Korea ICT & e-Government Success through Aggressive Broadband Policy

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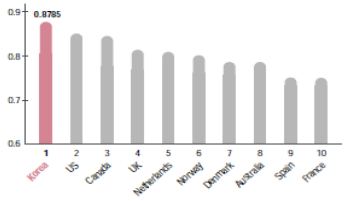
Agenda

- Korea ICT/e-Government Success Areas
  - ICT, e-Government, Industry
- Lessons Learned (CSF)
  1. Leadership
  2. Aggressive Policies & Actions
  3. Institution
  4. Funding
  5. Human Capacity Building
- Current Plan for Tomorrow

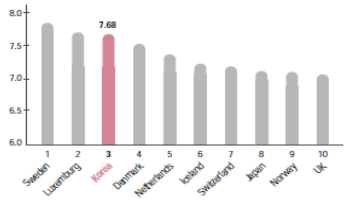
ICT Korea Global Rankings

E-government Development Index



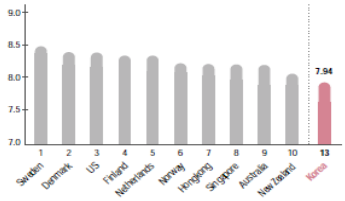
Source : UN, 'E-government Survey 2010', 2010. 4.

ICT Development Index



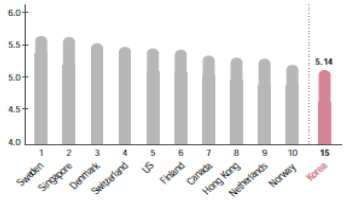
Source : ITU, 'Measuring the Information Society', 2010. 3.

Digital Economy Rankings



Source : EIU, 'Digital economy rankings', 2010. 6.

Networked Readiness Index



Source : WEF, 'The Global Information Technology Report 2009-2010', 2010. 3.

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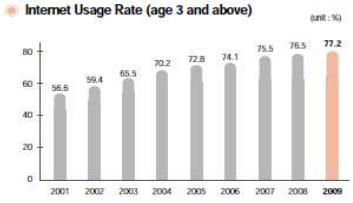
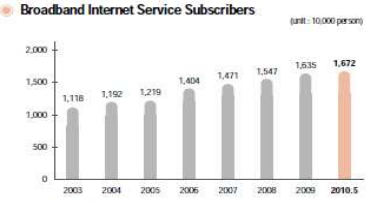
ICT Korea Domestic Numbers

Internet Usage Rate (age 3 and above)



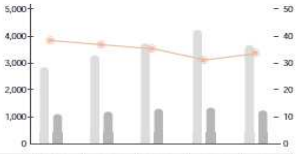
Source : Korea Communications Commission / Korea Internet & Security Agency, November 2009.

Broadband Internet Service Subscribers



Source : Korea Communications Commission, August 2010.

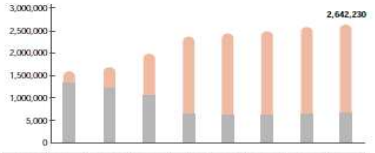
ICT Industry Export (in USD 100 million)



Year	2005	2006	2007	2008	2009
Total Export	2,844	3,255	3,715	4,220	3,635
ICT Industry Exports	1,083	1,191	1,301	1,312	1,209
Share (%)	38.1	36.6	35.0	31.1	33.3

Source : National IT Industry Promotion Agency

Number of IPTV Subscribers



Year	2009.1Q	2009.2Q	2009.3Q	2009.4Q	2010.1	2010.2	2010.3	2010.4
IPTV	222,620	468,673	936,516	1,741,455	1,803,721	1,887,146	1,963,784	1,996,067
Pre-IPTV	1,338,810	1,219,160	1,051,796	632,456	618,042	612,405	614,338	646,163
Total	1,561,430	1,687,833	1,988,312	2,373,911	2,421,763	2,499,551	2,578,122	2,642,230

Source : Korea Communications Commission

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UN e-Government Index 2010

Country	Ranking by Year						Rank Difference (2001~2010)
	2010	2008	2005	2004	2003	2001	
Korea	1	6	5	5	13	15	▲ 14
US	2	4	1	1	1	1	▽ 1
Canada	3	7	8	7	6	6	▲ 3
UK	4	10	4	3	5	7	▲ 3
Netherlands	5	5	12	11	11	8	▲ 3
Norway	6	3	10	10	7	5	▽ 1
Denmark	7	2	2	2	4	9	▲ 2
Australia	8	8	6	6	3	2	▽ 6
Spain	9	20	39	34	29	16	▲ 7
France	10	9	23	24	19	14	▲ 4
Singapore	11	23	7	8	12	4	▽ 7
Sweden	12	1	3	4	2	11	▽ 1
Germany	15	22	11	12	9	10	▽ 5
Finland	19	15	9	9	10	13	▽ 6

Source : UN, 'e-Government Survey', 2001~2010.

Source: United Nations 2010 E-Government Development Knowledge Base, http://www.unpan.org/egovkb

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e-Government Global Awards

Achieving the World Class e-Government

International Awards

- KISS : UN Public Service Award ('07)
- Invil : World e-Gov Forum Award ('06)
- KONEPS : WCIT Global Excellence Award ('06)

Model Case Selection

- HTS : OECD e-Tax Best Practice ('06)
- OPPP : 'Online Politics Trophy Top10' ('06)
- uTradeHub : 'World Advanced' in APEC Report ('06)

International Certifications

- KIPOnet : WIPO IT Standard ('06)
- UNIPASS : ISO 9001, 20000 ('06)
- KONEPS : UN/CEFACT Int'l Standard ('05)

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Infrastructure - Broadband

- Household penetration of High-speed internet : #1 of the world
  - 0.1% (1998) -> 69% (2002) -> 97% (2009)
    * Proportion of households with Internet
- Mobile penetration [subscribers per 100 inhabitants] : top-ranked
  - 3.6% (1995) -> 30% (1998) -> 68% (2002) -> 98% (2009)
  - Rapid smartphone penetration (15M est. '11)

Three Major Factors in ICT Success

1. DB
   - Centralized, Accuracy
   - Accessible, Shareable
2. Infrastructure
   - Standard
   - High speed internet
3. Client centric applications
   - Easy of use
   - Open platform

Lessons Learned (CSF)

1. National Leadership & Commitment
2. Policy & Legal Framework (R&D & Industry Cluster)
3. Institutional Arrangement
4. IT Promotion Fund
5. Human Capacity Building

1. Leadership & Commitment

"For the second nation-building, we will focus on establishing a knowledge-based economy where information and leading technology play a central role."

Address by President Kim Dae-jung commemorating the 50th Anniversary of the Republic of Korea
August 15, 1998

"I will promote the continued expansion of the infrastructure for a knowledge and information society and cultivate new industries.."

Inaugural Address by President Roh Moo-Hyun
February 25, 2003

"Our main task is to overcome the point at issue, our economic crisis. However, we also have to prepare for our future. Therefore, our full-scale promotion of informatization is valuable as a new growth engine for the future of Korea."

Address by President Lee Myung-Bak
'Visionary Announcement for IT'
December 3, 2008

2. Aggressive ICT Policies (Informatization + Industrialization)

- 1978-1987 National Administration DB
- 1987-1996 National Backbone Network
- 1996-2000 National Informatization (Integration)
- 1999-2002 Cyber Korea 21
- 2002-2006 e-Korea
- 2003-2007 Broadband IT Korea
- 2006-2007 u-Korea
- 2008-2011 New National Informatization (IT Convergence, Green IT, Smart Work)

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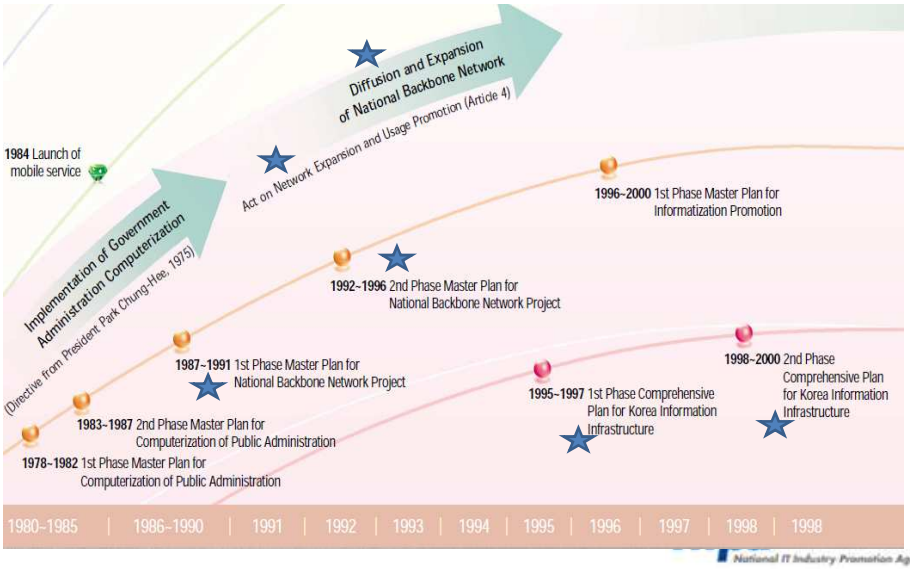
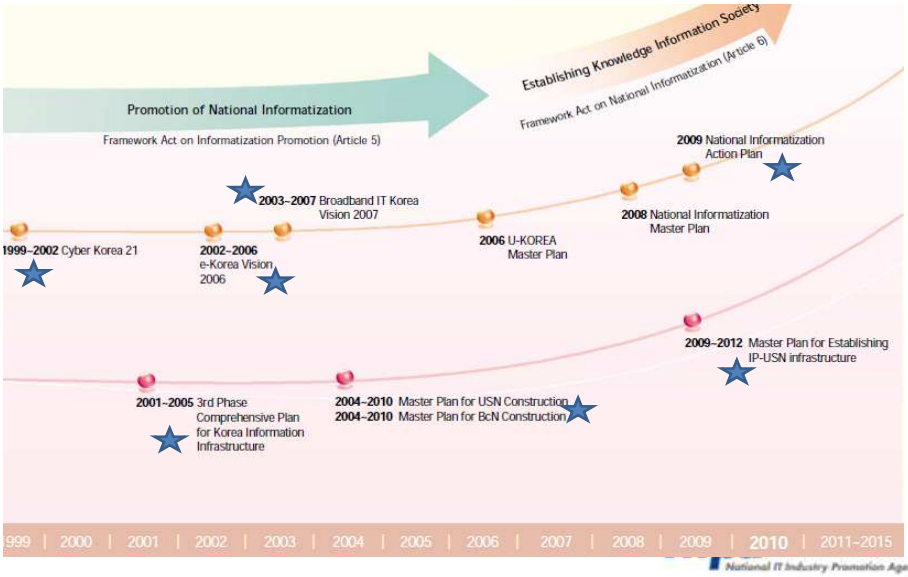
ICT Policy History (1)



ICT Policy History (2)



Cyber Korea 21 Policy (Ex.)

Construction of a Creative Knowledge-based Nation

- **Increasing the share of GDP of the knowledge-based industries to that of the OECD countries by 2002.**
- **Becoming one of the top ten advanced knowledge-based information societies in the world by the year 2002**

Establishing the Information Infrastructure

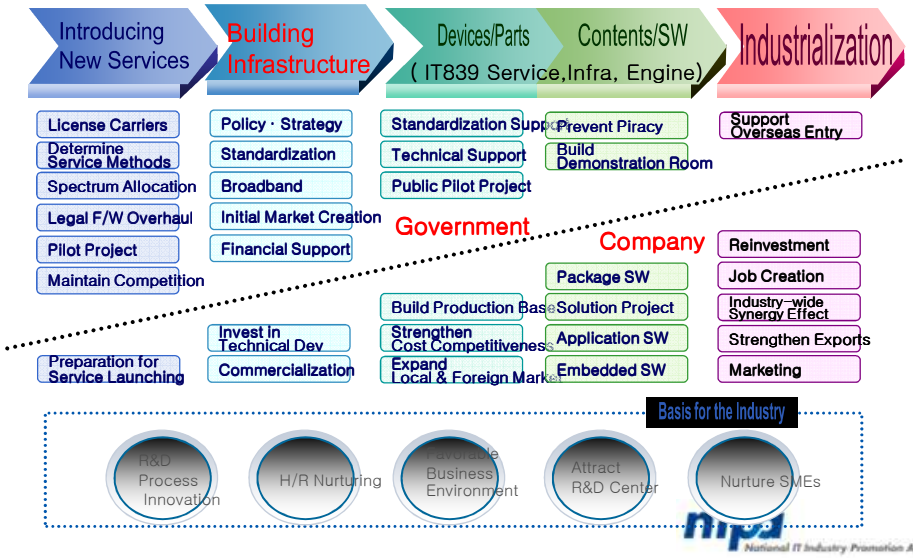
Improving National Productivity

Creating New Business & Facilitating IT Industry

MIC

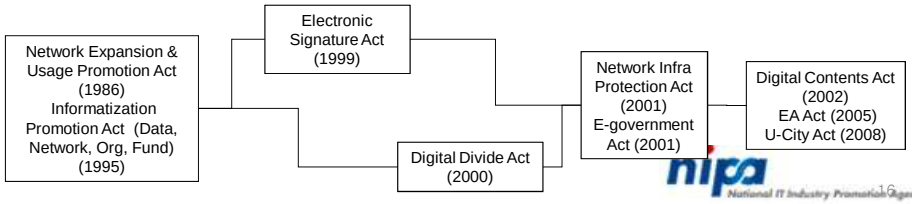
e-Korea Industry Policy (Ex.)

IT Industry Value Chain/ Governmental & Corporate Roles



Legal Framework Support (Ex.)

- A total of **187 ICT related laws** had been enacted or updated based on the results of the analysis of 7 rounds during '95-'03 in Korea.
  - 86 laws, including the Basic Act on Informatization Promotion, were enacted or revised for informatization promotion in the public sector
  - 101 laws, including Electronic Signature Act and Online Digital Contents Industry Promotion Act, were enacted or revised for the development of the IT industry and informatization of the private sector (ICT, SW, Contents, Games, etc)
  - http://elaw.klri.re.kr/eng/main.do (Korean Government Law English Site)



3. Institutional Arrangements

- Policy by Ministry and Execution by Agencies
- MoIC from 1994-2007 during heavy ICT sector development
- Convergence activities to Other Ministry since 2008
  - National Informatization to MoPAS (e-Gov) by NIA
  - ICT Industry Promotion to MKE by NIPA (Previously KIPA, IITA, KIEC)
  - Broadcasting/Telecom Convergence, Mobile Services and Regulation to KCC by KISA, KORPA, KISDI
  - Contents (DB, Gaming SW) to MoCT by KOCCA

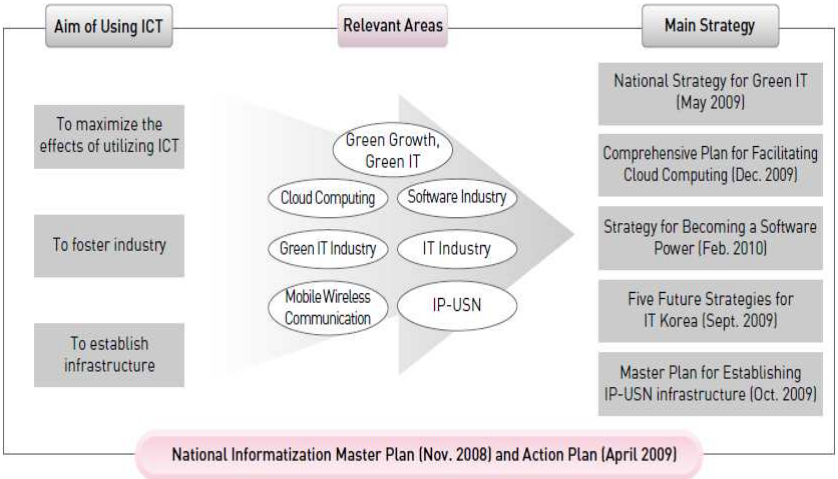
4. Funding

- ICT Promotion Fund based on ICT Promotion Law (9B$ used) since 1993 by Informatization Promotion Law
- Informatization Promotion Fund Used for Major Infra projects
  - Key projects: KII Project and 11 e-Government projects
  - R&D ; IT839 Products and Services, Standard
  - ICT workforce Education and Training
- Public-Private Partnership
  - Co-investment: KII Backbone and Subscriber's network
  - BTL (Build, Transfer, and Lease): Army Broadband Network, NEMA Digital TRS Network
  - Share-in-Revenue: Electronic Payment Systems for on-line civil services (Supreme Court, G4C, etc.)

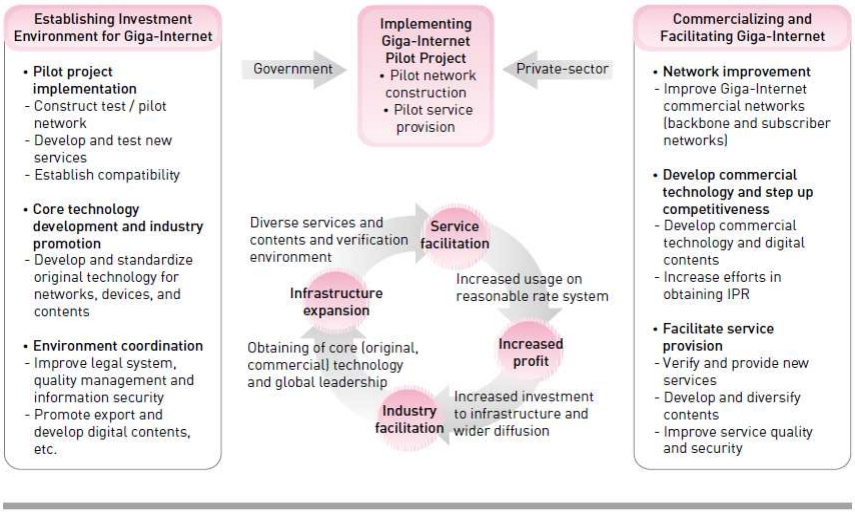
5. Human Capacity Building

- Mass digital literacy campaigns sponsored by Korean government
  - Target groups: the elderly, the disabled, farmers, government officials, the military, housewives, low-income groups and prison inmates, ect. (25 Millions, 50%)
    - 1st(2000 - 2002.6): 13,805,192
    - 2nd(2002.7 – 2004. 12): 11,811,145
- Partnership with private computer academies, colleges, welfare organizations, etc.(Grant, matching fund, etc.)
- IT Professional trainings for overseas markets (subsidies to professionals and training institutes)
- Boosting up ICT demand by training programs

Current Gov's ICT Blueprint



Current Plan for Giga-Internet



Source : National Information Society Agency, 'Plan for Developing Giga-Internet', April 2009.

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Questions & Discussions

Thank you

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