Korea’s e-Government strategy for new digital economy environment

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Ministry of the Interior & Safety
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2. Achievements of the e-Government
   - Korea e-Government today
   - Citizen centric government services
   - Government innovation
   - Citizen participation & engagement
3. Future directions
Korea and e-Government in Brief
1. Korea in Brief

<table>
<thead>
<tr>
<th>Category</th>
<th>1955</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>21.5M</td>
<td>51.45M (2017)</td>
</tr>
<tr>
<td>Communication</td>
<td>Mobile: N/A</td>
<td>Mobile: 54.1M (2016)</td>
</tr>
<tr>
<td>GNI /1person (GNI)</td>
<td>$65</td>
<td>$27,561 (2016)</td>
</tr>
</tbody>
</table>

Area: 100,210km²
2. History of the Korean e-Government

1967 - 1994
- Digitalization of major administrative works such as real estates, social security, etc.

Informatization of Public Administration

STEP 1

1995 - 2002
- Establishment of high speed network infrastructure and penetration of internet
- Electronic Government Act (2001)

Institutional Framework of e-Government

STEP 2

2003 - 2007
- National Computing and Information Center (2005)
- Integration of databases of different ministries

Integration of Infrastructures

STEP 3

2008 - 2017
- Service-oriented, Competent, and Transparent Government
- Customized Service, Inter-ministerial Cooperation, and Open Data

Intelligent Gov. Smart Nation

STEP 4

Predictive Preventive Responsive ...

STEP 5
3. Challenges to e-Government Implementation

• How to prioritize e-Government elements in efficiently & effectively

• How to maximize the benefit from the investment on e-Government

• How to avoid possible duplication or silo between different area/organizations
4. Approaches in Each Steps

**STEP 1** Mid-long term e-government planning
- Established **10 year plan with major 5 information systems**
  - Administration, National Security, Defense, Financial, Education/Research
- Developed e-Government foundations & databases

**STEP 2** Foundation of e-government – both of legislation & IT Infrastructure
- **Transparent, efficient government** – Gov. financial system, local e-administration
- **Quality public service** – e-Government portal, Home tax, etc.
- **Common infrastructure** – e-Document, Digital signature
- **Better business environments** – National e-procurement system

**STEP 3** e-Gov. reformation
- Reformation of **Government work process**
  - Paper based → Electronic
  - Siloed process → Integrated process
- Reformation of **Civil service**
  - Multiple interface → Single point of contact
  - Limited online participation → Full fledged online participation
- Reformation of **Information resource management**
  - Departmental resource management → Gov. wide resource management
  - Individual standards → Common standards

**STEP 4** Citizen oriented services
5. 11 Priorities on e-Government Initiatives

<table>
<thead>
<tr>
<th>Upgrade Government Services for Citizens and Businesses</th>
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</thead>
<tbody>
<tr>
<td>- Single point of contact</td>
</tr>
<tr>
<td>- Interconnect four major social insurance systems</td>
</tr>
<tr>
<td>- Integrated governmental e-procurement System</td>
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<tr>
<td>- Tax services over the Internet</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Improve the Efficiency of Administration</th>
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</thead>
<tbody>
<tr>
<td>- National finance information system</td>
</tr>
<tr>
<td>- Local government information system</td>
</tr>
<tr>
<td>- National education information system</td>
</tr>
<tr>
<td>- Standard personnel support system</td>
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<tr>
<td>- E-document system</td>
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</table>

<table>
<thead>
<tr>
<th>Establish Infrastructure for e-Government</th>
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</thead>
<tbody>
<tr>
<td>- e-government signature system</td>
</tr>
<tr>
<td>- Government-wide data center</td>
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</tbody>
</table>
## 6. 31 e-Government Roadmap

<table>
<thead>
<tr>
<th>Work Process</th>
<th>Services to Citizens</th>
<th>Management of Information Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Integrated Criminal Justice Sys.</td>
<td>17. Food &amp; Drugs System</td>
<td></td>
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<tr>
<td>10. Information Sharing System</td>
<td>21. Logistics Information System</td>
<td></td>
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<tr>
<td></td>
<td>23. Foreigners Support System</td>
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2

Achievements of the e-Government
1. Korea e-Government Today

**Service-oriented government**
- Public Information Sharing Center
- Mobile e-Government
- dBrain
- On-nara BPS

**Effective/efficient government**
- Resident registration system
- Personnel policy support
- Criminal-Justice Services System

**Transparent government**

<table>
<thead>
<tr>
<th>G2G</th>
<th>Public Information Sharing Center</th>
<th>Mobile e-Government</th>
<th>dBrain</th>
<th>On-nara BPS</th>
<th>Resident registration system</th>
<th>Personnel policy support</th>
<th>Criminal-Justice Services System</th>
</tr>
</thead>
<tbody>
<tr>
<td>G2B</td>
<td>UNI-PASS (customs)</td>
<td>KONEPS (procurement)</td>
<td></td>
<td></td>
<td>e-Government Standard Framework</td>
<td></td>
<td>KIPO net (intellectual properties)</td>
</tr>
<tr>
<td>G2C</td>
<td>Minwon24</td>
<td>Open Data Portal</td>
<td>ICIS</td>
<td>Home tax</td>
<td>e-People</td>
<td>NEIS</td>
<td>112 Integrated Reporting</td>
</tr>
</tbody>
</table>

Over 20,000 systems (total)

National Information Resources Services Institute
(Government Integrated Data Center)
- Important Services for digital economy in Korea e-Gov.

**UNI-PASS** *(unipass.customs.go.kr)*

The world’s first electronic customs clearance system that automates export/import customs, tax collection and any other related administrative processes.

**KONEPS** *(G2B.go.kr)*

National e-Procurement system that allow people to do business with the country by processing all the procurement processes online.
2.1 Customized Government Services ("GOV24")

Before

People could check out services they needed by visiting different websites or when bills arrived.

After

People can check all services and benefits they need on "GOV24".
2.2 Customized Government Services ("One-Stop Service")

"One-Stop Service" for all birth support services and benefits

**Before**

People visited multiple agencies to apply for each service.

- Childcare benefits
- Childbirth subsidy
- Dadoongi Card, etc.

**After**

People apply (online/offline) once anywhere, anytime.

- Childcare benefits
- Childbirth subsidy
- Dadoongi Card, etc.

www.gov.kr
2.3 Customized Government Services

People with disabilities, basic livelihood security benefit recipients, etc. can get all utility deduction without application.

**Before**

An individual had to apply for multiple times to receive utility deduction.

**After**

Local government offices provide utility deduction to the registered recipients.
3.1 Government Innovation - disclosure of information

The government makes documents officially approved in the policy-making process as well as critical data to the citizens public.

**Disclosure of gov. documents**

- Officially-approved government documents are provided in real time (www.open.go.kr).
- Central: documents approved by Director General or higher level
  District: documents approved by deputy heads or higher level
  Public institutions: documents approved by executive-level or higher

**Disclosure of critical information**

- Critical information on people’s daily lives
- 12 categories (e.g. health and welfare)
- Standardized model of information disclosure
3.2 Government Innovation - open data & digital economy

National core data have been fully released in 33 areas (2014-2016)
Intelligence- and convergence-type data is being released in 38 areas (2017-2019)
Korea ranked first for two consecutive times in OECD OUR Data Index (2015 and 2017)

Applications of open data

“Jikbang”: real estate app
• Annual sales: KRW 12.1 b
• Job creation: 60 employees
• Invested capital: KRW 75.5 billion

Information on actual transaction prices

“Imschool”: school notification app
• Annual sales: KRW 600 m
• Job creation: 50 employees
• Invested capital: KRW 4 billion

Information on notices by school
3.3 Government Innovation - big data & admin innovation

**Use of Big Data for the quality of people’s lives towards proactive government**

**Bus route reform**

City bus routes have been reorganized based on demand analyses of when people take buses and where they get in and out of taxis.

**Public health alert service**

Information on the risks of food poisoning, asthma, colds, eye diseases, dermatitis, etc. is provided by district based on health insurance and weather information combined.
4.1 Public Engagement

**e-People** *(epeople.go.kr)*

*All-of-government online communication channel*

**idea.epeople** *(idea.epeople.go.kr)*

*An online portal to understand people’s views from their suggestions and discussions, and through surveys*
3

Future directions
## 1. AI- and IoT-based Public Services

Enhancing administrative efficiency and improving public services by using new technologies, including AI and IoT.

<table>
<thead>
<tr>
<th>AI</th>
<th>IoT</th>
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<tbody>
<tr>
<td>To enhance the quality of people’s lives</td>
<td>The intelligent CCTV</td>
</tr>
<tr>
<td>To support policy-making for public employees</td>
<td>The National Safe Returning Home Service</td>
</tr>
<tr>
<td>The response system against cyber threats which automatically analyzes any abnormal behavior, such as hacking and DDoS attacks</td>
<td>Laying the foundation for the national government IoT network (G-IoT network)</td>
</tr>
</tbody>
</table>
- Gov. Innovation using Artificial Intelligent & Block Chain

New technologies like AI and Block Chain make citizen convenience.

**AI Pilot Projects**

- AI based Security System
- New Immigration System
- AI Cargo Screening System

**Block Chain Pilot Projects**

- Electronic Document Distribution System
- Issuing & Exchange system for electronic certificate of Country of Origin
2. Data use vs. Personal Information Protection

The government is finding ways to achieve a balance between personal information protection and use.

- A clear definition of personal information
- Legal foundation for de-identification measures
- Responsibilities in the private sector

Reaching an agreement on personal information protection and use through discussions between the public and private sector
International Cooperation
e-Government International Cooperation

**Programs**

1. **e-Gov. High-Level Dialogues**
   - MOUs and bilateral meetings
   - 47 countries, 4 Int’l Org.

2. **e-Gov. Capacity-Building**
   - Training and e-Government
   - From 1998, 1,500 officers

3. **e-Gov. Implementation Support**
   - Consultations (F/S, pilot project)
   - Over 20 projects

4. **e-Gov. Expert Meetings**
   - Discussions with e-Gov. experts

**Activities**

5. e-Government Cooperation Center
   - Indonesia(Mar.16), Peru(Jun.17), Kenya(Sep.17) for 3 years

6. e-Government Global Forums
   - OECD e-Leaders Meeting in Seoul(18.10.)
Korea will share its knowledge and experience of e-Government and contribute to the development of e-Government for your country
Thank you