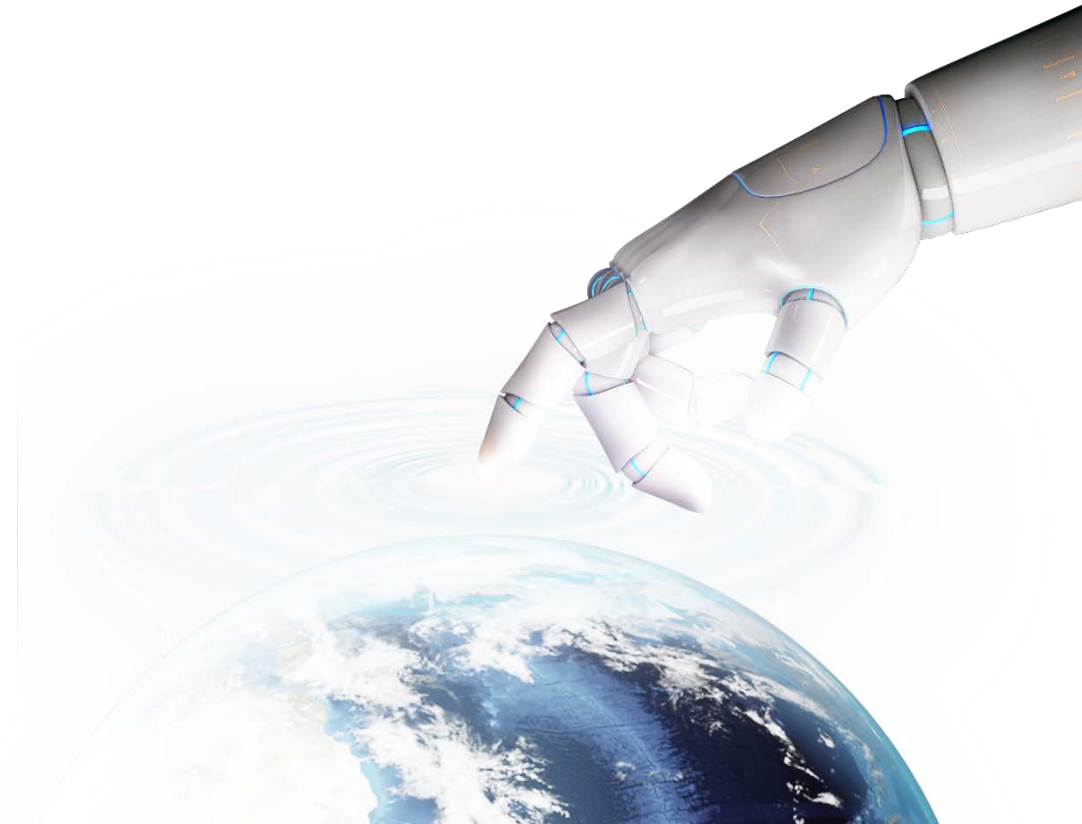**16K** information systems, **9.3B USD** annual government IT budget

37M Koreans, **89%** of population are Using Digital Government

98% of users are Satisfied with Digital Government Services

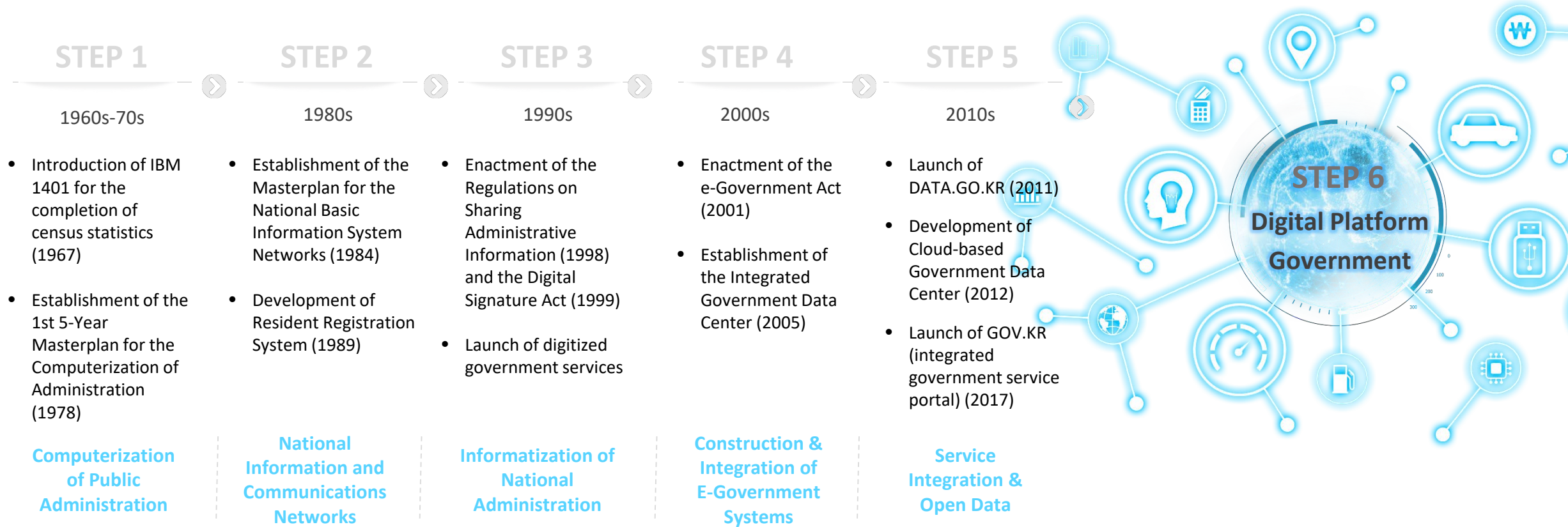**#1** OECD Digital Government Index 2019

#1 OECD OUR(Open-Useful-Reusable) data Index 2019
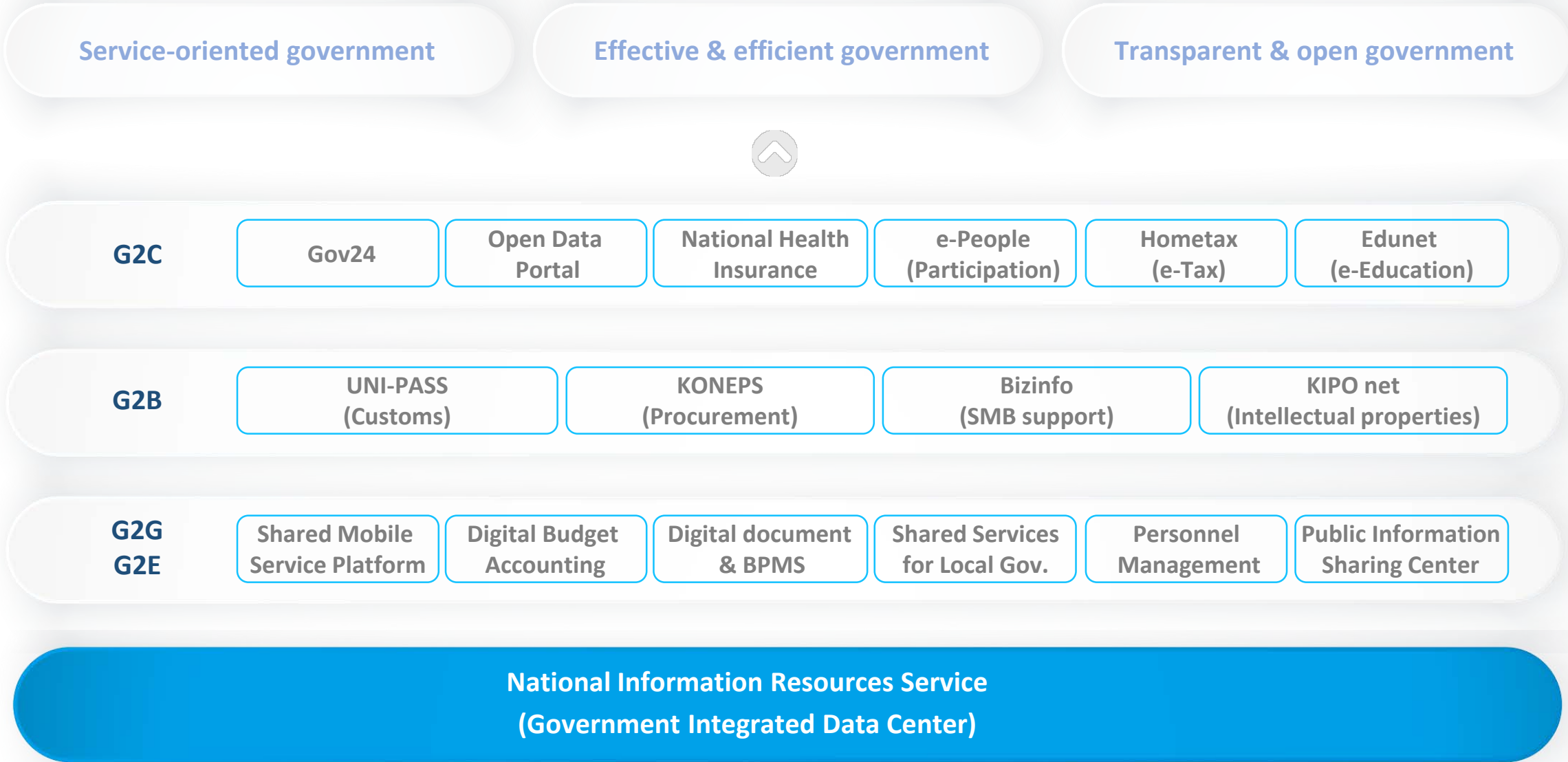
#2 UN e-Government Survey 2020

Journey of Korea's Digital Government

## 50 years of Digital Government in Korea

STEP 1
1960s-70s

- Introduction of IBM 1401 for the completion of census statistics (1967)

- Establishment of the 1st 5-Year Masterplan for the Computerization of Administration (1978)

Computerization of Public Administration

STEP 2
1980s

- Establishment of the Masterplan for the National Basic Information System Networks (1984)

- Development of Resident Registration System (1989)

National Information and Communications Networks

STEP 3
1990s

- Enactment of the Regulations on Sharing Administrative Information (1998) and the Digital Signature Act (1999)

- Launch of digitized government services

Informatization of National Administration

STEP 4
2000s

- Enactment of the e-Government Act (2001)

- Establishment of the Integrated Government Data Center (2005)

Construction & Integration of E-Government Systems

STEP 5
2010s

- Launch of DATA.GO.KR (2011)

- Development of Cloud-based Government Data Center (2012)

- Launch of GOV.KR (integrated government service portal) (2017)

Service Integration & Open Data

STEP 6
Digital Platform Government

Digital Government Services

	Service-oriented government	Effective & efficient government	Transparent & open government

G2C	Gov24	Open Data Portal	National Health Insurance	e-People (Participation)	Hometax (e-Tax)	Edunet (e-Education)

G2B	UNI-PASS (Customs)	KONEPS (Procurement)	Bizinfo (SMB support)	KIPO net (Intellectual properties)

G2G G2E	Shared Mobile Service Platform	Digital Budget Accounting	Digital document & BPMS	Shared Services for Local Gov.	Personnel Management	Public Information Sharing Center

**National Information Resources Service
(Government Integrated Data Center)**

DgovKorea.go.kr

Introduction website of the Korean digital government

- 29 best practices of Korean digital government

- VR tour of the Digital Government Exhibition Hall

- Links and materials for further information

- Blog and updates
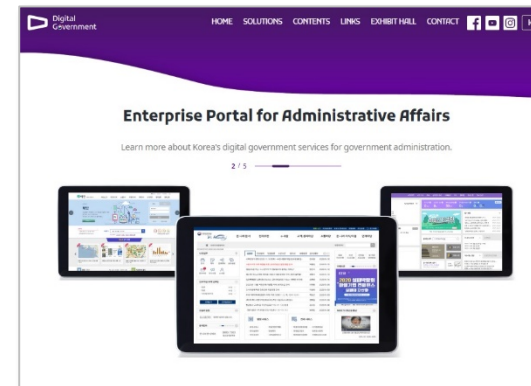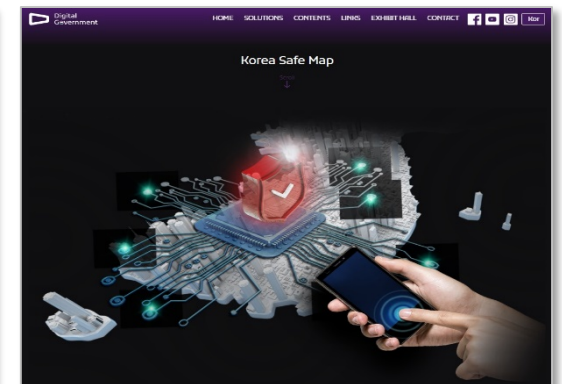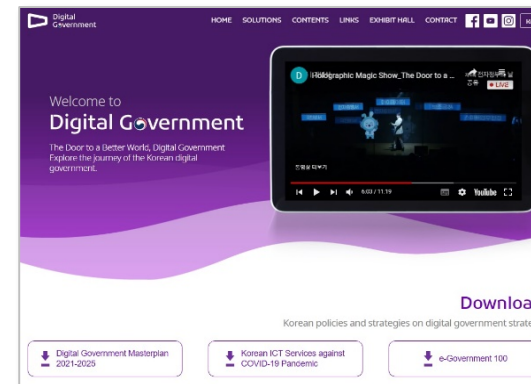
2. Digital Government Masterplan 2021-2025

Digital Government Masterplan 2021-2025

Digital,

the door to a better world

THE DIGITAL GOVERNMENT

- Creates digital by design public services

- Provides personalized service delivery channels

- Asks a citizen for information once only

- Opens its data and services to the public by default

by implementing
intelligent public services

by facilitating
data-based government

by strengthening
foundation of digital transformation

Mission #1: Implementing intelligent public services

Virtual assistant for the public

- Natural language based platform that can be merged with chatbot solutions and AI assistant services to deliver public services and relevant information to citizens.

MyData and digital certificates for non-contact services

- Implements fully-digitized information exchange for public services
- Helps citizens to authorize and control sharing of their own data
- Helps the government to collect information with higher efficiency
- Protects people's privacy by minimizing redundant information transaction

Mobile digital ID & user-friendly authentication

- Implements secure and convenient authentication with new technologies like blockchain, biometrics, and IOT

Proactive service notification & one-stop application

- Provides personalized notification of service eligibility, due dates, events, and etc.
- Renovation of service processes and systems to break silos and barriers between government entities for one-stop application

Mission #2: Facilitating data-based government

Government data analysis centers

- Pan-government level integrated data analysis center
- Sectoral data analysis centers of ministries and regional centers of local governments

Data analysis projects for national & local issues

- Data-based policy making, decision, and evaluation

Data-based disaster prevention & response

- Using various data including real-time datastreams from IoT censors for rapid disaster prevention and response

Public data & service governance for collaboration

- Open both public data and service APIs to collaborate with the private sector

Cloud-based shared platforms and applications

- Increase cost-effectiveness, availability, and robustness of information systems with cloud computing technology
- Increase productivity of government officials with cloud-based applications

Mission #3: Strengthening foundation of digital transformation

Service design for digital inclusion

- Online services designed for vulnerable groups
- Offline support programs for vulnerable groups

Private & public partnership

- Develop cultures and legal grounds to encourage cross-sector collaboration
- Facilitate citizens' active participation such as civic hacking

Legal framework renovation

- Legislations considering digital rights and ethics

  ex) Privacy protection, Algorithmic transparency

International cooperation

- Experience sharing with other countries
- Supporting digital government implementation of developing countries
- Cooperation with international organizations and communities

3. More in the Future

Personalized One-Stop Service

Customizable service channels

- Citizens can select and customize their own service channel
- Open data, Open APIs, and microservice architecture for universal collaboration between the public and private sector
- To increase agility, availability, and convenience of government-citizen interaction

Seamless & silo-free government workflow

- Digital services of all government entities will be integrated, connected, and standardized by design
- The government as a single entity for interaction with citizens
- Better & faster response to citizens' request
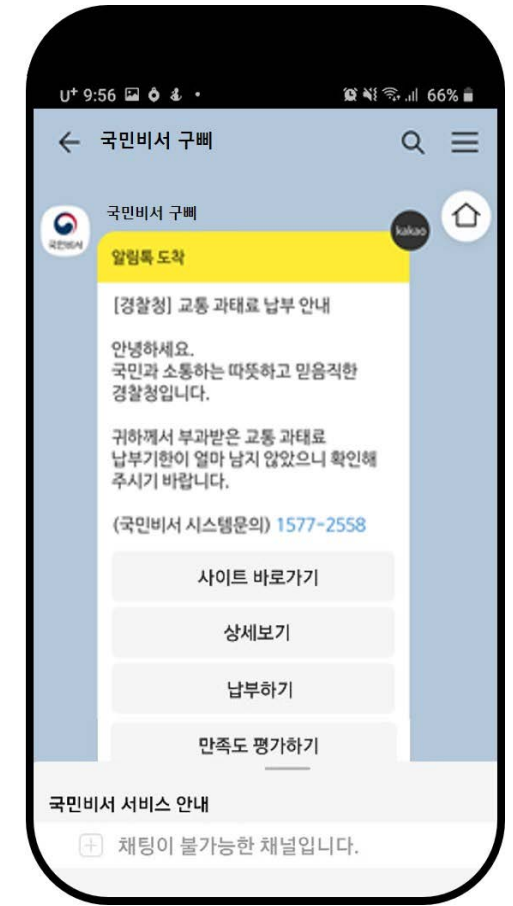
Real-Time & On-Site Interaction

Paperless, non-contact, anytime, and mobile

- All public information and data will be digital by default
- All public services will be available online
- People can access all the resources for interaction withoug visiting government offices

Interaction through portable devices

- Using on-site images, videos, and sounds for interaction
- Automatic recording of time and location of events and problems
- Rapid interaction through high-speed mobile network

Immersive Citizen-Government Digital Interaction

- Interaction through new types of IoT devices:
  Smart car, Smart appliance, Smart house, Smart building, etc.
- Digital interaction will be the new normal

Human-Friendly User Experience

Services designed for the people, and by the people

- Websites and mobile apps should be designed user-friendly to help citizens interact with government easily
- Government online services should consider accessibility of vulnerable social groups such as the disabled
- Participatory design process to create better user experience

Artificial Intelligence that can listen and watch

- Natural language processing, voice recognition, and vision AI will create completely new user experience
- As machines understand humans as they are, the barrier to digital literacy will be lowered
- More alternatives for the disabled

Analytics for Data-Based Administration

**Planned analytics on key policy areas**

- Data analysis for national agenda, pending issues, mid to long-term strategies

    - e.g.) identifying main causes for industrial disasters,

        effects of air pollution in the urban areas, etc.

On-demand analytics on specific issues

- Demand-based data analysis for individual government agency

    - e.g.) identifying the right time and location for effective pest prevention

Reference models for analytics

- Developing and sharing reusable reference models among government entities

    - e.g.) flood risk analysis model shared by all local governments

$$Safety = \beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k + \epsilon$$
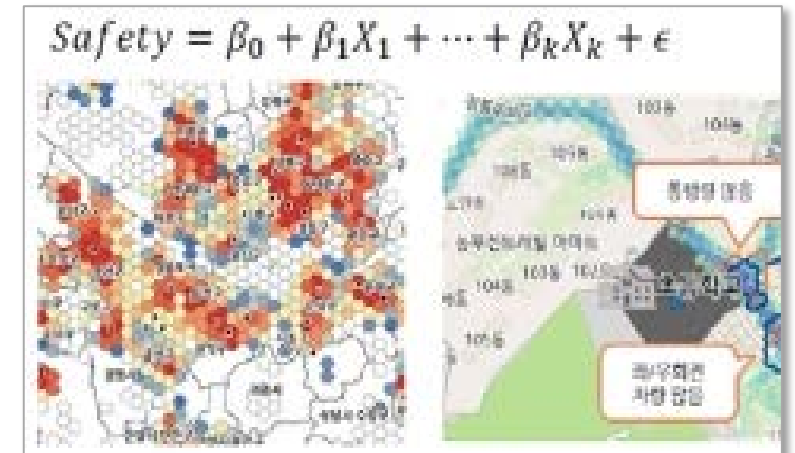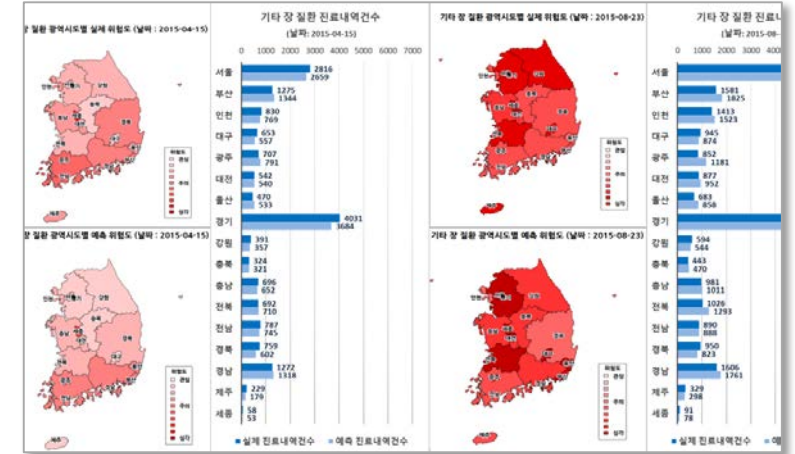
Thank You

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