e-Government in Korea

Ministry of Public Administration and Security
Trajectory of Korean e-Gov

- Computerization
  - Critical DB (Citizen, Land, Vehicle, etc.)

- Infrastructure Reshuffle
  - Ministerial Informatization
  - Gov-Wide

Lee (2008 – 2009)
- Utilization & Integration
  - Utilization & Integration of Service/Data/Info. Resources

Service
- PSTN/PSDN

Infra.
- KII (Korea Information Infrastructure)
- BcN (Broadband Convergence Network)
- RFID/USN

OECD e-Leaders Meeting 2010
Future: Smart Korea (2010~2020)

**Service Infra**
- M-Gov Service (Gov 3.0)
- Open 
  (Service/Data/Policy-Making, etc)
- Citizen Centric Service
  by Connected & Integration

**Social Infra**
- Giga Internet / Wireless free
- Safe & Trusted Infra
- Machine to machine communication

**Smart Life**
- Smart Gov
- Smart Biz

**Smart Culture**

**Smart Work**

**Smart Citizen**

**Smart Infra**
- **e-Gov 24(G4C)**
  - **Public Information Disclosure System** ([www.open.go.kr](http://www.open.go.kr))
  - **e-Participation** ([www.epeople.go.kr](http://www.epeople.go.kr)): Online Petition & Proposal Portal
  - **National Portal** ([www.korea.go.kr](http://www.korea.go.kr))
  - **Online Civil Service** ([www.minwondo.go.kr](http://www.minwondo.go.kr))

### Best Practices

<table>
<thead>
<tr>
<th>Public Info. Disclosure (Cases, request based)</th>
<th>Public Proposals (Cases)</th>
<th>Online civil service (Cases, Application based)</th>
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<td>'09: 398,000</td>
<td>'03: 0.38M</td>
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<tr>
<td>'02: 570</td>
<td>'09: 58,000</td>
<td>'09: 25.7M</td>
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</tbody>
</table>
Best Practices

- **G4B**
  - e-Procurement ([www.g2b.go.kr](www.g2b.go.kr)) & **Online Patent service** ([www.patent.go.kr](www.patent.go.kr))
  - e-Customs ([portal.customs.go.kr](portal.customs.go.kr))
  - **Single Window for Business** ([www.g4b.go.kr](www.g4b.go.kr))

- **G2B**
  - **On-Nara BPS**
  - **Digital Budget & Accounting System** ([www.digitalbrain.go.kr](www.digitalbrain.go.kr))

- **Shared Infra.**
  - **e-Gov Standard Framework** ([www.egovframe.go.kr](www.egovframe.go.kr))
  - **Knowledge Portal** ([www.knowledge.go.kr](www.knowledge.go.kr))
Indicators

- **Service**: e-Gov. Service Usage Index
- **Infra**: EA Maturity Index

**Security**
- National Security Index
- Privacy Protection Index

**Society**
- Digital Culture Index
- Digital Divide Index
- Internet Addiction Ratio
**Purpose:** Evaluate citizen’s usage & satisfaction of e-Gov. Service

**Major Indicators:** Recognition (R), Usage(U), Satisfaction(S)

\[ \text{Usage Index} = (R \times W1) + (U \times W2) + (S \times W3) \]

**Method:** Survey per year

- **Sample size:** more 5,000 citizens above than 20 years old
- **Survey method:** email or telephone interview by structuralized questionnaire
- **Survey Organization:** MOPAS, NIA, Research Company

**Index of e-Gov Usage**

- '07: 61.1
- '09: 72.5
Purpose: Evaluate maturity level for public area (Ministries, local Gov. and public agencies)

Major Indicators: EA Implementation, Management, Usage
- Average of each grade (1-5 step)

Method: Measure & Check the architecture products
- Self evaluation
  -> Check by 3rd party by MOPAS, NIA
Purpose: Evaluate & Upgrade the Security Level of Government, Business and Citizen

Major Indicators: Information Security Index, Adverse Effects Index

- Information Security Index (Direct Index): Penetration rate of antivirus S/W, firewall, IDS and ratio of budget & manpower for security, etc.
- Averse Effects Index (Indirect Index): Declaration rate of hacking, virus infection, privacy invasion, etc.
**Purpose:** Evaluate management level of privacy protection for citizens and business

**Major Indicators**
- **12 indicators for Business** (Ratio of Security Server Adoption, Rule-Observance about Privacy protection, Report Invasion, ETC)
- **7 indicators for Citizen** (Ratio of Antivirus S/W Installation, Privacy Guideline confirmation, ETC)

*Index = Sum of (Result * Weight)*

**Method:** Survey per year

✓ **Survey Organization:** KCC, KISA
Digital Culture Index

- **Purpose:** Transform to Good Digital Citizen by measuring ICT ethics, capability, sensibility and practical morality

- **Major Indicators:** 4 areas (Capability, Ethics, Sensibility, Activity)

- **Method:** Survey per year
  
  - Sample size: 2,000 internet users above than 7 years old
  - Survey method: Home-visit interview by structuralized questionnaire
  - Survey Organization: MOPAS, NIA, Research Company

### Indicators and Scores

- **Digital Capability:** 64.5 (’08) 69.7 (’09)
- **Digital Ethics:** 74.3 (’08) 76.5 (’09)
- **Digital Sensibility:** 55.0 (’08) 63.3 (’09)
- **Practice & Activity:** 44.6 (’08) 48.6 (’09)
- **General point:** 61.6 (’08) 66.2 (’09)
Digital Divide Index

- **Purpose:** *Bridge & resolve Digital Divide for neglected areas such as handicapped, low-income bracket, remote rural area residents*

- **Major Indicators:** *Gap of Accessibility (A), Capability (C), Usage Quantity (Q1), Usage Quality (Q2)*

  \[
  \text{Total Index} = (A \times W1) + (C \times W2) + ((Q1 + Q2) \times W3)
  \]

- **Method:** *Survey per year*

  ✓ **Sample size:** more 6,000 citizens (more 1,000 per each class)
  ✓ **Survey method:** Home-visit interview
  ✓ **Survey Organization:** MOPAS, NIA, Research Company

### Digital Divide Index:

- **Handicapped:**
  - 2004: 45.0%
  - 2009: 69.7%
  - Improvement: 24.7%

- **Low-income Bracket:**
  - 2004: 57.5%
  - 2009: 80.3%
  - Improvement: 22.8%

- **Rural residents:**
  - 2004: 55.6%
  - 2009: 79.5%
  - Improvement: 23.9%

- **Handicapped:**
  - 2004: 33.8%
  - 2009: 60.3%
  - Improvement: 26.5%
Purpose: Support the policy-making to prevent & resolve the Internet addiction problem

Method: Survey per year

- Sample size: more 6,500 citizens (2,000 youths, 4,000 adults)
- Survey method: Home-visit interview by structuralized questionnaire
- Survey Organization: MOPAS, NIA, Research Company

Internet Addiction 2004 2009

Youth

Adults

Internet Addiction Ratio