Digital Government Masterplan 2021-2025 of the Republic of Korea

GOVTECH TALKS (2022-02-24)







Korea's Digital Government in Numbers

16K information systems, 4.7B USD annual government ICT 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

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

STFP 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

STFP 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**

2010s

STEP 5

- · Launch of DATA.GO.KR (2011)
- Development of Cloud-based **Government Data** Center (2012)
- · Launch of GOV.KR (integrated government service portal) (2017)

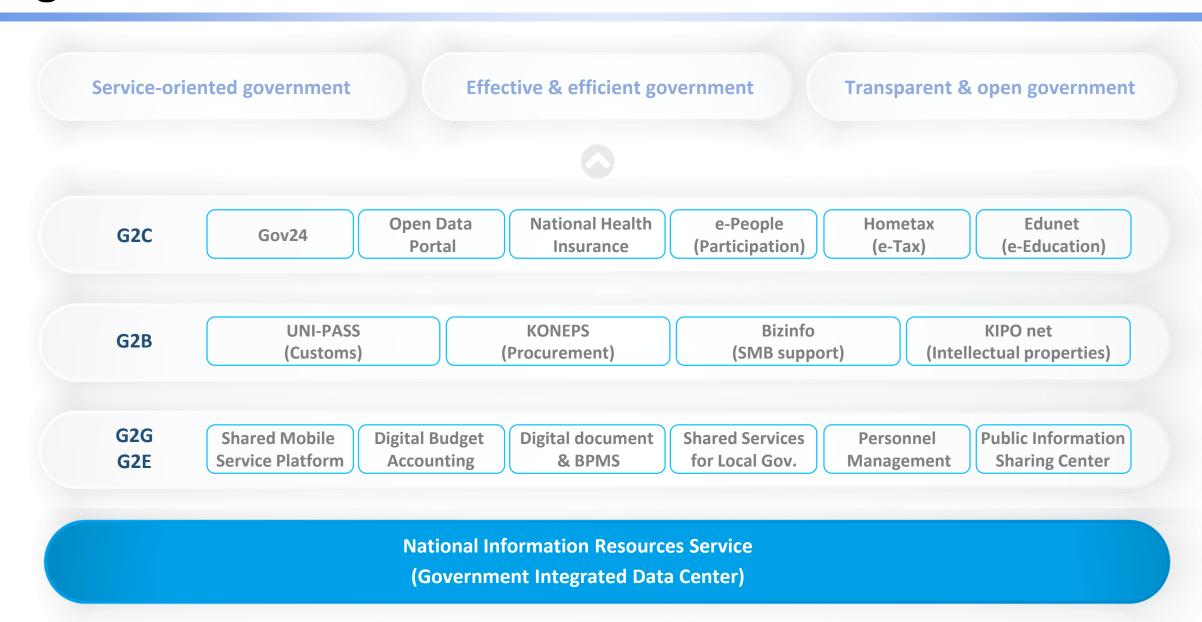
Service **Integration & Open Data**

Digital Government

STEP 6

Intelligent

Digital Government Services



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











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 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 Al 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





Personalized One-Stop Service

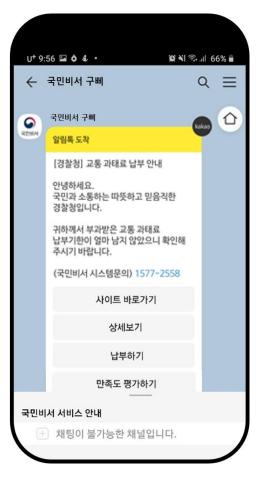
Customizable service channels

- 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 governmentcitizen 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

