Digital Society,
Digital Government

Choi, Doo Yeong
Deputy Minister of Government Administration and Home Affairs and President of Local Government Officials Development Institute
Republic of Korea
| CONTENTS |

01 Emergence of Digital Society
02 Government in Digital Society
03 Strategic Tasks of Digital Government
04 Critical Success Factors of Digital Government
05 Global Cooperation for Digital Government
01 Emergence of Digital Society
Emergence of Digital Society

- Hyper Connectivity: All objects and humans connected as one
- Sharing / Cooperation: Collaborative network including crowd sourcing and collective intelligence
- Data-based Economy: Creating and adding value by utilizing open data

New Strategy for Government Innovation in Digital Society: "Digital Government"
02 Government in Digital Society
1. Government in Digital Society

- Digital government: a government that invests into public goods required in the digital age while overcoming the limitations of the bureaucracy with digital technologies.
2. Digital Government Strategies

1. A government emphasizing transparent operation driven by citizens

2. A government realizing citizens’ well-being and creating values

3. A government pursuing disruptive innovation

4. A government offering proactive services that citizens need

5. A government connecting online to offline (O2O) service channels

6. A government realizing scientific administration based on data

7. A government providing a platform for sharing of various resources
3. Digital Government and Gov 3.0

Government Reform

"The Age of Gov 3.0 is coming, where the government will be transparent, competent, and service-oriented."

Strategy for citizen happiness in the digital society – digital government and Gov 3.0
03 Strategic Tasks of Digital Government
03 Strategic Tasks for Digital Government

1. Disclose Public Data
2. Establish a Participatory, Platform Government
3. Provide Customized Services
4. Develop a Cloud-based Framework for Collaboration and Sharing Administration
5. Integrate Management of Information Resources
6. Improve Information Security and Personal Information Protection
Expand public data disclosure and improve usage rate

Data is a production element of the digital society, such as technology, labor, and capital

- **Data Disclosure**
  - 2,928 to 12,291
  - 4.2 times increase
  - '13 to '14.12

- **Data Use**
  - 42 to 395
  - 9 times increase
  - '13 to '14.12

- **Use by Citizens**
  - 14,000 to 153,000
  - 11 times increase
  - '13 to '14.12

Monthly average number of service hits created by businesses using public data 110 million (314% increase from previous year)

125 cases of complaints regarding public data resolved
1. Disclose Public Data (2)

Disclose local administrative data

- Open up 530 types of local administrative database including SMEs, logistics, and medical information -> residents use the data for founding startups

1990

2000

2010

✓ Illustration on the increase of food manufacturing and processing industries

A user can view at a glance the distribution of food processing factories and their time-series analysis on a map, and select the best startup location, where there are many companies of the same field and transportation is convenient.
2. Establish a Participatory, Platform Government (1)

Collective intelligence: a network of online experts in policy research

Aristotle (USDOD)

Research network between national defense field experts in public-private sector
(Share national defense information, share policy feedback, maintain emergency contact information, etc.)

Global Development Commons (USAID)

Policy research network between experts and non-experts around the globe for providing economic aid and developmental support to developing countries
(Develop diverse ideas from the general public, students, NGOs, and experts; and provide policy planning and activities based on the ideas)
2. Establish a Participatory, Platform Government (2)

Citizens participate in the process of policy-making

**Digital voting: M-voting (Seoul)**

<table>
<thead>
<tr>
<th>제안</th>
<th>추천</th>
<th>반대</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 확대사업 찬성</td>
<td>211</td>
<td>1,994</td>
</tr>
<tr>
<td>2. 확대사업 반대</td>
<td>86</td>
<td>192</td>
</tr>
</tbody>
</table>

- 유리창을 쿨링하려고 비스노스노도를 1000번 박스
- 불편한 쿨링에 관련된 솔루션을 찾아보겠습니다.
- 장악범을 위해 복합적이지만 영향력도 노선
- 도 모기가 반을 제한해드리는
- 가해 비스노스노도 2.4배 거점, 관광지
- 주거 정유소에는 외부방향, 도, 도로 GPRS를
- 포기하면 공동체 서비스와 확대하고자 하는데
- 문의사항: 도시교통부 비스노스노

<table>
<thead>
<tr>
<th>제안</th>
<th>추천</th>
<th>반대</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 확대사업 찬성</td>
<td>16%</td>
<td>282</td>
</tr>
<tr>
<td>2. 확대사업 반대</td>
<td>11%</td>
<td>261</td>
</tr>
<tr>
<td>3. 확대사업 반대</td>
<td>19%</td>
<td>453</td>
</tr>
<tr>
<td>4. 확대사업반대</td>
<td>15%</td>
<td>349</td>
</tr>
</tbody>
</table>

**Resident participatory policy platform (MOGAHA)**

- **Poll Examples**
  - Which areas in Seoul need free WiFi?
  - Do we really need public trash cans at bus stops?
  - What kind of cultural events do you want to enjoy the most at the Cheonggye Plaza?

- Developed by MOGAHA, applied and expanded to local governments
  (Pilot application to Seongbuk-gu (district) and Seosan City)
2. Establish a Participatory, Platform Government (3)

Inconvenience reporting and civil petitions

**E-People (Anti-corruption and Civil Rights Commission)**

- Central ministries
- Diplomatic offices
- Education Office
- Local Government
- Public institutions
- Judicial Branch

Government-wide online communication channel through which citizens can file and process all petitions, suggestions, policy discussions regarding the government via the Internet.

**Inconvenience Reporting via Smartphone (MOGAHA, local governments)**

Citizens can directly report inconvenient situations in everyday life such as illegal parking, damaged roads, traffic light failure, etc., and be notified with the progress and result.

<table>
<thead>
<tr>
<th>Type</th>
<th>Petition</th>
<th>Suggestion</th>
<th>Policy Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearly</td>
<td>1,689,785</td>
<td>118,446</td>
<td>2,869</td>
</tr>
<tr>
<td>Daily Average</td>
<td>4,630</td>
<td>325</td>
<td>8</td>
</tr>
</tbody>
</table>

*As of 2014*
2. Establish a Participatory, Platform Government (4)

Outside-in / Outside-out

Develop a public open market platform upon which citizens can suggest or develop services they need, and government can use the services (Outside-In/Outside-Out)

- Supplier
  - Startup Founder
  - General Public
  - Government/Public Institutions

- User
  - Government/Public Institutions
  - General Public

- Service Registration
- Service Sharing and Use
- Investment

- App Store
- Web Store

- G4C/C4C/C4G/G4G Service Categories
- Authentication/Purchase/Payment Modules
- User Evaluation
2. Establish a Participatory, Platform Government (5)

Change in delivering disaster relief supplies: US FEMA

Through real-time social platform, FEMA shares disaster information and promptly provides relief supplies, temporary accommodations, and vehicles through cooperation with social and sharing economy-based companies.

Method of finding solutions through crowd sourcing is expanding to other areas (idea sharing, volunteering, etc.)
3. Provide Customized Services (1)

One-stop government service shop: Government Portal

Provide one-stop government service on introduction, classification, search and application on some 20,000 government policies and services

Basic Pension

1. Qualifications:
   - Age: Above 65
   - Standard income: acknowledged income under the standard of selection

2. How to apply:
   - Offline by visiting the office
   - Online by accessing to government portal
3. Provide Customized Services (2)

Individualized services through ministerial interconnection

- Integrate management of some 20,000 types of dispersed policies and services through ministerial interconnection
- Provide a list of available public services for each user type and deliver customized services

<table>
<thead>
<tr>
<th>Category</th>
<th>Services</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women</td>
<td>Ex) Postpartum caretaker service</td>
<td>270</td>
</tr>
<tr>
<td>SME Entrepreneurs</td>
<td>Ex) Marketing area analysis</td>
<td>100</td>
</tr>
<tr>
<td>Farmers &amp; Fishermen</td>
<td>Ex) House amelioration service for rural areas</td>
<td>480</td>
</tr>
</tbody>
</table>
Provide online-to-offline (O2O) services for users benefit

- Develop and provide O2O services, the well-balanced integration or combination of online and offline channels
- Citizens can choose the service channel they want and request or process services they need

<table>
<thead>
<tr>
<th>Case</th>
<th>Application Channel</th>
<th>Reception Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Card Reissuance</td>
<td>Call Center</td>
<td>Offline Counter</td>
</tr>
<tr>
<td></td>
<td>PC</td>
<td>Post</td>
</tr>
<tr>
<td></td>
<td>Mobile/ Tablet</td>
<td></td>
</tr>
<tr>
<td>ID Card Reissuance</td>
<td>Community Center</td>
<td>Community Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
</tr>
</tbody>
</table>
3. Provide Customized Services (4)

Providing services before application

**AS-IS**
Citizens *directly apply* and get approval from the government

**TO-BE**
Government service information is individually offered *before citizens apply*

[ Example ]
Year-end Tax Adjustments
- Citizens make request
- Government provides year-end settlement information to citizens beforehand
- Citizens confirm and approve
4. Develop a Cloud-based Framework for Collaboration and Sharing Administration (1)

Share documents or reports among ministries

**AS-IS**
- Data storage and use by each government agency
  - Difficult to search or use data of other institutions

**T0-BE**
- Integrated storage and knowledge administration

**Data storage and use in each individual PC**
- Discontinued flow of knowledge with personnel transfers

Integrated On-nara System and Cloud storage

- Save
- Modify
- View
- Search
4. Develop a Cloud-based Framework for Collaboration and Sharing Administration (2)

Anytime-Anywhere Administration

**AS-IS**

- Work using office PC
  - [Outside Office]
  - Data input is possible only through office PC, limitations in field business

**T0-BE**

- Anytime-Anywhere Administration
  - Work processed on site, administrative service delivered to user (Mobile On-nara, e-People, messenger service dedicated to public officials, etc.)
4. Develop a Cloud-based Framework for Collaboration and Sharing Administration (3)

Integrated management of information resources of local governments

- Standard system processing 1,138 tasks regarding tax, welfare, resident registration, environment, etc. by 243 local governments
- Centrally developed-disseminated S/W; Locally possessing H/W and DB

22 information systems of provincial governments

Integrated HW/DB Management

23 information systems of city governments

Transfer to cloud-based software (21 systems of central ministries)
5. Integrate Management of Information Resources

Cloud-based National Computing and Information Agency (NCIA)

- Establish and operate NCIA: managing 22,000 computation equipment of 44 central government
- Annual average of 3 million US $ budget reduction (reduce 226 million US $ by 2014)
- Curtail failure duration: monthly average of 67 minutes → 4 minutes
- Detect and analyze cyber-attacks: monthly average of 720 minutes → 0.5 minutes
6. Improve Information Security and Personal Information Protection

- Analysis/evaluation on weaknesses of major ICT infrastructures
- Application of ‘secure coding’ to public SW development projects
- Reinforcement of information security specialists and education
- Improvement of Privacy Impact Assessment
04 Critical Success Factors of Digital Government
04 Critical Success Factors of Digital Government

1. President’s leadership and commitment
2. Mid and long-term strategy and implementation framework
3. Collaborative governance among government, business, and citizens
4. Timely improvement of laws and regulations for digital government
5. Building of safe, open, and reliable infrastructure
6. Risk and change management strategy
7. Citizen participation and consensus building
Global Cooperation for Digital Government
1. Digital Government G2G Cooperation of MOGAHA

Signing MOU for Digital Government cooperation

- Development of human resources
- Development of technology
- Cooperation Committee
- Joint project implementation
2. MOGAHA G2G Cooperation: Capacity Building Program

Transfer of Korea's digital government development knowhow for stronger digital government capability of cooperative countries ('98~'14, 22 countries, 638 participants)

<table>
<thead>
<tr>
<th>Invitation for training</th>
<th>Sharing Korea's digital government policies, good models and knowhow by inviting digital government policy makers of developing countries (Airfare, accommodation, and other expenses provided by Korea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>Barbados</td>
</tr>
<tr>
<td>Trainees</td>
<td>6</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Trainees</td>
<td>120</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Peru</td>
</tr>
<tr>
<td>Trainees</td>
<td>95</td>
</tr>
</tbody>
</table>

| Customized training     | Providing customized digital government training to foreign trainees upon their needs (Travel expenses such airfare and accommodations are paid by recipient countries) |
| Local training          | Providing Korea’s digital government knowhow by visiting the recipient countries |
Providing short-term consulting services for improvement of digital government systems

Consulting experiences by region

**Dominican Republic**
Consulting on Business Process System (On-nara BPS)

**Costa Rica**
Consulting on system improvement for Supreme Court

**Peru**
Consulting on introduction of immigration control system
## 4. Best Models of Cooperation

### Uzbekistan
- Close cooperation since summit meeting and MOU on Digital Government cooperation in September 2012
- 5 rounds of cooperation committee meetings until February 2014
- Former Vice Minister dispatched for Vice Minister of Uzbekistan ICT Committee for enactment of digital government act
  - (Four Korean Digital Government experts are supporting Uzbekistan government)
- Cooperative projects are underway through Korea-Uzbekistan cooperation center

### Dominican Republic
- Cooperative MOU on Digital Government in October 2012
- Korea’s Digital Government system in Dominican Republic
- Continuous cooperation on transfer of Korea's knowhow through Consulting and IT Learning Program
- Korea Digital government Capacity Building Program : 71 participants (2014)
5. Korean Digital Government in LAC

- **Dominican Republic**
  - On-nara BPS
  - UNI-PASS
  - Immigration Control System
  - ITS

- **Colombia**
  - Local e-Gov, system
  - ITS
  - UNI-PASS

- **Peru**
  - KIPOnet
  - UNI-PASS
  - Immigration Control System

- **Paraguay**
  - ITS

- **Nicaragua**
  - UNI-PASS

- **Costa Rica**
  - KONEPS

- **Panama**
  - ITS

- **Bolivia**
  - UNI-PASS

- **Ecuador**
  - e-Gov, Framework
  - UNI-PASS

Build a framework for sharing national experiences and knowledge on digital government and collaborating with each other.

Contribute to realizing “Global 100% Digital”

Digital One Village
Where everyone is happy
Thank you