2009
Informatization White Paper

About NIA

NIA's 20 years of history is itself Korea's path toward national informatization.

In May 2009, the National Information Society Agency (NIA) has merged with the Korea Agency for Digital Opportunity and Promotion (KADO) keeping the name of NIA. Both agencies have been at the center of pioneering efforts in achieving 'ICT and Knowledge Information Power Korea'.

The history that NIA and KADO have accomplished during the past two decades is itself the history of Korea's national informatization. Both agencies have spared no effort to lead Korea into the present status as an ICT Powerhouse. Major achievements include building the Korea Information Infrastructure (KII), establishing e-Government, promoting new information technology application in businesses, bridging the digital divide, and developing information culture. These achievements have contributed to Korea being highly recognized by many global ICT indices. The Digital Opportunity Index (DOI) which measures the level of balance in the information society has ranked Korea as No. 1 among OECD countries for the last three consecutive years.

We believe it is time to make further contributions to solving such important national issues as economy recovery, integrating society, creating jobs, and accomplishing the low carbon green growth. Those objectives can be realized by shifting all our efforts toward the brand new paradigm for informatization based on creativity and practicality. Now based on our experiences and know-how accumulated through the years, the National Information Society Agency is trying to expand its horizon of the future with a new vision and new mission.

We will firmly position ourselves to lead global informatization by strengthening our roles and reputation as a think tank for future-oriented national informatization.

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Publisher's Message

For the last two decades, Korea has made consistent efforts and successfully established one of the most advanced information infrastructures in the world. By developing and diffusing a variety of ICT services and contents based on a world-class infrastructure, it is now recognized as one of the IT powerhouses.

However, the changing ICT environment both at home and abroad now requires a drastic transformation of the existing informatization strategies. While coping with such environmental changes, the Korean government has mapped out a national strategy that allows ICT-based economic growth and environment conservation to create synergies and is trying to become a leader in the future knowledge information society.

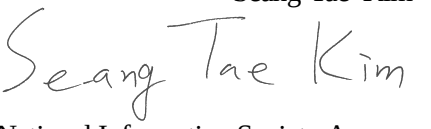
In order to provide objective information on Korea's informatization, the National Information Society Agency of Korea has collected and analyzed data on a comprehensive scale and published the 'Informatization White Paper' every year since 1994.

The '2009 Informatization White Paper' provides a broad outlook of Korea's informatization and features the 'Master Plan for National Informatization', which has been newly established in order to realize the goal of becoming one of the global ICT leaders. In addition, it also introduces the informatization status of each sector including e-Government, people's daily lives, e-Business, informatization infrastructure, ICT industry, and information security. Moreover, the annexed 'Key Informatization Statistics' will help understand Korea's ICT status from a more objective point of view.

I hope that this White Paper will enable readers to better understand the current status of Korea's informatization and serve as a useful reference.

October 2009

Seang-Tae Kim



President of National Information Society Agency

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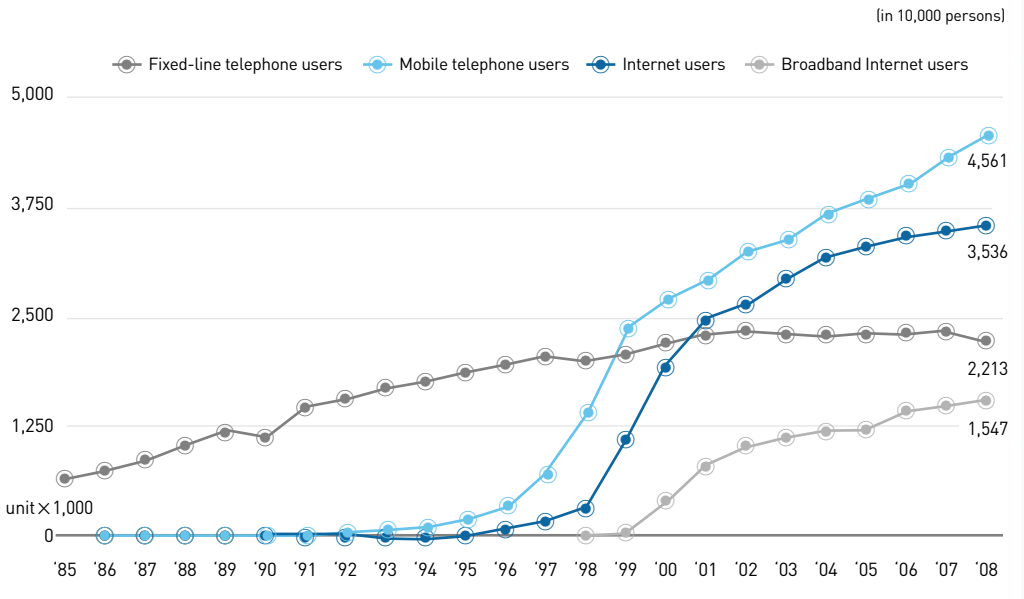
2009 Informatization White Paper

1. OVERVIEW

Korea has endeavored in informatization over the last two decades and earned a title as one of the ICT powerhouses of the world. It was in the mid 1990s when Korea started to be recognized in terms of ICT. Since 1996 when it launched CDMA-based digital mobile commercial service for the first time in the world, its recognition started to rise significantly. Especially the substantial improvement in the communications sector directly contributed to raising such recognition for Korea's ICT. Increase in the number of 'netizens' was another achievement that surprised the world. The number of Internet users increased significantly-increasing by 10 million every three years from 1.6 million in 1997. Moreover, the activities of netizens became more active than ever, with online social networks such as communities and forums already immersed into people's everyday lives. Well-developed information systems have also contributed to raising Korea's recognition as an ICT model country.

The achievements introduced above are the results of activities that had been prepared over a long period of time. For instance, the CDMA technology was the outcome of projects that stemmed from the TDX project of more than 20 years ago; the wide spread of the broadband Internet was also made possible thanks to the Korea Information Infrastructure project from 1994; and Korea's e-Government could not have been as advanced had it not been for the consistent efforts over 20 years since the National Backbone Information System project of 1987.

Figure 1 Development of Korea's Information Infrastructure



Source: National Information Society Agency

The year 2008 was in fact a turning point in the history of Korea's informatization. The informatization promotion framework that had been centered on the Ministry of Information and Communication, which had been leading national informatization since 1995, was dissolved and replaced by a new framework with the Ministry of Public Administration and Security at the center. Moreover, the institutions and projects that had composed the national informatization policies in the past went under a thorough review, which in November 2008 resulted in establishment of the National Informatization Master Plan that illustrates the new strategic directions for national informatization.

In terms of e-Government, the new administration of President Lee will maintain the next-generation e-Government plans but will focus more on the policies for service use rather than development and therefore the investment is expected to be reduced to a certain extent. In 2008, KRW 145 billion was spent for completing the e-Government roadmap projects and establishing plans for next-generation e-Government projects; in 2009, the government is focusing on strengthening the substance of e-Government projects such as stabilizing and facilitating the use of the existing projects rather than developing new ones.

The total volume of e-commerce transactions in 2008 was KRW 630 trillion, an increase of KRW 113 trillion from the previous year. In particular, the e-commerce transactions in Internet shopping malls were mostly carried out in 'open markets' such as Auction, G Market, etc. The 'open markets' in Korea have shown drastic growth over the past 10 year period.

In terms of the ICT industry, the global economic stagnation since the later-half of 2008 led to a decreased demand in ICT goods, which further affected the ICT industry as a whole. As a result, the operating profit of the world's 100 major ICT companies was around 5%, which was the lowest since 2001. However, ICT companies in Korea are now assessed as having weathered the hard times in their own ways. The most significant improvement during the last one year can be found in the area of broadcasting-communication convergence, which is represented by IPTV. It took five years to settle the long-debated issue on where to put the focus between broadcasting and communication, and together with the establishment of the law on Internet multimedia broadcasting services (IPTV Law), Korean IPTV services came to be fully available.

In terms of infrastructure, cases of many advanced countries that decided to include a wide range of smart SOC projects in their policies for economic recovery are drawing attention. As for Korea, the ICT infrastructure is one of the world's best; however, the country somehow lacked the providing of effective support for people's lives and business activities through applying ICT to SOC including logistics and distribution. In order to become competitive in terms of SOC, Korea needs to apply ICT as it is the national strength. In this regard, Korea announced in January 2009 the 'Green New Deal Project', which is based on the combined policies of employment facilitation and green growth such as those that are low-carbon/eco-friendly/resource-saving, etc.

On the other hand, some issues were raised regarding information security and culture, such as personal information infringement and circulation of wrong information on the Internet. As personal information protection schemes have been reinforced in order to establish the national framework for information security and to prevent adverse effects of informatization, the 2009 budget for information security increased 8.4% from 2008.

What informatization means to Korea possibly is much more than what it means to other countries. Obviously, every country considers informatization as an important national strategy; however it is something that Korea can be better at even while lacking natural resources. Considering these conditions, Korea has made the utmost effort in the area of informatization since the early 1970s and is now recognized as an ICT powerhouse. Nevertheless, it is only now just past the starting point and there still is a long road ahead. Korea still needs to overcome even more challenges and garner more achievements to genuinely become the ICT powerhouse. 2008 and the next one or two years will become the defining years that complete 40-years of activities for the old informatization model and a start of a new one.

Table 1 Informatization Progress in Korea (1993~2009)

Year	Mile stone	Contributions and Accomplishments
1993	Launching Informatization	• Opening Government Administration Information Network • Opening for Free Market Competition Paging service • Popularizing Personal Computer
1994	Promoting Informatization	• Establishing Plan for Korea Information Infrastructure • Founding the Ministry of Information and Communication • Commercializing Internet Services • Increasing Data Communication Subscribers
1995	Stabilizing Informatization	• Establishing Framework Act on Informatization Promotion • Confirming the Blueprint for High Speed Information Infrastructure • Diffusing Public Recognition toward the Internet • Revolutionizing On-Line Environment through Internet Technology • Launching Cable TV Service
1996	Dawn of Internet	• Effectuating Framework on Informatization Promotion Act • Promoting Localized Pilot Projects in Reducing the 'Regional Digital Divide' • Introducing EDI, EC and CALS • Spreading Multimedia Applications • Popularizing Personal Data Communication • Appearance of Cyber Community
1997	Opening Internet Era.	• Accomplishing the First Phase of High Speed Information Infrastructure Project • Beginning e-Commerce Services and its Preparation • Initiating PCS Service • Popularizing EDI and CALS
1998	Prospering Internet and Coping with Y2K Problems	• Shaping Counter measures on Y2K Problems nationwide • Public Administration Services through Internet • Investment Fevers on SOHO • Popularizing Internet Plaza(PC Cafe/Network Game Room)
1999	Reforming Society with Internet Revolution	• Establishing Cyber Korea 21(The Second Master Plan of Informatization Promotion) • Rapid Increase of IT Venture Businesses • Mobile Phone, Surpassing Fixed Line Subscribers in Numbers • Rising Adverse effect of informatization : Digital Divide, Hacking, Computer Virus • Launching Mobile Internet service

Table 1 Informatization Progress in Korea (1993~2009)

Year	Mile stone	Contributions and Accomplishments
2000	Popularizing Internet and e-Business	• Establishing Master Plan to Promote e-Commerce • Applying e-Document to All Government Agencies • Applying e-Business to Off-line Businesses
2001	Activating Mobile Internet	• Stimulating Mobile Internet through Mobile Phone, PDA • Being Claimed as the World's Best Broadband Internet Infrastructure(OECD Report) • Launching Digital Terrestrial TV Broadcasting Service
2002	Maximizing Digital Competitiveness	• Establishing e-Korea Vision 2006(The Third Master Plan of Informatization) • Laying the Foundation of e-Government • Initiating World's first IMT-2000 Service • Launching Digital Satellite Broadcasting Service
2003	The Maturity of Informatization	• The Political Issue has been moved from Facility Base over to the Service Base, due to the Market Maturation of Telecommunication Market • The Personal Privacy and Information Security Issues are Raised (Plan to Prepare Personal Privacy and Information Security Guideline) • Establishing the Road Map for e-Government • Announcement of 'Broadband IT KOREA VISION 2007' (Revision of the Third Master Plan for Informatization Promotion) • Issuing the government forms over Internet • Launching Mobile Banking Service
2004	Building New IT Growth Infrastructure	• Promote the building of IT growth-engine infrastructure • Number of Internet users exceeded 30 million people. • Build Broadband convergence Network (BcN) implementation plan • Draw up u-Sensor Network master plan • Establish IPv6 promotion master plan • Promote IT839 Strategy • e-Commerce transactions reached KRW 300 trillion.
2005	Beginning of Digital Convergence Era	• Build mid-and Long-term Information Security Roadmap • Launch terrestrial and satellite DMB service • Banking via the Internet exceeds banking done by tellers
2006	First year of the journey to the ubiquitous world	• Established u-KOREA Master Plan • Launched commercial services on BcN, WiBro, and HSDPA for the first time in the world • Achieved total e-commerce volume of KRW 400 trillion
2007	Toward u-Society	• World's top ranking in DOI for 3 consecutive years • Nationwide HSDPA service launched • 40 million users registered for Internet Banking
2008	Accelerated Convergence	• 10 million T-DMB terminals • Korea Communications Commission launched • Master Plan for National Informatization established • Real-time IPTV service launched
2009	**Toward Advanced Knowledge-Information Society**	**• 'Framework Act on Informatization Promotion' amended to a large scale and 'Framework Act on National Informatization' was established** **• National Informatization Strategy Committee launched** **• 'Green IT National Strategy' announced**

2. KOREA'S INFORMATIZATION POLICY

A. Master Plan for National Informatization

Since the 1980s, Korea has promoted policies that focused on fostering and the promotion of ICT as strategic means for national development: strategies for e-Korea, Broadband IT Korea, and u-Korea are just some examples. As the result, Korea came to establish a world-class information country with a highly acknowledged e-Government system in place and a world's top-level broadband Internet subscription rate.

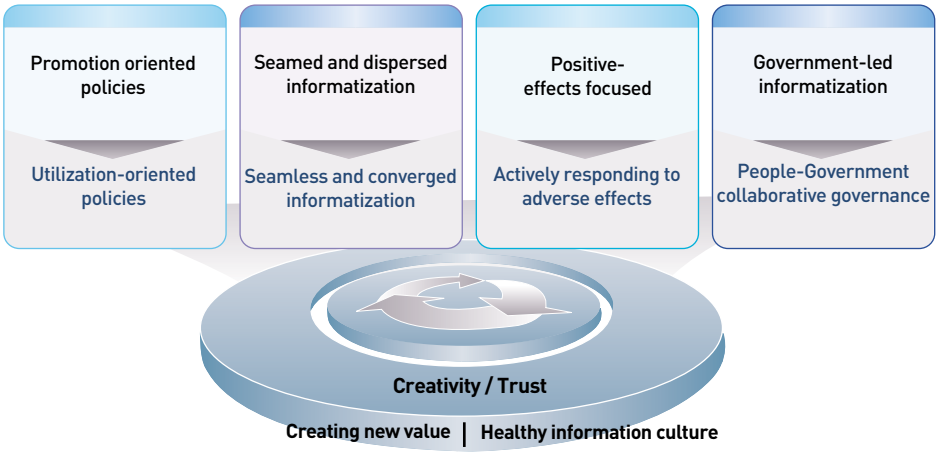
However, the spread of informatization into every sector of the society revealed issues and limitations of policies that were focused only on its promotion and positive effects. Many information systems were established in the central and local governments only to find difficulty in sharing information resources because of the lack of interoperability of data and systems. Adverse effects of informatization were aggravated as cyber violence including harmful information or malicious comment distribution and personal information leakage increased.

In order to root out such effects, the Korean government established a new vision and strategy for national informatization and is turning its policy directions accordingly.

It set as the vision of national informatization for the following five years 'Establishing an Advanced Knowledge Information Society Based on Creativity and Trust'. Five goals and twenty agenda items back up the vision for its early achievement.

The five goals are: ① 'creative soft-power' to create knowledge in the society and reform its utilization framework; ② 'cutting-edge infrastructure for digital convergence' that suits the age

Figure 2 National Informatization Policy Directions

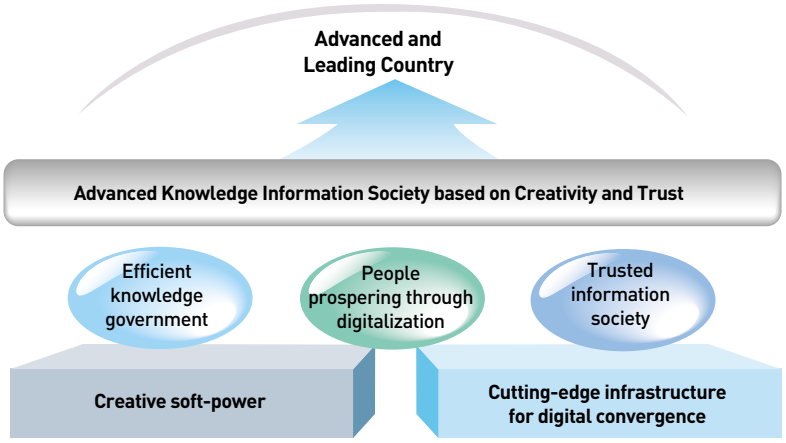


of digital convergence; ③ 'trusted information society' that is safe and mature; ④ 'efficient knowledge government' that communicates and cooperates with the citizens; and ⑤ 'people prospering through digitalization' by using the cutting-edge technology and services. Policy directions have also been changed-from informatization that is 'promotion-oriented' to 'utilization-oriented' from informatization that is 'seamed and dispersed' to 'seamless and converged' from focusing on 'positive effects' to 'adverse effects' and from promoting 'government-led policies' to 'people-Government collaborative governance'.

Goals and Tasks

In order to achieve the 'Advanced Knowledge Information Society Based on Creativity and Trust' the Master Plan for National Informatization provides five goals-creative soft-power, cutting-edge infrastructure for digital convergence, trusted information society, efficient knowledge government, and people prospering through digitalization. It also provides 20 agenda items and 72 tasks to be carried out by 2012.

Figure 3 Vision from National Informatization Master Plan



■ Creative Soft-power

In a knowledge information society, intangible assets such as knowledge, technology and culture as well as secured source technologies and market occupancy through flexible economic system will serve as the source of national competitiveness.

The goal of establishing creative soft-power aims to maximize such power through the transformation of the systems that create and utilize knowledge by opening, sharing, and cooperating.

In this regard, Korea will prepare the foundation for constructing a national knowledge infrastructure by providing opportunities to utilize information of all social sectors in a comprehensive way. It will also establish an environment for people to show their creativity by stepping up protection of intellectual property rights. In addition, the government plans to maximize the amount of knowledge exchanged throughout the country by facilitating the opening and sharing of knowledge in government, public organizations and research institutions.

■ **Cutting-edge Infrastructure for Digital Convergence**

As digital convergence is accelerated and such by applying ICT to BT, NT and traditional industry while at the same time the use of ubiquitous technology is expanded, informatization also extends its scope from people and devices to space.

In this sense, Korea will work on improving the network for quality convergence services and applying intelligence to SOC in order to establish the cutting-edge infrastructure for digital convergence.

In particular, it will increase the current level of Internet speed by more than 10 times by 2012 so that citizens can enjoy various advanced types of contents via the Internet. It also plans to save energy, time and other socioeconomic costs by combining ICT to SOC including roads, transportation and logistics. In addition, it will build the futuristic and cutting-edge u-City to increase the competitiveness of cities and further to contribute to improving the quality of people’s lives.

■ **Trusted Information Society**

Being the essential aspect for becoming an advanced and leading country, trustis now considered very important in every part of people's daily lives such as in disaster prevention and food and drug safety.

In order to establish a trusted information society, Korea plans to build a mature information society first by building trust and improving safety in cyberspace that creates an environment that people can trust and feel safe about by utilizing ICT.

Korea plans to introduce and enforce an identification scheme such as I-PIN that would replace the current resident ID numbers in order to build trust in the online world, and establish a

transparent distribution framework for agricultural, livestock and marine products as well as food and drugs in order to step up food safety. Moreover, by improving the response system to climate change, harmful environment, disasters and national security, it will be able to securely protect people's lives and property.

■ **Efficient Knowledge Government**

Today, governments are required to be capable of understanding the logic of situations through information collection and analysis, fast and accurate decision-making, and immediate response to problems.

In such regard, Korea aims to improve the efficiency of government affairs and the quality of civil services by integrating and connecting information systems. It plans to unify more than 30% of computing resources and homepages of the central government and save 50% of energy consumption of the National Computing and Information Agency by 2012. Also by expanding administrative information sharing system, it will minimize the number of required documents that are submitted to the government, banks, and universities for services. Moreover, it will provide services for citizens and businesses, which require offline visits to more than one administrative office, via online to decrease the inconvenience and promote informatization based on enterprise architecture (EA) and to minimize redundant construction of information systems and enhance their interoperability.

■ **People Prospering Through Digitalization**

Digitalization plays such an important role in economic development of a country. It increases to a large extent the convenience of citizens by expanding online-based consumption and people's cultural lives as well as contributing to an increase of exports.

To help people prosper through digitalization, Korea plans to facilitate the economy by utilizing ICT in creative and productive ways. By merging the traditional manufacturing and service industries with ICT, it will create opportunities for new value-added industry and actively promote the expansion of 'Green ICT' for low-carbon and green growth.

Expected Benefits

■ **Economic Benefits**

In economic terms, ICT is expected to be applied to a wide range of social areas and contribute to increasing efficiency and creating new values. Especially, the convergence of an advanced ICT infrastructure and traditional industries is projected to strengthen the competitiveness of the

industries and function as a new growth engine for creating new industries and jobs.

■ **Social Benefits**

In social terms, ICT is expected to play a significant role in unifying citizens and society in general by stepping up the self-purifying function of the Internet to the extent which it will not hinder the selection of quality information. By establishing a cyberspace that is reliable by increasing democracy, transparency and convenience through the facilitation of cyber communities and information sharing/disclosure in cyberspace will be realized.

■ **Benefits for National Competitiveness**

In terms of improving national competitiveness, ICT is expected to play a part in securing the global competitiveness of domestic ICT businesses through continuous investment, service development, and export of Korea's experiences as well as raising the image of Korea as an ICT powerhouse in this age of fierce competition.

B. Informatization Promotion Framework

Launch of the National Informatization Strategy Committee (NISC)

Upon the start of President Lee Myung-Bak administration in February 2008, the national informatization promotion framework of Korea went under a significant transformation. The new government decided to combine ICT and the functions of each ministry. As the result, the Ministry of Information and Communication (MIC)-centered framework was replaced by a new one with the Ministry of Public Administration and Security (MOPAS) at its core. The functions that had been carried out by MIC were transferred to other ministries: functions for national informatization to MOPAS; functions for facilitation of the ICT industry to Ministry of Knowledge Economy (MKE); and functions for broadcasting-communications convergence to the Korea Communications Commission (KCC) under the President.

In order to establish a new framework for national informatization promotion, MOPAS started to undertake the amending of the Framework Act on Informatization Promotion as a whole. Upon the announcement of the full revision of the Framework Act, it also changed the title to ‘Framework Act on National Informatization’ on May 22nd, 2009. The changes in the national informatization framework reflected in the law are as below:

The level of the Informatization Promotion Committee was upgraded from being under the Prime Minister to under the President to empower its functions of coordinating national policies. Its title was also changed to the 'National Informatization Strategy Committee'. Moreover, it actively utilizes the expertise of the private sector and expands their participation to establish a governance framework for government-private collaboration.

Roles and Structure of National Informatization Strategy Committee

The NISC deliberates on policies regarding informatization-it establishes and revises the master plan and action plans, designates knowledge information resources, fosters information culture and decides priority projects for closing the digital divide.

The new framework established the Executive Committee for National Informatization Strategy to review the agenda items to be presented to the NISC and deliberate on agenda items commissioned by the Committee. It also states to establish expert subcommittees for each area of informatization under the Executive Committee for support in agenda deliberation.

Figure 4 National Informatization Framework

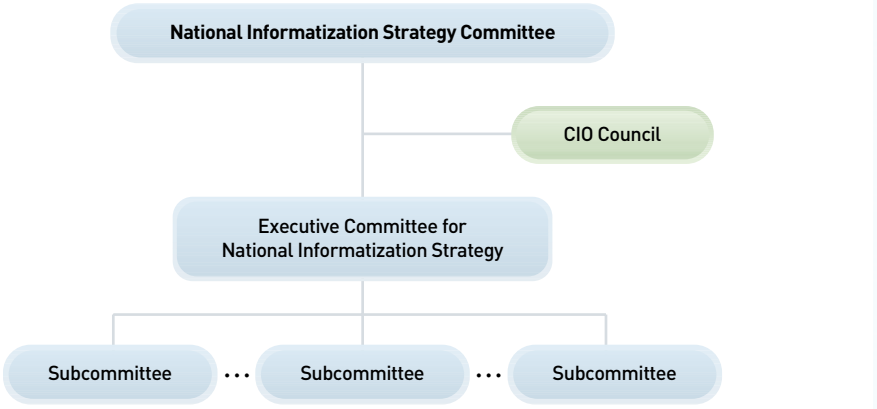


Table 2 Roles of NationalInformatization Strategy Committee and CIO Council

	Structure	Roles
National Informatization Strategy Committee	• Co-Chairs: Prime Minister and private-sector expert • Secretary: Minister of MOPAS • Members: ministers and private-sector experts (35 members) ※ Members are from constitutional institutions, central government administrative bodies, local governments, private-sector experts, etc	[Deliberation] Deliberates on issues related to national informatization promotion • Deliberates on master plan and implementation plans on national informatization • Coordinates national informatization policies • Provides feedback regarding informatization plans (in terms of budget) • Designates critical knowledge information resources • Deliberates on project plans for closing digital divide
Executive Committee for National Informatization Strategy	• Co-Chairs: Second Vice Minister of MOPAS and private sector expert • Secretary: CIO of MOPAS • Members: Directors of ministries and private-sector experts	[Preliminary deliberation] Deliberates on agenda items to be presented to the Committee and deliberate on agenda items commissioned by the Committee
Subcommittees	• Chair: Appointed by Co-Chairs of Executive Committee • Members: Government officials and private-sector experts	[Support for Executive Committee deliberation] • Provides support for agenda deliberation as bodies under Executive Committee • Support in fostering information culture, closing digital divide, managing knowledge information resources, etc.
Chief Information Officers (CIO) Council	• Chair: Minister of MOPAS • Members: Directors of ministries	[Coordination] • e-Government policies • Administrative information sharing • Information technology architecture (ITA) • Information resource management • Regional informatization, etc.

Reorganization of Informatization Bodies

Together with the ministerial reform of the informatization promotion framework, the functions of government agencies were also reorganized-functions of umbrella organizations of ministries were transferred to each other according to the changes of ministerial reorganization and similar functions were integrated and revised.

First of all, the channels providing support for MOPAS in its functions as the main body of national informatization were unified from National Information Society Agency (NIA) and Korea Agency of Digital Opportunity and Promotion (KADO) to NIA only. This came to be so that an agency could provide the functions of promoting informatization, expanding information culture and addressing adverse effects of informatization in a comprehensive way.

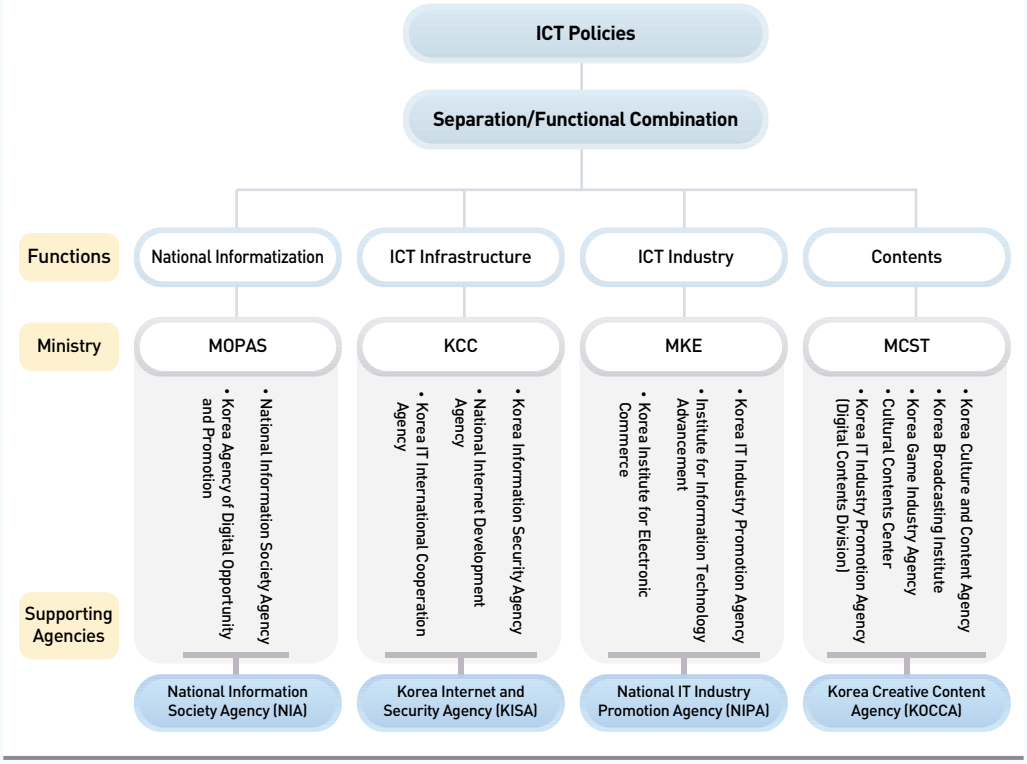
Moreover, Korea Information Security Agency (KISA), National Internet Development Agency (NIDA) and Korea IT International Cooperation Agency (KIICA), all of which had supported Korea Communications Commission in terms of ICT infrastructure were merged into a single agency and launched as the Korea Internet & Security Agency (KISA).

In regards to providing support for ICT industrial policies of MKE, Korea IT Industry Promotion Agency (KIPA), Institute for Information Technology Advancement (IITA), and

Korea Institute for Electronic Commerce (KIEC) were merged and launched as the National IT Industry Promotion Agency (NIPA).

In terms of information contents, five agencies-Korea Culture and Content Agency (KOCCA), Korea Broadcasting Institute (KBI), Korea Game Industry Agency (KOGIA), Cultural Contents Center, and Digital Contents Division of Korea IT Industry Promotion Agency were merged and launched as the Korea Creative Content Agency (KOCCA) under the Ministry of Culture, Sports and Tourism (MCST).

Figure 5 Mergers of Agencies for National Informatization



3. E-GOVERNMENT

A. Status of e-Government Promotion

Korea's e-Government, which was first introduced by computerizing administrative business processes in the 1970~1980's, has greatly contributed in increasing efficiency and convenience as well as expanding citizen participation and establishing a base for the knowledge-information society. The eleven e-Government initiative projects and thirty-one e-Government roadmap projects in the 2000's were part of the process.

In June 2008, the Korean government selected key e-Government tasks that would support the national vision and agenda of the newly organized administration. Most of the key tasks are those focusing on increasing administrative efficiency and convenience for citizens and businesses through connecting and sharing information among multiple ministries. According to the strategy that allows system construction after improving business processes, most of the activities for implementing the new tasks were focused on BPR/ISP on the new tasks for providing integrated e-Government services, supporting business competitiveness, establishing national enterprise architecture (EA), etc...

In addition, it also decided to continue 5 out of the 31 e-Government roadmap projects (2003~2007) that had been completed by the former administration, which needed improvement in terms of the extent of application and the scope of information linkage (KRW 53.3 billion). These projects included improving and expanding On-nara system, developing additional network integrating criminal judicial systems, and expanding installation of systems for managing classified information.

Table 3 Korea's History of e-Government Promotion

Period	Stage	Achievements
1978~1987	Computerization of Administrative System	• 1st and 2nd phase Administrative System Computerization Projects (1978~1986) - Each ministry developed their unit tasks - Laid foundation for administrative system network ※ Master Plan for Administrative System Computerization
1987~1996	Construction of National Backbone Network	• 1st and 2nd phase National Backbone Construction Projects (1987~1996) - Developed nation-wide civil service tasks - Expanded intra-organizational computing network and facilitated information sharing among relevant organizations ※ Law on Computer Network Expansion and Promotion of Its Utilization (1987)
1996~2007	Establishment of Korea Information Infrastructure and e-Government	• Building of Foundation for High-speed Information and Communications (1995~2005) - Constructed optical transmission network in 144 zones nation-wide • Expansion of e-Government Base and Services - 11 initiative tasks for e-Government, e-procurement, etc. (2001~2002) - Implemented 31 e-Government roadmap projects under participation of multiple ministries (2003~2007) ※ Comprehensive Plan for e-Government Execution (Sept. 1999) ※ Framework Act on Informatization Promotion (1995), e-Government Act (March 2001)
2008~	Facilitation of Informatization	• e-Government Implementation in Relation with National Agenda - 23 tasks (increasing efficiency in administration, increasing convenience for citizens, facilitating economy, strengthening social safety, creating informatization foundation, etc.) ※ Framework Act on National Informatization (Dec. 2008)

In 2009, the carrying out of 12 key e-Government projects that aim at executing the national agenda of the new government and establishing the 'Advanced Knowledge Information Society Based on Creativity and Trust' is being supported (KRW 105.2 billion). At the same time, the government secured additional budget of KRW 25.5 billion later in 2009, carrying out two additional projects 'BPR/ISP for improving civil services' and 'standardizing e-Government websites and improving accessibility of the disabled'.

Table 4 Status of e-Government Projects in 2009 (in KRW 100 million)

Category	Project	Executing Body	2009 Budget
Total			**1,307**
Increasing convenience for citizens	1. Distributing customized administrative information	Ministry of Public Administration and Security	65
	2. Providing integrated information for residential life	Ministry of Public Administration and Security, Ministry for Health, Welfare and Family Affairs	59
	3. Constructing the National Portal	Ministry of Public Administration and Security	18
Facilitating the economy	4. Supporting business competitiveness improvement	Ministry of Knowledge Economy, Small and Medium Business Administration, Defense Acquisition Program Administration	100
	5. Constructing integrated network for national logistics and trade	Ministry of Land, Transport and Maritime Affairs, Ministry of Knowledge Economy, Korea Customs Service	90
	6. Constructing e-passport reader system and standardizing foreigner identification information	Ministry of Justice, Ministry of Foreign Affairs and Trade, etc.	30
Improving efficiency in administration	7. Providing GIS convergence service	Ministry of Land, Transport and Maritime Affairs, Ministry of Public Administration and Security	250
Strengthening social safety	8. Integrating national safety information	National Police Agency, Ministry for Health, Welfare and Family Affairs, National Emergency Management Agency	108
	9. Managing livestock hygiene based on disease prevention	National Veterinary Research and Quarantine Service	50
Improving Foundation for Informatization	10. National informatization architecture-based information connection and utilization	Ministry of Public Administration and Security and each relevant organization	45
	11. Supporting specialized technology for resource integration	National Computing and Information Agency	30
	12. Strengthening national information protection system	Ministry of Public Administration and Security, Ministry of Education, Science and Technology, National Emergency Management Agency, National Intelligence Service	207
Projects to be carried out from the additional budget	1. BPR/ISP for improving civil services and system construction	Ministry of Public Administration and Security	135
	2. Standardizing e-Government web and strengthening accessibility of the disabled	Ministry of Public Administration and Security, Ministry of Land, Transport and Maritime Affairs, National Tax Service	120

B. Korea's e-Government through the Eyes of the World

The 20 years of making sustained e-Government efforts has allowed Korea to maintain its position as one of the world's leaders in terms of e-Government. The UN e-Government Readiness Index that was announced in January 2008 showed that Korea ranked 6th with the total score of 0.8317, still maintaining its position in the leading group since 2004. This time Korea's ranking in terms of infrastructure and human capital both went up by 7 spots but the web measure index fell down from 5th in 2005 to 6th. However, it climbed two notches in the online participation index, with a ranking of 2nd, after the United States.

Table 5 e-Government Scores for Top Ten Countries

Rank	2008		2005		2004	
	Country	Score	Country	Score	Country	Score
1	Sweden	0.9157	US	0.9062	US	0.9132
2	Denmark	0.9134	Denmark	0.9058	Denmark	0.9047
3	Norway	0.8921	Sweden	0.8983	UK	0.8852
4	US	0.8644	UK	0.8777	Sweden	0.8741
5	Netherlands	0.8631	**Korea**	**0.8727**	**Korea**	**0.8575**
6	**Korea**	**0.8317**	Australia	0.8679	Australia	0.8377
7	Canada	0.8172	Singapore	0.8503	Canada	0.8369
8	Australia	0.8108	Canada	0.8425	Singapore	0.8340
9	France	0.8038	Finland	0.8231	Finland	0.8239
10	UK	0.7872	Norway	0.8228	Norway	0.8178

Source: United National Economic & Social Affairs, 'UN E-Government Survey 2008: From E-Government to Connected Governance', 2008.01

In the meantime, Korea's e-Governmentis highly recognized by other international institutions besides the United Nations. The assessment of government websites (1,667 websites of 198 countries) by the US Brookings Institute (formerly carried out by Brown University) placed Korea, 1st with a score of 64.7, placing Korea at the top for three consecutive years since 2006. Korea was highly assessed especially in terms of complete online services and customized services, and the accessibility of the disabled, web accessibility and bulletin board functions were also found to have been improved from 2007.

Table 6 Scores and Rankings of Top Ten Countries in 2008 e-Government Assessment by Brookings Institute

Rank (2007 Rank)	Country	Score (2007 Score)
1 (1)	**Korea**	**64.7 (74.9)**
2 (3)	Taiwan	58.7 (49.4)
3 (4)	US	53.7 (49.4)
4 (2)	Singapore	53.1 (54.0)
5 (6)	Canada	53.0 (44.1)
6 (8)	Australia	53.0 (43.5)
7 (10)	Germany	49.8 (42.9)
8 (11)	Ireland	45.2 (42.4)
9 (14)	Dominican Republic	45.0 (41.0)
10 (13)	Brazil	43.7 (41.1)

Source: Darrell M.west, Brookings Institute, 'Improving Technology Utilization in Electronic Governnmet arround the world', 2008.

The 2009 e-Government Assessment by Waseda University of Japan placed both Korea and Japan in 5th place out of 34 countries.

Table 7 Scores and Rankings of 2009 e-Government Assessment by Waseda University

Rank	Country	Score	Rank	Country	Score
1	Singapore	92.89	11	Italy	75.30
2	US	89.31	12	Norway	73.84
3	Sweden	86.94	13	Australia	73.60
4	UK	85.45	14	Hong Kong	71.86
5	**Korea**	**82.30**	15	Belgium	71.26
5	Japan	82.30	16	Spain	70.77
7	Canada	80.00	17	France	70.61
8	Taiwan	78.69	18	Netherlands	68.88
9	Finland	76.02	19	New Zealand	68.58
10	Germany	75.30	20	Mexico	64.68

Source: WASEDA University, '2009 WASEDA University e-Government Ranking', 2009.

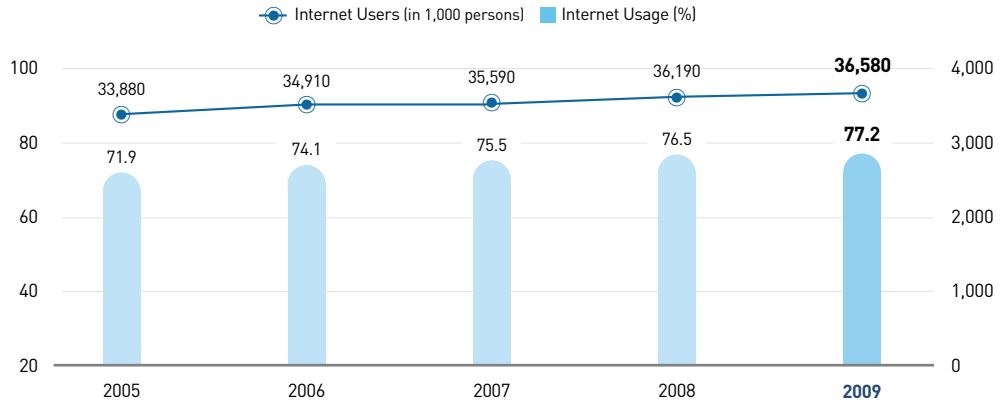
4. INFORMATIZATION OF DAILY LIFE

A. Internet Usage

Internet Usage Rate and Number of Users

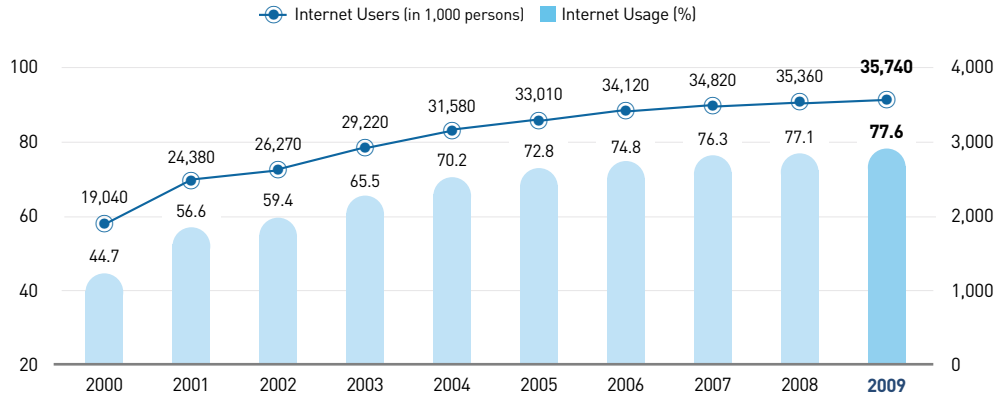
The Internet usage in Korea is constantly increasing and as of 2009, the number of Internet users aged 3 and above is 36.58 million (usage rate 77.2%). The number of those aged 6 and above now reaches 35.74 million (77.6%).

Figure 6 Internet Usage Rate and Number of Internet Users (Age 3 and above)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Figure 7 Internet Usage Rate and Number of Internet Users (Age 6 and above)

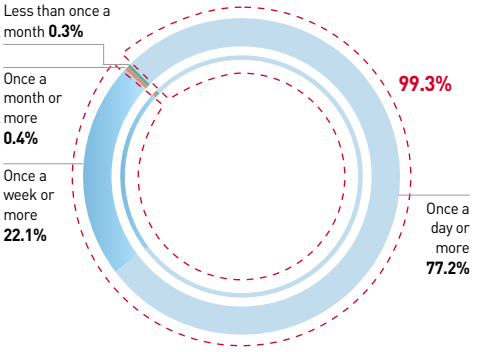


Note: 1) The data of 2004 and onwards includes the use of wireless Internet via mobile phones and the definition of "Internet users' has also changed from 'those who use the Internet at least once a month on average' to 'those who have used the Internet within the last month'.
2) The population surveyed was expanded to those aged 3 and above from 2005 (2000~2001: age 7 and above; 2002~2004: age 6 and above).
Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Internet Usage Status

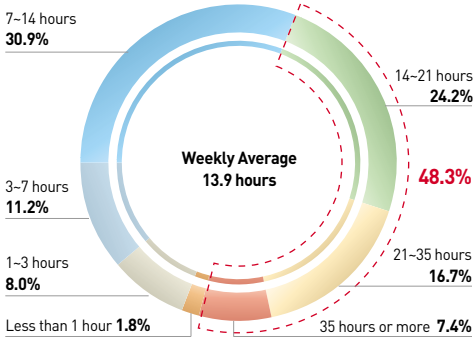
According to the survey of Korea Communications Commission and Korea Internet & Security Agency, Korea's Internet users spend an average of 13.9 hours per week and most of the Internet users (99.3%) aged 3 and above use the Internet once a week or more.

Figure 8 Frequency of Internet Use (Age 3 and above)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

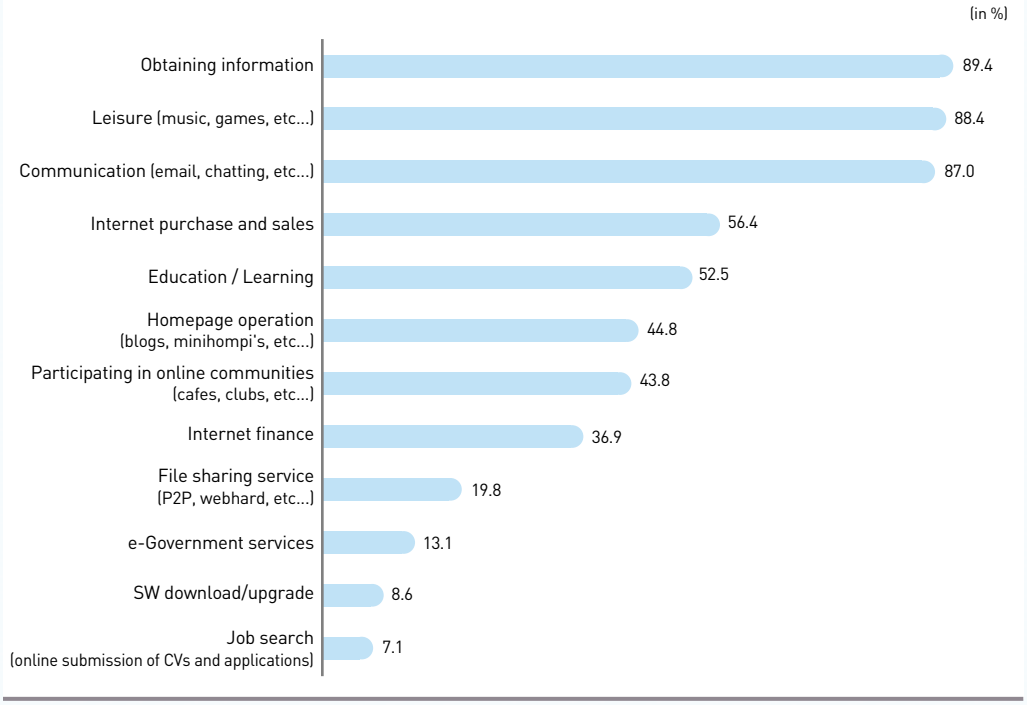
Figure 9 Weekly Average Time Spent on the Internet (Age 3 and above)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

The main purposes of using the Internet were 'obtaining information (89.4%)', 'enjoying leisure time music, games, etc. (88.4%)' and 'communicating via email, chatting, etc. (87.0%)'. Other purposes included 'buying and selling via the Internet (56.4%)', 'learning (52.5%)', 'maintaining homepages (blogs and minihompi's) (44.8%)', 'participating in online communities (cafes and clubs) (43.8%)'.

Figure 10 Purpose of Using the Internet (Multiple Answers) (Age 3 and above)



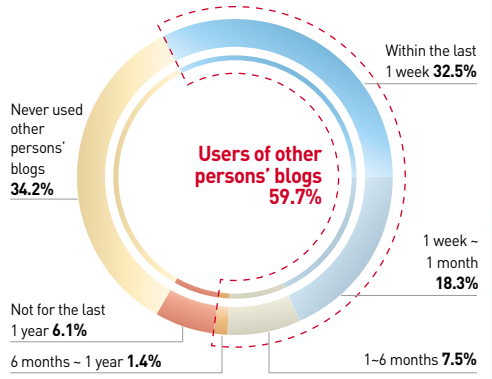
Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Internet and Communication

85.2% of the Internet users aged 6 and above are 'e-mail users' who have used email services within the last one year and 68.3% have used it within the last one month. In addition, half (51.0%) of the Internet users aged 6 and above have used the instant messenger services within the last one year.

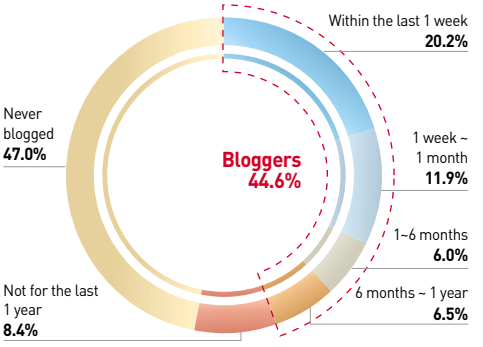
Moreover, 59.7% of the Internet users aged 6 and above are 'blog users' who have used other persons' blogs within the last one year and 44.6% are 'bloggers' themselves who have visited and managed their own blogs within the last one year.

Figure 11 Time Spent Using Other Persons' Blogs (Aged 6 and above)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Figure 12 Time Spent Blogging (Aged 6 and above)

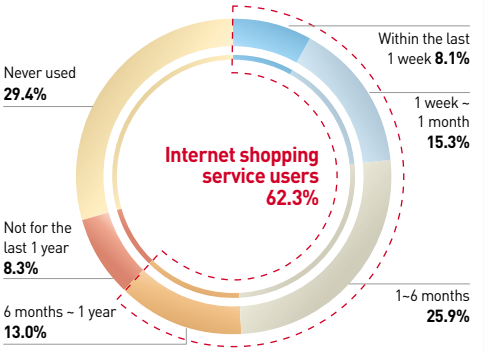


Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Internet and Economic Activities

The 2009 Status Survey on Internet Usage revealed that 62.3% of the Internet users aged 12 and above are 'Internet shopping service users' who have purchased (including advanced purchase and booking) products or services via the Internet within the last one year. Especially, the rate of Internet shopping mall usage was 14.7% points higher in females at 70.3% than in males (55.6%) and the highest usage rate was in the age group of those in their 20s at 88.6%.

Figure 13 Time of Using Internet Shopping Services



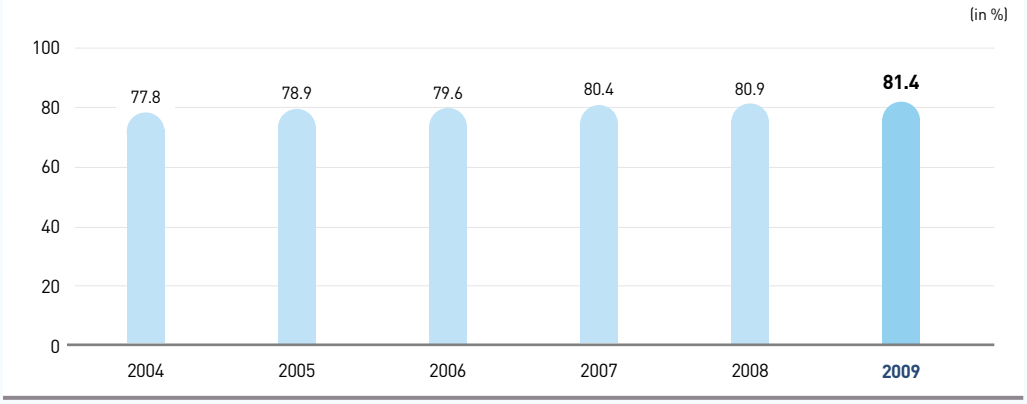
Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

In addition, the survey also showed that 41.2% of the Internet users aged 12 and above are Internet banking service users, among which 31.6% have used the service within the last one month. 9.0% of the Internet users aged 18 and above are 'Internet stock trading service users' who have traded stocks via the Internet for the last one year. The rate of the service use was a little higher in males (10.9%) than in females (6.8%).

Internet Usage Environment

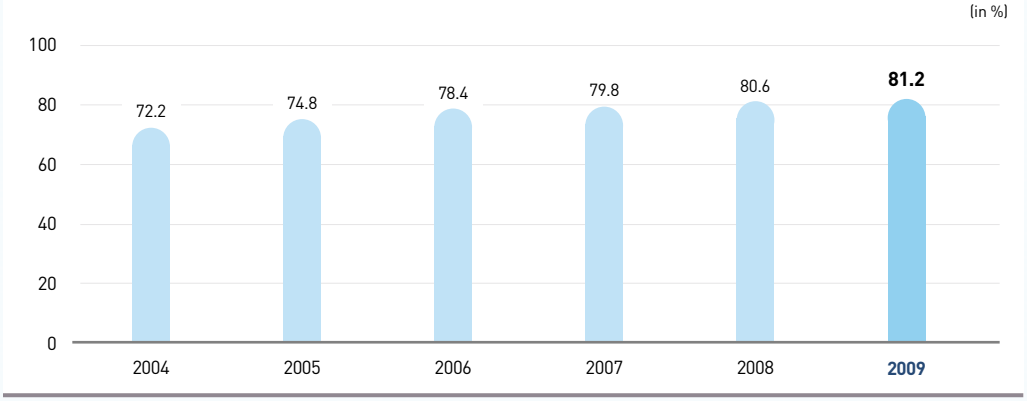
As of 2009, the computer penetration rate in Korean households is 81.4% and the Internet access rate was 81.2%.

Figure 14 Computer Penetration in Households



Note : Since 2006, computers inciuded both UMPCs and PDAs (PDA phones, smart phones) in addition to desktop and laptop computers.
Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

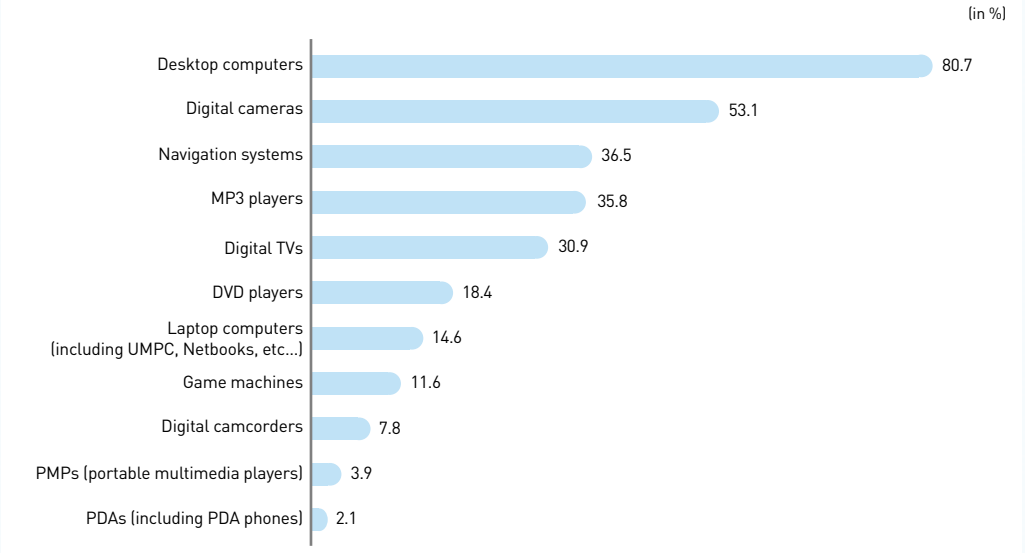
Figure 15 Household Internet Access Rate



Source: Korea Communications Commission and , '2009 Status Survey on Internet Usage', September 2009.

In terms of ICT device penetration in households, 'desktop computers' are the most widely penetrated at 80.7% followed by others such as 'digital cameras (53.1%)', 'navigation systems (36.5%)', 'MP3 players (35.8%)', 'digital TVs (30.9%)' - all of which showing a penetration rate of higher than 30%.

Figure 16 ICT Device Penetration in Households (Multiple Answers)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

B. Using Internet Services

Information Search

The information search services provided by Korean portals as of 2008 were one of the most advanced-level services in the world and had reached the level of providing the final information that a user wants.

Table 8 Share of Portals in Search Service Market (in %)

Portal	2007.12	2008.12
Naver.com	72.9	73.6
Daum.net	17.5	19.6
Yahoo.co.kr	4.7	3.9
Empas.com	4.3	2.3
Paran.com	0.6	0.5

Source: Korean Click, www.koreanclick.com

During 2008, the portals in Korea made a wide range of efforts to improve search services and increase their competitiveness. As search advertisements became the new source of profits, its market also expanded. In such regard, the portals introduced map services in a competitive way and launched TV search services through which users can search various contents of the Internet via TV in later 2008.

The information search service market is projected to continue to grow in 2009. Above all, the

services based on user participation on the mobile phones, maps, and customized platforms of the Providers are expected to produce contents in a variety of different ways.

Games and Music

■ Games

The volume of the Korean game industry continued its growth to KRW 8.6 trillion in 2005; however, after some gambling cases (e.g. 'Story of the Sea' after the name of the slot-machine game) becamea serious social issue in 2006, the arcade game market rapidly contracted with its volume decreasing in both 2006 and 2007. However, on the contrary, online games, in which users play games with others connected to the server via the Internet, maintained high growth rates and lead to the growth of the Korean game industry as a whole.

Table 9 Volume of Game/Online Game Industry of Korea (in KRW 100 million, %)

Type		2002	2003	2004	2005	2006	2007
Game Industry	Volume	34,026	39,387	43,156	86,798	74,489	51,436
	Growth Rate	-	15.8	9.6	101.1	-14.2	-30.9
Online Game Industry	Volume	4,522	7,541	10,186	14,397	17,768	22,403
	Growth Rate	-	66.8	35.1	41.3	23.4	26.1

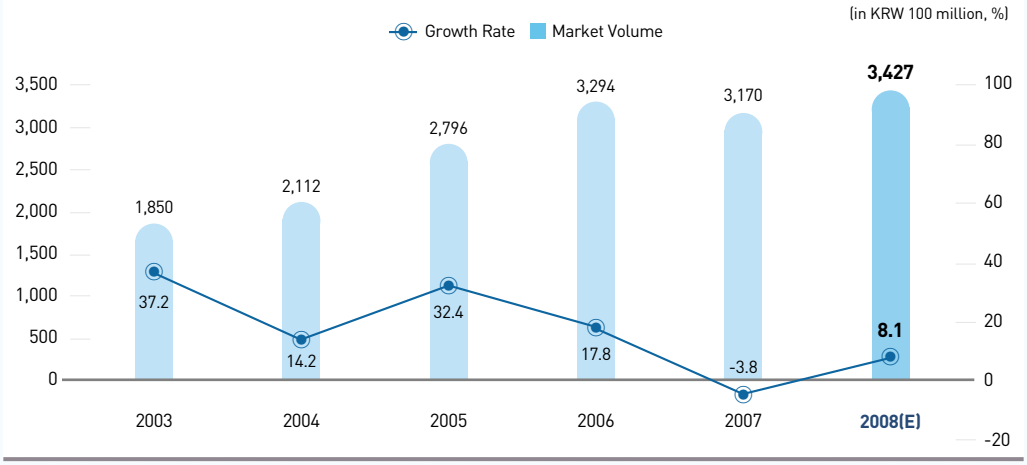
Source: Korea Game Industry Agency, '2004~2008 White Paper of Korean Games', 2004~2008

■ Music

Digital music market in Korea grew 8.1% a year on average since 2003 and hit the volume of KRW 342.7 billion in 2008, which is also an 8.1% increase from the previous year. The mobile ringtone and ring-back tone markets still take up the larger part of the industry with a volume of KRW 137.6 billion in 2008.

It is expected that the growth rate of digital music market will gradually decrease from 2008 and enter into the stage of maturity.

Figure 17 Volume and Growth of Digital Music Market



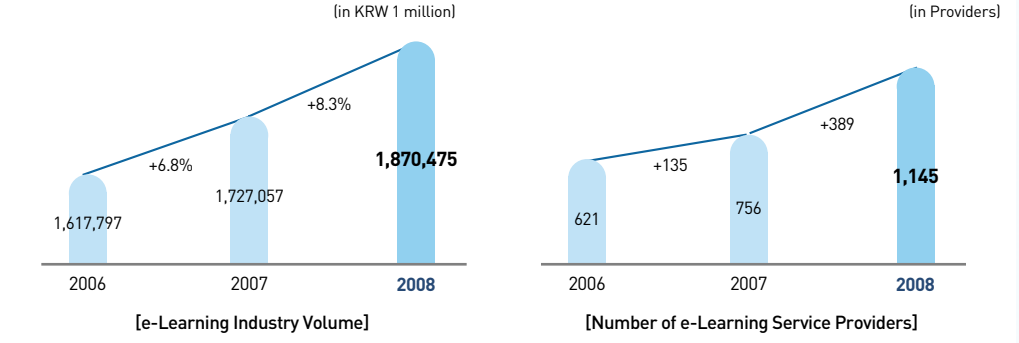
Source: Korea Game Industry Agency, '2004~2008 White Paper of Korean Games' , 2004~2008.

e-Learning

The total sales in the Korean e-Learning market in 2008 increased by 8.3% from 2007 and reached KRW 1.87 trillion. The number of e-Learning service providers increased by 51.5% from 2007 to 1,145, showing that even in the economic stagnation, the e-Learning industry experienced a significant boom in terms of services launched and market entrance.

Since 2004, the e-Learning industry market volume continued to grow by 7.6% on yearly average with the number of service providers also having increased by 34.7% on yearly average and is still improving as a knowledge service industry that has a high potential. In terms of e-Learning service use by individuals, the share of the Internet users aged 3 and above who had

Figure 18 e-Learning Industry Volume and Number of Providers



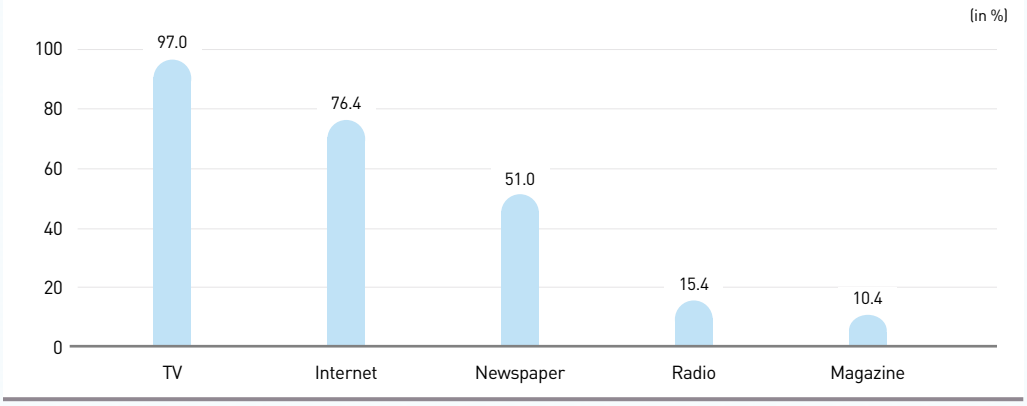
Source: Korea Institute for Electronic Commerce, 'Presentation on the Result of 2008 Status Survey of e-Learning Industry', March 2009.

used e-Learning services for the last two years was 45.0%, a 5.6% point increase from 2007. It can be explained that the e-Learning services which had been mostly provided for corporate education or cyber universities in former times are now widespread among the general public.

Internet News

More Internet users are now using news services on web portals. According to the Korea Communications Commission and Korea Internet & Security Agency's '2009 Status Survey on Internet Usage', the most widely used medium for news services were TV (97.0%) followed by the Internet (76.4%). 82.0% of the Internet users in Korea aged 6 and above are 'Internet news service users' who have read or used news on the Internet for the last one year and the rate is 46.0% for those who have done so 'within the last one week'. Among the Internet news service users, 71.8% read or use news articles on the Internet 'more than once a day'.

Figure 19 Main Media Channels for News Service (Multiple Answers, Internet Users Aged 6 and Above)



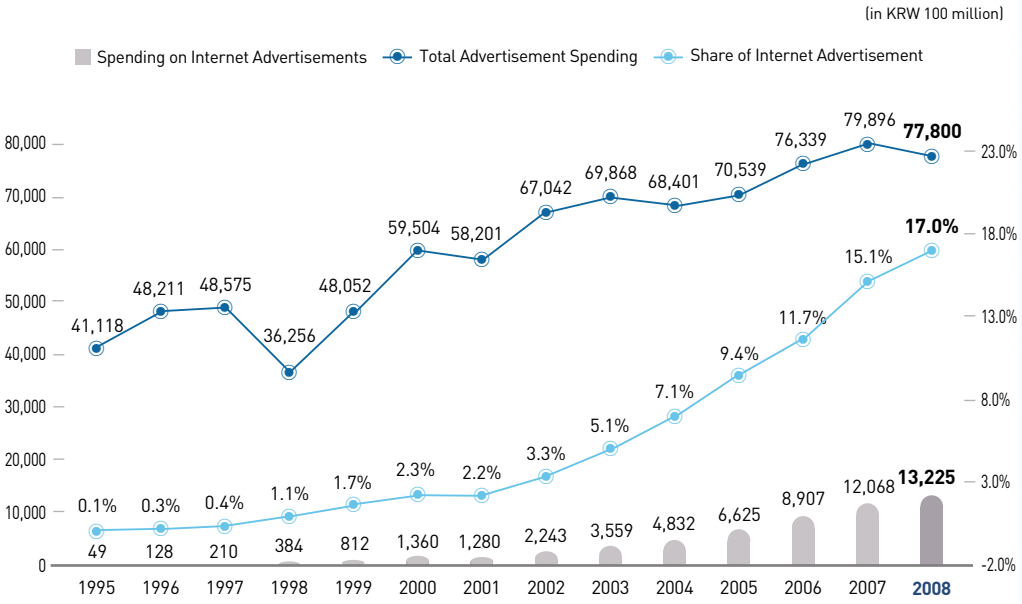
Source: Korea Communications Commission and Korea Internet & Security Agency, '2009 Status Survey on Internet Usage', September 2009.

Internet Advertisements

The Internet advertising share in the entire advertising market has maintained an increased rate despite the global financial crisis and economic stagnation.

The Korean advertising market as a whole showed a negative growth of -2.6% from KRW 7.99 trillion in 2007 to KRW 7.79 trillion in 2008. However, the Internet advertising market marked a growth rate of 9.6% from KRW 1.21 trillion in 2007 to KRW 1.32 trillion in 2008. This led to the increase of the share of Internet advertising in the entire market from 15.1% in 2007 to 17% in 2008.

Figure 20 Volume of Internet Advertising Market in Korea



Source: 1) Korea Federation of Advertising Associations, 'Settlement of 2008 Advertising Market and Forecasts for 2009', December 2008.
2) Internet Marketing Council of Korea, '2008 Internet Marketing Trend and Hot Issue', December 2008.

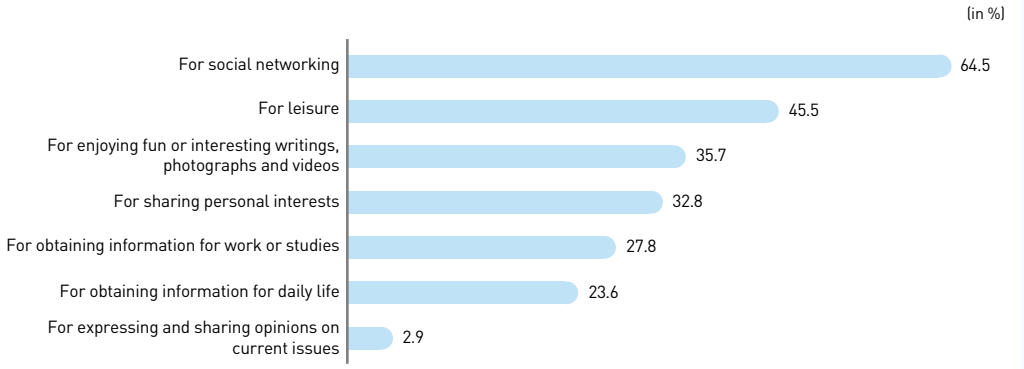
Online Communities

■ Online Cafes and Clubs

According to Korea Communications Commission and Korea Internet & Security Agency's '2008 Status Survey on Internet Usage', 50.2% of the Internet users aged 6 and above were users of online communities (cafes and clubs) within the last one year and 36.4% of them had used them within the last one month. The number of communities whose members use the service more than once a month is 2.2 on average. Those using 'less than one' community (cafes and clubs) were the most with the share of 46.1%, followed by 'two' with 26.8% and 'three' with 15.1%.

The reasons for using the online community services (cafes and clubs) were 'for social networking (64.5%)' while more than 30% also answered that they use the services 'for spending leisure time (and information exchange) (45.5%)', 'for enjoying writings, photographs and videos (35.7%)', and 'for sharing interests (including fan-club activities) (32.8%).

Figure 21 Reasons for Using Online Communities (Cafes/Clubs) (Multiple Answers)



Source: Korea Communications Commission and Korea Internet & Security Agency, '2008 Status Survey on Internet Usage', November 2008.

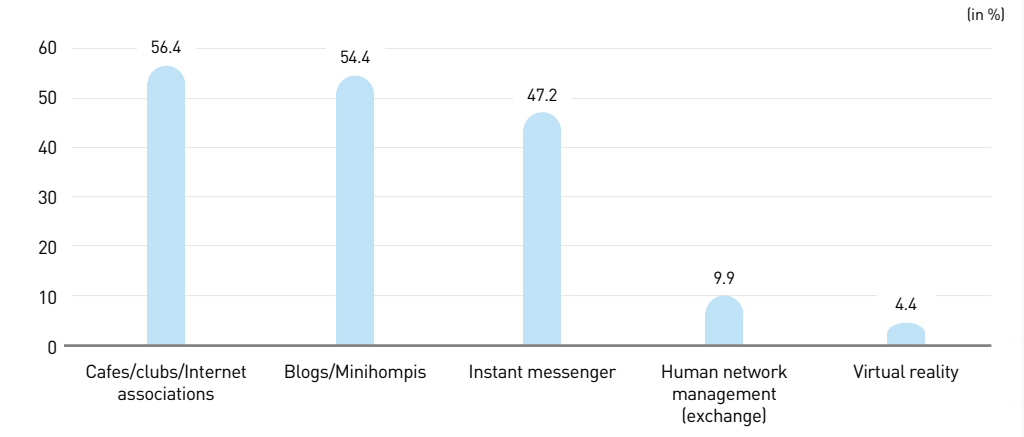
■ Blogs

While the number of minihompi users rapidly decreased in 2008, blog use by bloggers increased significantly. A considerable portion of bloggers who first moved from minihompis to blogs answered that they chose blogs that were easier to organize at their will because they could not accumulate or expand information in ways they wanted to in their minihompis.

■ Social Networking Sites (SNS)

According to the 'Status Survey on Use of Social Networking Sites by Internet Users' of Korea Internet & Security Agency, 61.3% of the Internet users aged 12~49 are 'SNS users' who

Figure 22 Usage Rate by SNS Service Type



Source: Korea Internet & Security Agency, 'Status Survey on Use of Social Networking Sites by Internet Users', June 2009.

actively network with others through SNSs.
In this case, SNS users mean the Internet users who use the SNS service-blogs/minihompis, instant messengers, human network management (exchange) services, virtual reality services, etc... -more than once a month and who engage in active networking activities with others.

In terms of the usage rate by SNS service types, about a half of the Internet users used the service through cafes/clubs/Internet associations (56.4%) and blogs/minihompis (54.4%), whereas only 9.9% and 4.4% used human network management (exchange) services and virtual reality services respectively.

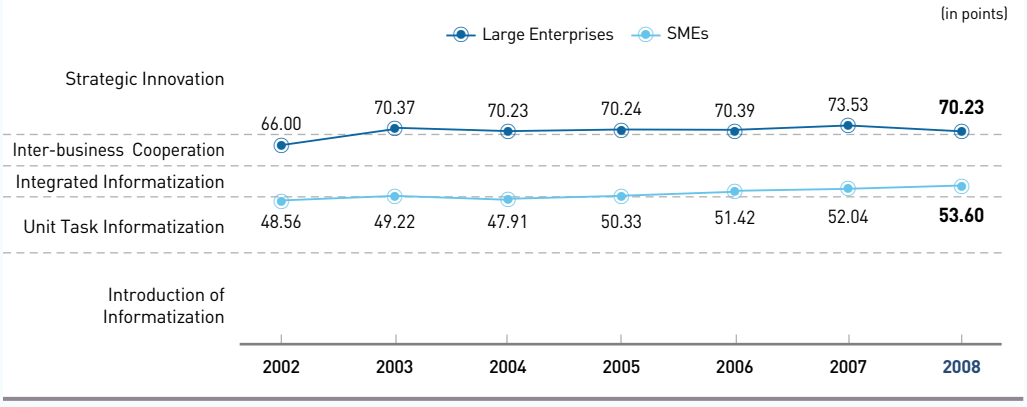
5. DIGITAL ECONOMY

A. Business Informatization Level

Informatization Level of SMEs

Based on the '2008 SME Informatization Level Assessment' of Korea Technology and Innovation Promotion Agency for SMEs, the informatization level of SMEs has been showing constant improvement since 2004 with the result in 2008 of 53.60 points out of 100, which is a 1.56 point increase from 2007.

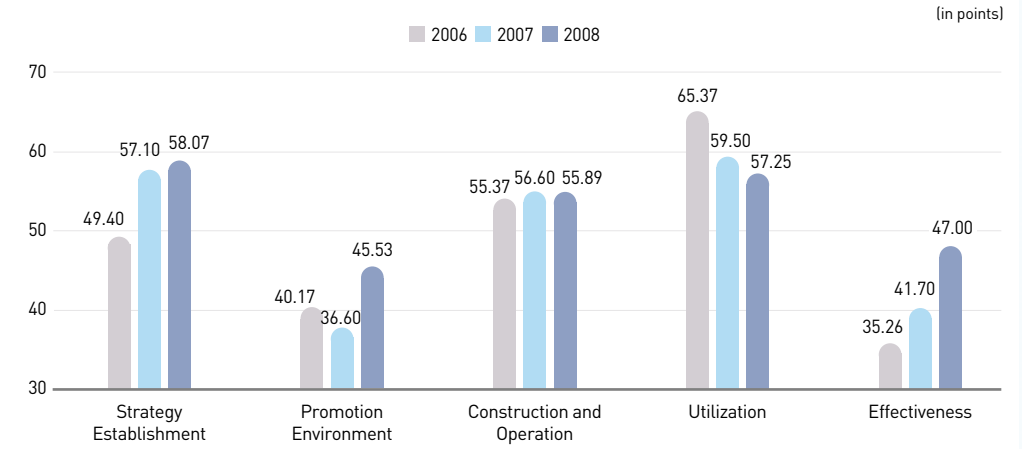
Figure 23 Informatization Level of Large/Small and Medium Enterprises by Year



Source: Korea Technology and Innovation Promotion Agency for SMEs, '2008 SME Informatization Level Assessment', April 2009.

When analyzing the change in informatization level of SMEs by each assessment area, the level of promotion environment improved significantly and led the overall betterment after showing a decrease in points in 2007 and the levels of strategy establishment and the effectiveness have been constantly improving since 2006.

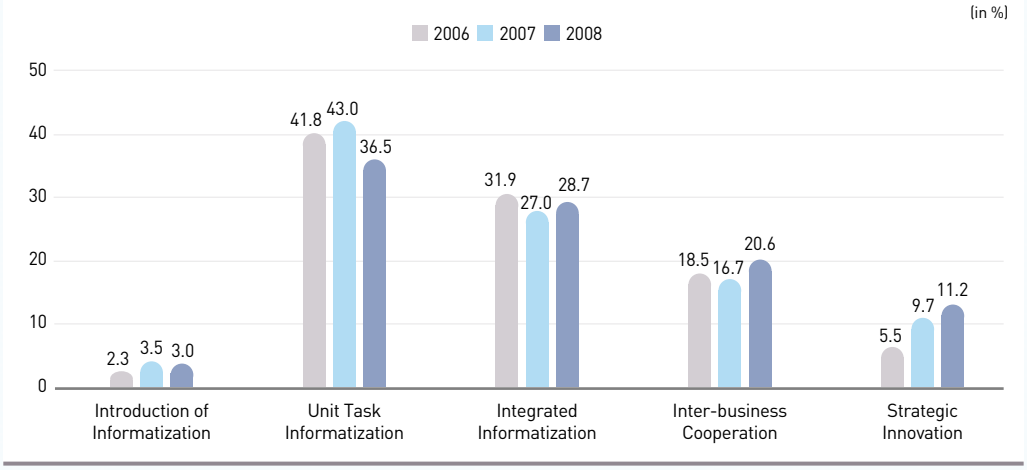
Figure 24 Informatization Level of SMEs by Assessment Area



Source: Korea Technology and Innovation Promotion Agency for SMEs, '2008 SME Informatization Level Assessment', April 2009.

In terms of the informatization level by each developmental stage, the constant improvement of the informatization level led the Korean SMEs to reach the stage of integrated informatization and with the increased inter-business cooperation and the increased number of enterprises in the stage of integrated informatization, the bipolarization issue was solved up to a certain level.

Figure 25 SMEs Categorized by Developmental Stage of Informatization



Source: Korea Technology and Innovation Promotion Agency for SMEs, '2008 SME Informatization Level Assessment', April 2009.

In terms of the informatization level by each industrial type, the informatization level of ICT industry is improving significantly every year and the level of the construction industry recovered after a sharp fall in 2007 up to the level from the year before. Moreover, the level of the wholesale and retail trade industry, which showed a decrease in the growth rate of its

informatization level, improved greatly.

Figure 26 Informatization Level of SMEs by Industrial Type

Source: Korea Technology and Innovation Promotion Agency for SMEs, '2008 SME Informatization Level Assessment', April 2009.

Informatization Level of Large Enterprises

The informatization level of large enterprises in 2008 scored 70.23 out of 100 in 2008, a 3.30 point decrease from 2007.

When comparing the informatization level of large enterprises to that of SMEs, the levels of promotion environment and effectiveness improved in both of them but the improvement was greater in SMEs with 8.93 and 5.30 point increase respectively. This led to the decrease in the gap between large enterprises and SMEs by 7.66 and 5.05 points each. In terms of the levels of construction/operation and utilization, the improvement level was lower in both large enterprises and SMEs; however, the decrease in points was more severe in large enterprises with 6.26 and

Table 10 Comparison of Informatization Levels of Large Enterprises and SMEs by Assessment Area

Type	Strategy Establishment	Promotion Environment	Construction and Operation	Utilization	Effectiveness	Informatization
Large Enterprises	74.29	60.26	76.33	71.15	60.70	70.23
	▽1.37	▲1.27	▽6.26	▽5.64	▲0.25	▽3.30
SMEs	58.07	45.53	55.89	57.25	47.00	53.60
	▲0.97	▲8.93	▽0.71	▽2.25	▲5.30	▲1.56
Difference	16.22	14.73	20.44	13.9	13.7	16.63
	▽2.34	▽7.66	▽5.55	▽3.39	▽5.05	▽4.56

Source: Korea Technology and Innovation Promotion Agency for SMEs, '2008 SME Informatization Level Assessment', April 2009

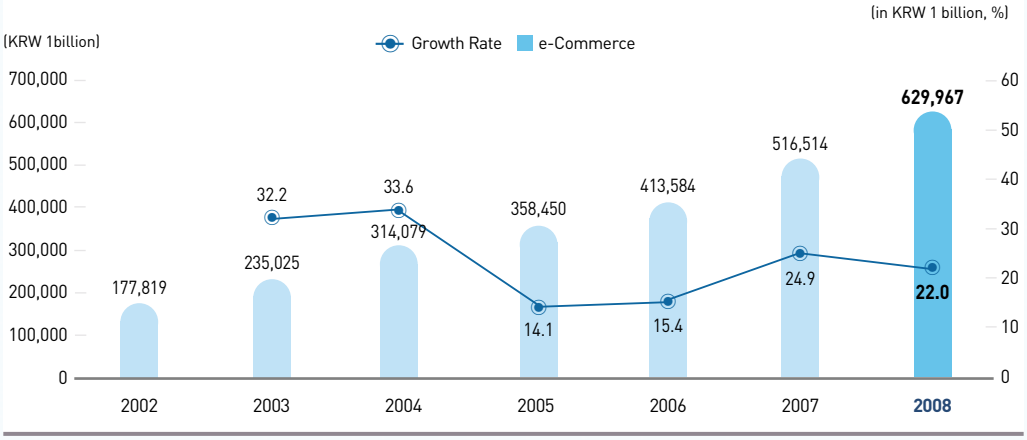
5.64-point decrease respectively, which further led to 5.55 and 3.39 point decrease in their difference from the levels of SMEs.

B. e-Business

e-Commerce

The e-Commerce volume of Korea reached KRW 629.97 trillion in 2008, which was an increase of KRW 113.45 trillion (22.0%) from 2007 and more than a ten-fold increase from the KRW 58 trillion mark in 2000.

Figure 27 e-Commerce Volume by Year



Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

The volume and proportion of each transaction type shows that B2B accounts for 88.9% of the entire number of businesses with KRW 560.14 trillion, while B2G takes 8.3% with KRW 52.27 trillion. B2C takes 1.9% with KRW 11.66 trillion and C2C takes 0.9% with KRW 5.91trillion.

Table 11 e-Commerce Volume by Transaction Type (in KRW 1 billion, %)

Type	2007		2008P		Total Transactions (from previous year)	
		Share		Share	Increased Amount	Growth Rate
Total e-Commerce Volume	516,514	100.0	**629,967**	**100.0**	113,453	22.0
- B2B	464,456	89.9	**560,135**	**88.9**	95,679	20.6
- B2G	36,801	7.1	**52,266**	**8.3**	15,464	42.0
- B2C	10,226	2.0	**11,660**	**1.9**	1,434	14.0
- C2C	5,032	1.0	**5,907**	**0.9**	875	17.4

Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

■ B2B

The total B2B e-Commerce transaction volume in 2008 reached KRW 560.14 trillion, which increased 20.6% from KRW 464.46 trillion in 2007. Of the B2B transactions, buyer-led transactions increased by 18.6% to KRW 380.90 trillion and seller-led transactions increased by 23.2% to KRW 146.93 trillion. Broker-led transactions also increased by 33.8% to KRW 32.30 trillion.

Table 12 B2B e-Commerce Volume by Transaction Type (in KRW 1 billion, %)

Type	2007		2008P		Total Transactions (from previous year)	
		Share		Share	Increased Amount	Growth Rate
Total B2B Transaction	464,456	100.0	**560,135**	**100.0**	95,679	20.6
- Buyer-led	321,058	69.1	**380,902**	**68.0**	59,844	18.6
- Seller-led	119,246	25.7	**146,929**	**26.2**	27,683	23.2
- Broker-led	24,152	5.2	**32,304**	**5.8**	8,152	33.8

Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

■ B2G

The 2008 B2G e-Commerce volume of government bodies such as central administrative organizations, local governments, and offices of education accounted for KRW 52.27 trillion, which increased 42.0% from KRW 36.80 trillion in the previous year. Of this amount, the volume of purchasing goods and services increased 54.7% (KRW 10.72 trillion) and the construction contract volume increased 27.6% (KRW 4.74 trillion) from 2007.

Table 13 B2G e-Commerce Volume (in KRW 1 billion, %)

Type	2007		2008P		Total Transactions (from previous year)	
		Share		Share	Increased Amount	Growth Rate
Total B2G Transaction	36,801	100.0	**52,266**	**100.0**	15,464	42.0
- Purchase of goods and services	19,585	53.2	**30,306**	**58.0**	10,721	54.7
- Construction contracts	17,216	46.8	**21,960**	**42.0**	4,743	27.6

Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

■ B2C/C2C

The transaction volume through online shopping malls in 2008 has increased by 15.1% (KRW 2.380 trillion) from KRW 15.77 trillion in 2007 to KRW 18.15 trillion. Of this amount, B2C transaction takes the largest portion with 64.3% (KRW 11.66 trillion), which is a 14.0% increase from KRW 10.23 trillion in 2007. The amount of C2C transaction takes 35.7% or KRW 6.49 trillion, which is a 17.1% (KRW 946 billion) increase from the previous year.

Table 14 Volume of e-Commerce Transactions for Online Shopping (in KRW 1 billion, %)

Type	2007		2008P		Total Transactions (from previous year)	
		Share		Share	Increased Amount	Growth Rate
Total	15,766	100.0	**18,146**	**100.0**	2,380	15.1
- B2C	10,226	64.9	**11,660**	**64.3**	1,434	14.0
- Others	5,540	35.1	**6,486**	**35.7**	946	17.1

Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

In terms of product types, the shares were the largest in products related to clothing/fashion with KRW 2.99 trillion (16.5%), followed by travel and reservation services with KRW 2.86 trillion (15.7%), home appliances/electronic and communications devices with KRW 2.47 trillion (13.6%), life/automobile-related products with KRW 1.71 trillion (9.4%) and computers and peripherals with KRW 1.64 trillion (9.0%). Compared to the transaction volume in 2007, the transactions increased in office/stationary products (44.9%), food/beverage (38.2%), agricultural and marine products (25.5%) and audio disc/videos/musical instruments (19.5%), which led the growth of online shopping malls. On the contrary, some product types such as various services and flowers showed a decrease in transaction volume by 19.3% and 1.8% each.

Table 15 Online Shopping Volume by Product Type (in KRW 1 billion, %)

Type	2007		2008p		Total Transactions (from previous year)	
		Share		Share	Increased Amount	Growth rate
Total	15,766	100.0	**18,146**	**100.0**	2,380	15.1
Clothing/fashion-related products	2,714	17.2	**2,996**	**16.5**	282	10.4
Travel and reservation services	2,416	15.3	**2,857**	**15.7**	441	18.3
Home appliances/electronic and communication devices	2,326	14.8	**2,466**	**13.6**	140	6.0
Life/automobile-related products	1,485	9.4	**1,710**	**9.4**	224	15.1
Computer and peripherals	1,542	9.8	**1,636**	**9.0**	94	6.1
Products for kids/babies	868	5.5	**1,027**	**5.7**	158	18.2
Food and beverage	731	4.6	**1,009**	**5.6**	279	38.2
Cosmetics	793	5.0	**917**	**5.1**	125	15.7
Books	744	4.7	**875**	**4.8**	131	17.6
Sports/leisure-related products	536	3.4	**614**	**3.4**	78	14.6
Agricultural and marine products	393	2.5	**493**	**2.7**	100	25.5
Office/stationary products	181	1.1	**262**	**1.4**	81	44.9
Software	110	0.7	**112**	**0.6**	2	2.1
Audio discs/videos/musical instruments	93	0.6	**111**	**0.6**	18	19.5
Various services	70	0.4	**56**	**0.3**	-13	-19.3
Flowers	51	0.3	**51**	**0.3**	-1	-1.8
Others	712	4.5	**951**	**5.2**	240	33.7

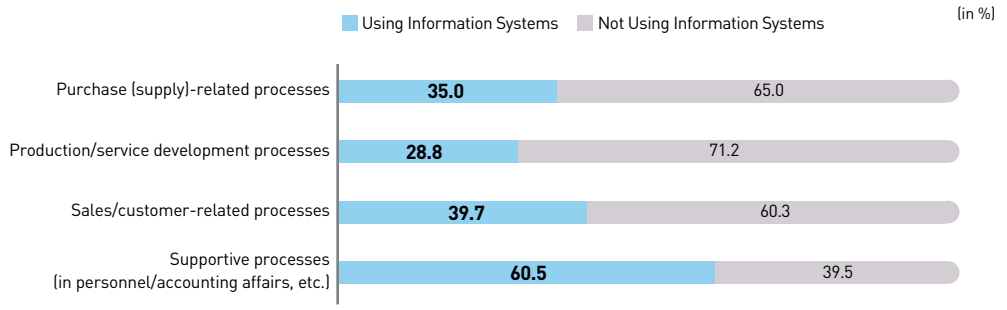
Source: National Statistical Office, '2008 Year-round and 4Q Statistics on e-Commerce', February 2009.

e-Business Level

According to the 'Survey on e-Business and ICT Usage by Korean Businesses' that was carried out from September to November 2008 by the Ministry of Knowledge Economy and Korea Institute for Electronic Commerce, the e-Business adoption in Korea was increasing steadily despite its small share and leading to an overall increased productivity and work efficiency. However, the survey found that there were gaps between business types and sizes that needed to be addressed through cooperation.

As for the construction and utilization of information systems, a survey on the use of information systems for each business process was carried out in the later-half of 2008 by a sample of 5,508 businesses with 10 or more employees. As the result, the share of businesses using information systems for processes regarding business-supportive activities such as in personnel and accounting affairs was the largest with 60.5%. The usage rate was 28.8% in production/service development affairs, 35.0% in purchase and 39.7% in sales affairs.

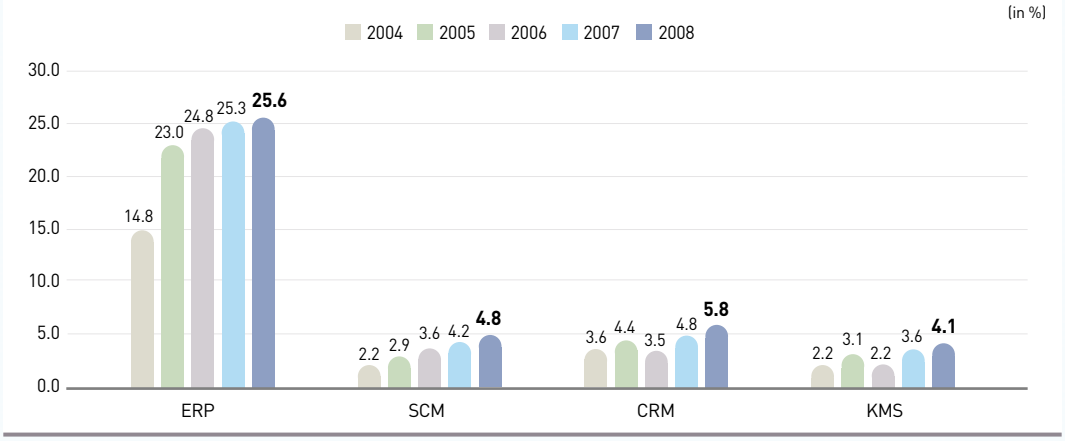
Figure 28 Use of Information Systems for Each Business Process



Source: Ministry of Knowledge Economy, Korea Institute for Electronic Commerce, 'Survey on e-Business and IT Usage in Korean Businesses', December 2008.

Though the use of information systems such as ERP (25.6%), SCM (4.8%), CRM (5.8%) and KMS (4.1%) was limited, it still was on the increase. The use of CRM and KMS recovered after showing a slight fall in 2006.

Figure 29 Information System Adoption



Source: Ministry of Knowledge Economy, Korea Institute for Electronic Commerce, 'Survey on e-Business and IT Usage in Korean Businesses', December 2008.

In terms of the e-commerce usage rate, 44.1% of the businesses that sell products or services through e-commerce transactions stated that their e-commerce sales accounted for 25~50% of the total sales. The percentage of businesses that partially use e-commerce transactions for sales or purchases was 33.4% in 2008, showing sluggish growth with an increase of 1% point from the previous year.

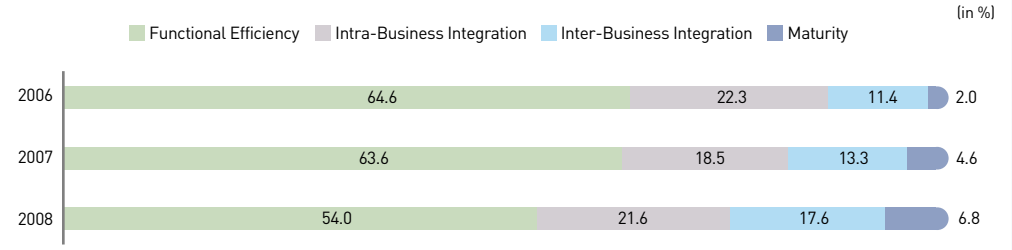
Table 16 e-Commerce Usage Rate (2004~2008) (in %)

Year	e-Commerce (Total)	e-Commerce (in Sales)	e-Commerce (in Purchases)
2004	17.7	6.3	13.0
2005	26.1	10.3	17.7
2006	31.3	19.6	17.9
2007	32.4	20.6	19.2
2008	**33.4**	**25.1**	**20.4**

Source: Ministry of Knowledge Economy, Korea Institute for Electronic Commerce, 'Survey on e-Business and IT Usage in Korean Businesses', December 2008.

As for e-business maturity, the share of businesses in the stage of functional efficiency were the largest with 54.0%, followed by those in the stage of intra-business integration with 21.6%, those in inter-business integration stage with 17.6% and those in maturity stage with 6.8%.

Figure 30 e-Business Maturity Stages



Source: Ministry of Knowledge Economy, Korea Institute for Electronic Commerce, 'Survey on e-Business and IT Usage in Korean Businesses', December 2008.

C. Financial Informatization

Internet Banking

As of December 2008, the number of Internet banking customers registered in 19 financial organizations[1)] maintained a two-digit growth rate since 2005 and stood at 52.6 million, which was a 17.7% increase from the end of 2007. Of this, 50.08 million were individual customers and 2.52 million were corporate customers.

1) 17 Korean banks, HSBC and Korea Post Bank

Table 17 Internet Banking Service Registered Customers (in 1,000 persons or businesses, %)

Type	2004-end	2005-end	2006-end	2007-end	2008-end
Individuals	23,094 (6.2)	25,303 (9.6)	34,123 (34.9)	42,396 (24.2)	50,075 (18.1)
Businesses	1,177 (17.5)	1,434 (21.8)	1,789 (24.8)	2,302 (28.7)	2,520 (9.5)
Total	**24,271** **(6.7)**	**26,737** **(10.2)**	**35,912** **(34.3)**	**44,698** **(24.5)**	**52,595** **(17.7)**

Note: Figures in ( ) are increase rates from the previous year.
Source: Bank of Korea, January 2009.

Money transfers, loan services and a variety of inquiries through Internet banking services reached an average of 22.43 million cases daily in 2008, a 25.1% increase from 17.92 million cases in 2007. The proportion was highest for inquiries at 84.7% (average 19.09 million cases daily), while money transfers accounted for 14.8% (average 3.33 million cases daily).

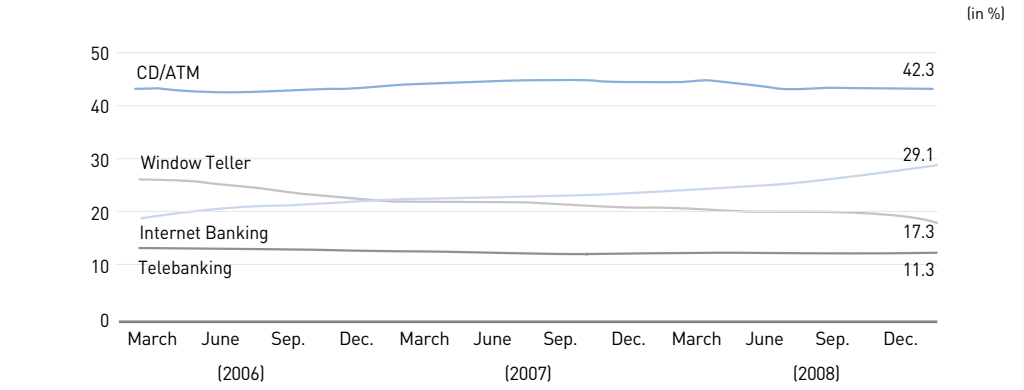
Table 18 Daily Average Internet Banking Service Use (in 1,000 cases; KRW 100 million)

Type		2005	2006	2007	2008
Number of Cases	Inquiry	9,199 〈82.7〉	10,596 〈82.8〉	15,177 〈84.7〉	19,093 〈85.1〉
	Fund Transfer	1,924 〈17.3〉	2,204 〈17.2〉	2,740 〈15.3〉	3,330 〈14.8〉
	Loan Application	2 〈0.0〉	2 〈0.0〉	2 〈0.0〉	3 〈0.0〉
	Total	**11,125** **〈100.0〉**	**12,802** **〈100.0〉**	**17,919** **〈100.0〉**	**22,425** **〈100.0〉**
Amount	Fund Transfer	125,182	150,903	185,570	228,426
	Loan Application	115	137	135	160
	Total	**125,297**	**151,040**	**185,705**	**228,586**

Note: 〈 〉shows the proportion (%).
Source: Bank of Korea, '2008 Status of Domestic Internet Banking Service Usage', January 2009.

In December 2008, among the four major financial service channels window teller, CD/ATM, tele-banking and Internet-banking, the number of transactions through CD/ATM accounted for 42.3% as the main channel. The number of transactions through Internet-banking has been constantly increasing and came in at 29.1% in 2008.

Figure 31 Transactions by Financial Service Channel



Source: Bank of Korea, '2008 Status of Domestic Internet Banking Service Usage', January 2009.

As of the end of 2008, there were 12.87 million authorized certificates issued by Korea Financial Telecommunications and Clearings Institute for use in Internet banking. This was an 11.7% increase from the end of 2007 (11.52 million certificates).

Mobile Banking

The use of mobile banking services offered by domestic banks and the Post Bank increased significantly by 47.6% in 2008 to 1.06 million cases daily, up from 720,000 cases in 2007.

Table 19 Daily Average Mobile Banking Service Use (in 1,000 cases, KRW 100 million)

Type		2005	2006	2007	2008
Number of Cases	Inquiry	231 〈103.6〉	366 〈58.4〉	598 〈63.4〉	898 〈50.2〉
	Fund Transfer	55 〈108.0〉	80 〈45.5〉	118 〈47.5〉	159 〈34.7〉
	Total	**286 〈104.4〉**	**446 〈55.9〉**	**716 〈60.5〉**	**1,057 〈47.6〉**
Amount	Fund Transfer	567 〈108.5〉	735 〈29.6〉	1,061 〈44.4〉	1,507 〈42.0〉

Note: 〈 〉 shows the proportion (%).
Source: Bank of Korea, '2008 Status of Domestic Internet Banking Service Usage', January 2009.

As of the end of 2008, the number of mobile banking customers was 8.48 million, a 69.3% increase from the end of the previous year. Of this number, the number of IC chip-based mobile banking ('BankOn', 'M Bank' and 'K Bank') customers stood at 4.69 million and the number of VM-based customers was 3.78 million.

Table 20 Number of Mobile Banking Customers (for 1,000 persons)

Type	2005	2006	2007	2008
IC chip-based	1,861 (108.2)	2,979 (60.1)	4,412 (48.1)	4,694 (6.4)
VM-based	-	-	597 (-)	3,784 (533.8)
Total	**1,861 (108.2)**	**2,979 (60.1)**	**5,009 (68.1)**	**8,478 (69.3)**

Note: 1. VM (Virtual Machine)-based mobile banking: Method using Internet banking service by installing Internet banking programs in mobile phones (does not use IC chips)
2. ( ) shows the proportion (%)
Source: Bank of Korea, '2008 Status of Domestic Internet Banking Service Usage', January 2009.

Electronic Cash

Use of electronic cash in 2008 was on average 310,000 cases per day with an amount reaching KRW 260 million, a 13.1% and 9.0% decrease from 2007. The use of electronic cash cards is decreasing due to the increase in the use of credit cards, which also include pay functions of transportation fare, and other charged cards.

As of the end of 2008, the number of electronic cash cards issued was 9.66 million, a 4.3% decrease from the end of 2007; whereas the amount of the balances slightly increased to KRW 11.2 billion.

Table 21 Volume of Electronic Cash Use (Daily Average) and Card Issuance (in 1,000 cases, KRW 1 million, 1,000 cards)

Type	2005	2006	2007	2008	Increase Rate (%)
Number of Cases	422	438	352	**306**	-13.1
Amount	327	309	288	**262**	-9.0
Number of Card Issuance	7,820	8,859	10,100	**9,661**	-4.3
Balance	11,574	10,539	10,549	**11,215**	6.3

Note: K-Cash, MYbi, VisaCash included.
Source: Bank of Korea, '2008 Report on Payment Operation Management', March 2009.

Online Stock Trading

In 2008, the portion of online stock trading within the overall stock trading volume was recorded at 49.7%, a slight decrease from 51.8% in the previous year. This is due to the fact that the decrease in the total amount of stock trading from 2007 led to a significant decrease in the amount of transactions in the KOSDAQ market, which had the largest share of online transactions.

In addition, the Korea Stock Exchange launched the development program-EXTURE, in November 2007. This is a next-generation system that integrates the securities, futures and KOSDAQ markets. Each brokerage firm is also in the process of constructing the next-generation KRX system and is preparing for the execution of the Capital Market Act.

Table 22 Share of Online Stock Trading (in KRW 1 trillion)

Year	Total Amount of Stock Trading[1] (A)	Amount of Online Stock Trading[1] (B)	Share of Online Trading (B/A, %)
2005	2,465.3	1,442.2	58.5
2006	2,552.0	1,388.3	54.4
2007	3,724.5	1,928.2	51.8
2008	**3,188.9**	**1,586.3**	**49.7**

Note: 1) Amount is the total of purchase and sale.
Source: Korea Exchange, '2008 Stock Statistics'.

Online Insurance

As of the end of 2007, 22 life insurance companies and 15 non-life insurance companies provided Internet marketing services. Their number of customers who used these particular Internet marketing services annually totaled 9.03 million, and 159.18 million services were used, of which 4.0% of 6.29 million cases were made up of insurance and loan contracts.

Table 23 Internet Marketing of Insurance Companies (for 1,000 persons or cases)

Year	No. of Companies	No. of Registered Customers (year end)	No. of Users (whole year)	No. of Usage (whole year)	Inquiry	Money Transfer	Insurance Contract	Loan Contract	Others
2004	26	10,528 [△22.2]	5,694 [61.1]	69,709 [2.6] 〈100.0〉	66,303 〈95.1〉	479 〈0.7〉	762 〈1.1〉	968 〈1.4〉	1,198 〈1.7〉
2005	29	14,396 [36.7]	6,086 [6.9]	89,903 [29.0] 〈100.0〉	86,340 〈96.0〉	281 〈0.3〉	396 〈0.4〉	1,059 〈1.2〉	1,827 〈2.1〉
2006	34	20,729 [44.0]	6,462 [6.2]	100,156 [11.4] 〈100.0〉	95,709 〈95.6〉	832 〈0.8〉	1,584 〈1.6〉	703 〈0.7〉	1,328 〈1.3〉
2007	**37**	**21,648 [4.4]**	**9,028 [39.7]**	**159,175 [58.9] 〈100.0〉**	**148,871 〈93.5〉**	**1,432 〈0.9〉**	**3,114 〈2.0〉**	**3,178 〈2.0〉**	**2,580 〈1.6〉**

Note: [ ] shows the increase rate (%), and 〈 〉 shows the share in the entire usage.
Source: Bank of Korea, '2007 Status of Financial Informatization', September 2008.

6. ESTABLISHMENT OF U-INFRASTRUCTURE

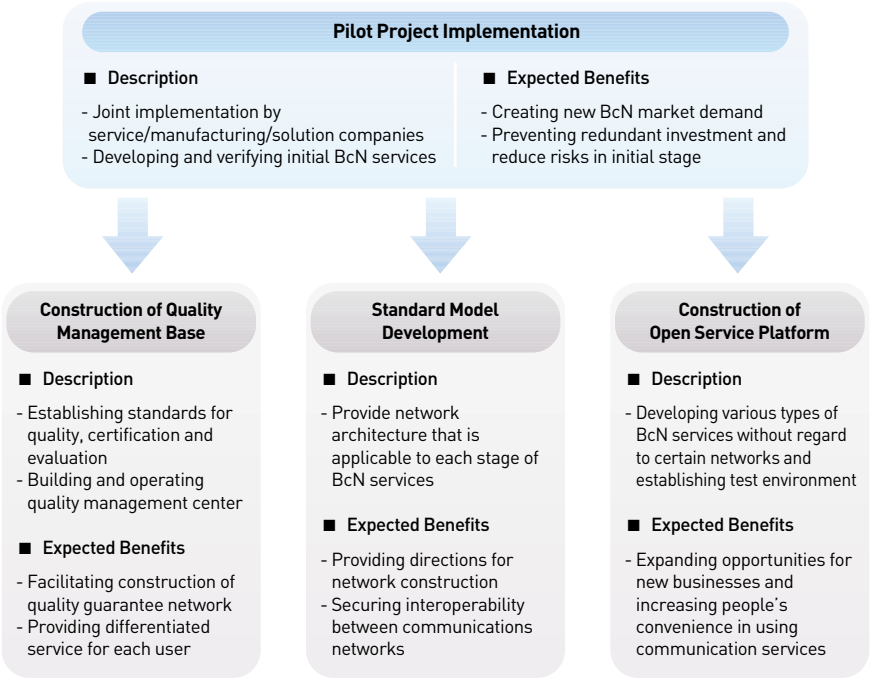
A. Next-generation Networks

Broadband Convergence Network (BcN)

As society is developing into an intelligence-based ubiquitous society, the Korean government has been continually carrying out the construction of broadband convergence network (BcN) from 2004 to enable seamless and safe use of broadband multimedia services regardless of time and place, under which communication, broadcasting and the Internet are converged.

In this regard, the government aims to provide broadband multi-media services to 12 million households and 23 million wireless subscribers by 2010. Under the three-phase plan-1st phase for infrastructure-building (2004~2005); 2nd phase for network construction (2006~2007); and 3rd phase for completion (2008~2012)-it is carrying out projects on developing new service models, facilitating usage, constructing and operating BcN quality management base and open services.

Figure 32 BcN Project Overview



Source: National Information Society Agency, '2008 Report on Construction of BcN Base', December 2008.

In 2008, many activities were carried out-including BcN pilot projects, construction and operation of quality management base, construction and operation of test environment for open service development, BcN standard model development and establishment of environment for BcN construction.

The BcN project aims to improve the current 35 million wired and wireless subscriber networks through the 3rd phase plan and to establish an environment where all users can conveniently use quadruple play services (QPS) regardless of time and place.

In January 2009, the Korean government announced the 'Mid/Long-term Plan for Improving Broadcasting and Communications Network' aiming at establishing the ultra broadband convergence network (uBcN) by 2012 in order to satisfy the demand in future broadcasting and communications services that will be more reality-like, converged, intelligent and personalized.

The uBcN will be an all-IP network that provides a maximum speed of 1 Gbps for the fixed wired network and an average of 10 Mbps on the wireless network-that planned speed is 10 times faster than the current network speed. uBcN users will be able to enjoy new multiple play services (MPS) which will combine telephony, Internet and broadcasting under various types of environment settings in the future.

u-Sensor Network (RFID/USN)

Ubiquitous sensor network (USN) can be defined as the technology integrating and processing identified information through tags and sensor nodes for anyone to use freely anytime and anywhere. USN is gradually evolving from a simple RFID-based identifying technology to autonomous context cognition-based technology that can be controlled thanks to addition of many sensing abilities.

Currently, the USN technology is recognized as the key infrastructure that increases efficiency and cost-savings in areas such as disaster prevention, environment monitoring and facilities maintenance. As its significance is being more emphasized as time goes by, many countries around the world are making efforts to establish the market in advance through technology development and pilot project implementation.

Korea established the 'Master Plan for USN Construction' in order to provide the national guidance in promoting USN and mapped out a variety of policies for RFID and USN diffusion based on the master plan. In 2007, the comprehensive scheme for RFID/USN diffusion was discussed and detailed action plans were finalized in the Ministerial Meeting on Economic Policies, in which 15 ministries participated including the then Ministry of Industry and Resources and then Ministry of Information and Communication. In 2009, the government is

fully driving RFID/USN promotion for facilitating the industry in terms of research and development as well as technology/service verification based on the Ministry of Knowledge Economy's strategy for RFID/USN industry development.

The USN project led to the launch of nine field tests and research tasks in 2005~2006, which included marine environment, cultivation environment and bridge monitoring, for establishing the base for facilitating demand in the area of USN. Moreover in 2007 and 2008, the government mainly focused on implementation of projects that were likely to create USN market through service facilitation and bring far-reaching effects to the citizens.

Korea is currently developing key technologies such as sensor-node chip/platform technology, USN transmission technology, sensor-node power technology, OS technology and RFID technology with the aims of establishing core technologies and strengthening technological competitiveness under the framework of industry-academy-research cooperation where the Electronics and Telecommunications Research Institute (ETRI), Korea Electronics Technology Institute (KETI) and Korea Advanced Institute of Science and Technology (KAIST) are participating. This led to a decreased technological gap between Korea and the world's top-level RFID/USN infrastructure technology nation-United States, of 1.3 years and Korea's relative technological level was 83.8%.

Diffusion and Facilitation of IPv6

There are approximately 4.3 billion IPv4 addresses worldwide and as of March 2008, 88% of them were in use already. This fact warns us that we will see the complete lack of addresses by 2011. As the Internet use in countries such as China and India is rapidly increasing every year and even for Korea, the use of Internet addresses since the launch of commercial Internet service in 1994 increased about 17 times until 2008. As it is expected that the demand for address resources will continue to increase with the launch of services such as telematics and home-network services, it is considered necessary to completely move onto the IPv6 address system with the lack of IPv4 addresses.

IPv6 is the next-generation Internet address scheme that was developed in 1997 by the Internet Engineering Task Force (IETF) for responding to lack of IPv4 Internet addresses. The IPv4 addresses that are now in use have the length of 32 bits whereas the IPv6 addresses have four-fold longer length, 128-bit, creating 2^{128} new addresses. In this regard, IPv6 can provide a sufficient number of addresses required in the ubiquitous age, better security and mobility, and also more convenience through automatic setting of Internet addresses.

As the agency taking charge in transition and diffusion of IPv6, the Korea Internet & Security Agency promoted many projects to first apply IPv6 in the public sector in 2008. It is also

operating the 6NGIX (next-generation Internet exchange node) and IPv6 6KANet (Internet subscriber network) to satisfy the demand for IPv6 use. As of December 2008, the 6NGIX was connecting 12 organizations at home and 4 organizations abroad. The 6KANet had 10 subscriber organizations.

Korea Communications Commission announced the 'Master Plan for Facilitating and Managing Internet Address Resources Development and Use (2009~2011)' in December 2008. As the plan lays out, it is promoting the transition to and diffusion of IPv6 with the aims of achieving the Internet backbone networks 'IPv6 readiness of 100% by 2011(recommended) and achieving the public organizations' IPv6 readiness of 100% by 2013.

Table 24 IP Addresses in Each Country (as of June 2009)

Rank	Country	No. of IPv4 Addresses	Country	No. of IPv6 Addresses(/32)
1	US	1,480,703,232	Brazil	65,728
2	China	206,341,888	US	14,916
3	Japan	155,468,544	Germany	9,759
4	EU	150,450,307	Japan	8,334
5	Germany	85,884,824	France	8,328
6	Canada	76,557,312	Australia	8,247
7	**Korea**	**72,353,536**	EU	6,158
8	UK	71,084,632	**Korea**	**5,201**
9	France	68,288,192	Italy	4,163
10	Italy	33,116,608	Poland	2,110
11	Brazil	31,852,032	UK	1,218
12	Russia	25,849,032	Netherlands	626
13	Others	380,536,480	Others	1,661
Total		**2,876,132,955**		**138,759**

Source: Korea Internet & Security Agency, September 2009.

B. u-City Infrastructure

While traditional cities construct and operate separate information centers and communications networks for administration, transportation, police, and fire administration, the u-City provides inter-linked information of the functions of such cities and enables more efficiently run government services. It also collects via mobile communications, WiBro, optical communications network or RFID/USN the information on city infrastructure and water/air pollution on a real-time basis, allowing immediate response and providing citizen safety.

To support u-City infrastructure-building, the Korean government has established and is enforcing the 'Law on Constructing Ubiquitous Cities' and ordinances. Moreover, it decided to add the contents regarding u-City construction to the Master Plan for National Informatization and is exploring ways to provide systematic support through collaboration among relevant ministries.

The Ministry of Land, Transport and Maritime Affairs established the 'u-City Action Plans (August 2008)' in order to foster the u-City industry as the new growth engine and facilitate entrance into overseas markets based on the experiences and localized core technologies. These action plans include developing core technologies through u-Eco City R&D project, selecting and supporting u-City pilot city projects, and training manpower for u-City construction.

The Ministry of Public Administration and Security is focusing on introducing and verifying the potentials of Korea's advanced local e-Governments through 'u-Life 21 Master Plan (December 2007)' and 'Project for Establishing Infrastructure for u-City Construction (2007~)'. Specifically, it developed the service standard model (2007~) and is diffusing the model to increase interoperability between u-City services and minimize trial-and-errors.

Table 25 u-City Construction Projects (2008)

Project Names	Local Governments
u-safety Integrated System	Incheon Metropolitan City
Construction of Active u-City Safety Network	Dong-gu, Gwangju Metropolitan City
Safe u-Subway with Culture	Gwangju Metropolitan City
u-Watch System on Water Supplies	Namyangju City, GyeongGi Province
Construction of Advanced u-Wellness Infrastructure	Wonju City, GangWon Province
u-Support for Converged and Multiple Administrative Processes	Cheongju City, Chungbuk Province
Integrated Management System of u-City Wastes	Jeonju City, Jeonbuk Province
u-Gaya Tour Guidance Service	GoRyung-Kun, Gyeongbuk Province
u-IT-based Integrated Tunnel Control System	Busan Metropolitan City
Integrated Management System of Facilities	YeongDeungPo-gu, Seoul
u-Crime Prevention Service	YeonGi, Chungnam Province
Ecological Environment Management System of u-Suncheonman	SunCheon, Jeonnam Province
Construction of ubi-Global City	Gumi, Gyeongbuk Province
Building of u-2010 Roads for Athletic Championships	Daegu Metropolitan City

Source: Press Release by Ministry of Public Administration and Security, September 16, 2008.

C. Information Resource Management in the Public Sector

Operation of the National Computing and Information Agency

The government went through BPR for efficient operation of government-wide computing facilities in December 2002 and established the Informatization Strategic Plan for constructing the National Computing and Information Agency. The master plan was finalized in December 2004 and after the organization of a steering committee in February 2005, the agency officially opened in November 2005.

The National Computing and Information Agency undertakes the integration of national information resources and their efficient operation/management, safe protection of national information systems, provides security and recovery from disasters, improvement/operation/management of national communications network as a whole and supporting informatization of government ministries.

As of May 2009, the National Computing and Information Agency in Daejon operates and manages 8,002 information resources related to 549 business systems of 19 central administrative bodies including the Ministry of Public Administration and Security's resident registration system and electronic civil service application system. The agency in Gwangju operates and manages 5,858 information resources related to 475 business systems of 20 central administrative bodies including the National Tax Service's Home Tax system. The number of information resources operated and managed in these two places is 13,860 including servers, networks and security equipment.

Application of Government-wide Enterprise Architecture (EA)

The application of EA was promoted as part of the 31 e-Government projects in August 2003. In December 2005, the 'Law on Efficient Introduction and Operation of Information Systems' was enacted to mandate the application and operation of EA in public organizations. In June 2006, ordinances and regulations were established. In addition, the new administration of President Lee Myung-Bak decided to step up the foundation for sustainable informatization by including government-wide EA establishment in the Master Plan for National Informatization which was established in December 2008.

In this regard, public organizations are introducing and operating information systems based on EA and government-wide informatization activities are also being implemented upon EA.

According to a report from the Ministry of Public Administration and Security, 32 central administrative organizations, 3 metropolitan city/provincial governments and 37 public organizations adopted and operated EA as of December 2008.

Table 26 Status of EA Adoption

Type	Total Number of target organizations	Number of organizations with EA	Year of EA adoption			
			~2005	2006	2007	2008
Central Administrative Organizations	42	32(76%)	5	12	10	5
Metropolitan City/Provincial Governments	16	3(19%)	1	-	-	2
Public Organizations	77	37(48%)	5	6	13	13
Total	**135**	**72(53%)**	**11**	**18**	**23**	**20**

Note: Data is based on December 2008.
Source: Ministry of Public Administration, 'Presentation in EA Executive Workshop', May 2009.

7. ICT INDUSTRY

A. Status of ICT Industry

The total sales volume in the ICT industry in 2008 increased by 7.7% from 2007 to KRW 288.18 trillion and is maintaining a yearly average growth rate of 10.4% over the last 10 year period since 1999.

The financial crisis that started in the United States in later half of 2008 was expected to bring global economic stagnation and substantially affect the Korean economy and ICT exports. However, based on the firm growth of the ICT industry for the last 10 years and the competitiveness in exports, Korea maintained its average growth rate in 2008.

The breakdown of the ICT industry shows that the production in the ICT service sector has increased on average 10.1% every year since 1999 and 5.46% from 2007, and now accounts for KRW 58.16 trillion or 20.2% of the total production. Issues such as reform of the competition structure by increasing the size of service providers, business suspension, and launch of the IPTV service were raised in 2008 in the ICT service market where Internet portals and content services were taking the lead. Moreover, the introduction of IPTV service led to a variety of converged services while also leading the service market.

ICT equipment production in 2008 increased 8.5% from 2007 and now reaches KRW 205.65 trillion or 71.4% of the total ICT production volume. After breaking the KRW 100 trillion-mark in 2000, it took 9 years for Korea to achieve the volume greater than KRW 200 trillion with the average growth rate of 10.1% per year. Despite the disadvantage in exports due to the global economic crisis, Korea's ICT export level continued to grow thanks to the increase in won/dollar exchange rate and global competitiveness.

Software and computer-related service production increased 15.8% on a yearly-average basis since 1999, reaching KRW 24.38 trillion in 2008 or 8.5% of the total population. Despite the worsened performance of SW companies and decrease in the amount of new orders received, all

Table 27 ICT Product and Service Sales (in KRW 100 million)

Type	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008P	CAGR(%) ('99~'08)	Increase Rate(%) ('07~'08)
ICT Service[1]	245,433	315,980	363,288	429,764	416,045	459,941	490,831	518,655	551,589	581,584	10.1	5.4
ICT Equipment[2]	867,938	1,099,611	1,087,207	1,234,901	1,375,465	1,628,515	1,664,772	1,793,737	1,894,564	2,056,464	10.1	8.5
SW and Computer-related Service[1]	64,986	107,316	147,268	182,228	184,396	186,588	200,827	219,680	230,568	243,795	15.8	5.7
Total	**1,178,357**	**1,522,907**	**1,597,763**	**1,846,893**	**1,975,907**	**2,275,044**	**2,356,430**	**2,532,072**	**2,676,721**	**2,881,843**	**10.4**	**7.7**

Note: 2008 data are estimates (may change according to the result of early 2010 report).
1) businesses with 1 or more employees; 2) businesses with 10 or more employees
Source: Ministry of Knowledge Economy, Korea Communications Commission, KEA, KAIT,"Annual Report on ICT Industry', 1999~2008.

of which were caused by the decrease in ICT investment by large enterprises that were concerned about the economic stagnation, it maintained a 5.7% growth rate from 2007 through expanding the demand in the area of maintenance and repair.

B. ICT Exports and Imports

ICT exports in 2008 increased 0.8% to USD 131.2 billion despite the global economic stagnation and the following decrease of unit-cost of major ICT products. On the contrary, the entire industries exports in 2008 increased 13.6% from the previous year, decreasing the share of ICT exports to 31.1% (from 35.0% in 2007). ICT imports in 2008 increased 5.4% to USD 73.5 billion and showed a gradual increase rate for four consecutive years since 2005. In spite of the 13.3 billion-dollar deficit in the trade balance of the entire industries, the ICT trade balance was USD 57.6 billion in surplus, which was the second largest surplus recorded to one (USD 60.37 billion) recorded in 2007.

Table 28 Entire Industries/ICT Industry Exports and Imports (in USD 100 million, %)

Type	Type	2004	2005	2006	2007	2008	CAGR('04~'08)
Entire Industries	Export	2,538.4 (31.0)	2,844.2 (12.0)	3,254.6 (14.4)	3,714.9 (14.1)	4,220.1 (13.6)	13.6
	Import	2,244.6 (25.5)	2,612.4 (16.4)	3,093.8 (18.4)	3,568.5 (15.3)	4,352.7 (22.0)	18.0
	Balance	294	232	161	146	-133	-
ICT Industry	Export	**997.1 (31.4)**	**1,082.5 (8.6)**	**1,191.1 (10.0)**	**1,301.0 (9.2)**	**1,311.6 (0.8)**	**7.1**
	Import	**542.3 (17.6)**	**592.7 (9.3)**	**646.8 (9.1)**	**697.3 (7.8)**	**735.2 (5.4)**	**7.9**
	Balance	**454.8**	**489.9**	**544.3**	**603.7**	**576.4**	**-**
Proportion	Export	39.3	38.1	36.6	35.0	31.1	-
	Import	24.2	22.7	20.9	19.5	16.9	-
	Balance	154.8	211.3	338.4	412.3	-	-

Note: The statistics on ICT industry export and import are based on the revised ICT items classificatory system of July 2008.

ICT Exports by Sector/Item

The export volume of mobile phones (including parts), taking the largest share in the entire ICT export market, grew -0.9% in 2006 and 14.6% in 2007. In 2008, the volume increased 19.1% and reached USD 33.44 billion due to the increased demand for premium phones in advanced countries in North America and EU as well as increased sales of mid/low-cost mobile phones in emerging markets. Reflected benefits from the slump of competitors such as Motorola and Sony Ericsson also contributed to such an increase in the volume.

Table 29 ICT Export Volume by Sector (in USD 100 million)

Type	2004	2005	2006	2007	2008	CAGR('04~'08)
ICT total	997.1 (31.4)	1,082.5 (8.6)	1,191.1 (10.0)	1,301.0 (9.2)	**1,311.6 (0.8)**	7.1
ICT Equipment	902.5 (32.9)	983.4 (9.0)	1,078.7 (9.7)	1,194.4 (10.7)	**1,195.5 (0.1)**	7.3
• Communications and Broadcasting Equipment	257.7 (40.3)	274.3 (6.5)	271.0 (-1.2)	306.7 (13.2)	**360.3 (17.5)**	8.7
· Communications Equipment	253.3 (41.2)	270.5 (6.8)	267.6 (-1.1)	305.5 (14.2)	**359.0 (17.5)**	9.1
Wired Communications Equipment	7.8 (20.7)	9.3 (18.9)	10.2 (9.9)	13.5 (31.6)	**13.9 (3.1)**	15.4
Wireless Communications Equipment	245.5 (42.0)	261.2 (6.4)	257.4 (-1.5)	292.0 (13.5)	**345.1 (18.2)**	8.9
- mobile phones	227.6 (42.3)	247.4 (8.7)	245.1 (-0.9)	280.9 (14.6)	**334.4 (19.1)**	10.1
· Broadcasting Equipment	4.4 (2.1)	3.8 (-14.1)	3.4 (-9.0)	1.2 (-65.0)	**1.3 (5.9)**	-26.7
• Computers and Peripherals	169.4 (11.2)	134.4 (-20.7)	118.6 (-11.8)	129.2 (9.0)	**98.4 (-23.9)**	-12.7
· Computers	7.7 (-50.1)	4.3 (-43.5)	3.8 (-13.5)	3.2 (-14.2)	**4.1 (25.9)**	-14.8
· Peripherals	93.8 (20.1)	88.1 (-6.1)	81.4 (-7.6)	102.7 (26.1)	**76.2 (-25.8)**	-5.1
· Computer Parts	62.3 (17.0)	37.8 (-39.4)	30.3 (-19.6)	20.5 (-32.4)	**15.6 (-23.8)**	-29.2
· Software and Contents	5.6 (-0.7)	4.2 (-25.4)	3.1 (-26.9)	2.8 (-9.2)	**2.5 (-9.7)**	-18.2
• Electronic Parts	360.5 (39.9)	461.5 (28.0)	577.6 (25.2)	654.7 (13.3)	**637.1 (-2.7)**	15.3
· Semiconductors	270.4 (37.8)	320.2 (18.4)	373.6 (16.7)	390.4 (4.5)	**327.9 (-16.0)**	4.9
- memory semiconductors	161.4 (49.4)	160.6 (-0.5)	171.1 (6.6)	223.9 (30.8)	**170.3 (-24.0)**	1.3
· Flat Panel Display	36.3 (173.0)	93.2 (157.2)	155.3 (66.6)	215.8 (38.9)	**257.0 (19.1)**	63.2
· Electronic Tubes	27.7 (1.1)	19.0 (-31.3)	13.6 (-28.6)	7.2 (-46.9)	**4.7 (-34.0)**	-35.6
· Passive Components	7.1 (9.2)	7.1 (0.7)	7.8 (9.7)	9.8 (25.6)	**10.9 (11.1)**	11.4
· Connective Components	17.6 (33.8)	20.3 (15.5)	25.2 (24.3)	28.5 (12.8)	**32.4 (13.9)**	16.5
• Video and Audio Equipment	109.3 (31.5)	103.9 (-4.9)	102.7 (-1.2)	93.6 (-8.9)	**89.9 (-3.9)**	-4.7
· Video Equipment	73.0 (40.6)	72.2 (-1.1)	76.5 (5.9)	68.7 (-10.2)	**65.6 (-4.5)**	-2.6
- TVs (including parts)	57.8 (61.1)	61.5 (6.3)	67.4 (9.6)	60.7 (-9.9)	**58.4 (-3.8)**	0.3
· Audio Equipment	23.8 (12.1)	21.6 (-9.1)	16.7 (-22.8)	13.1 (-21.6)	**12.9 (-1.6)**	-14.2
· Other Equipment	12.5 (24.9)	10.1 (-19.1)	9.5 (-5.8)	11.8 (24.2)	**11.5 (-2.8)**	-2.1
• Magneto-Optical Media	5.7 (149.6)	9.3 (61.8)	8.8 (-5.6)	10.2 (16.2)	**9.7 (-4.2)**	14.2
ICT Application / Broad IT	94.6 (18.3)	99.1 (4.8)	112.4 (13.4)	106.6 (-5.1)	**116.2 (9.0)**	5.3
• Medical, Precision and Optical Instruments	11.9 (30.6)	15.0 (26.1)	18.6 (23.7)	23.3 (25.1)	**26.7 (15.0)**	22.4
• Home Appliances	49.3 (9.4)	43.8 (-11.1)	43.8 (-0.0)	43.5 (-0.8)	**40.1 (-7.7)**	-5.0
- Refrigerators	14.1 (28.1)	16.3 (15.5)	17.3 (6.6)	18.0 (3.8)	**18.6 (3.6)**	7.2
• Office Supplies and Equipment	4.2 (44.4)	4.1 (-3.1)	4.2 (1.6)	4.8 (16.0)	**5.1 (5.6)**	4.8
• Electronic Equipment	29.1 (27.7)	36.2 (24.2)	45.8 (26.7)	35.1 (-23.4)	**44.2 (26.1)**	11.0
- primary batteries and storage batteries	12.1 (6.2)	13.7 (13.5)	16.4 (19.2)	23.2 (41.9)	**31.4 (35.2)**	26.9

Note: The data is adapted by the Korea Institute for Information Technology Advancement from the HS Code of Korea Customs and Trade Development Institute

Panel display exports recorded the highest amount ever thanks to the high demand for flat-screen TVs such as full HD TVs and panels for large monitors continued and reached USD 25.7 billion, a 19.1% increase from the previous year. In addition, the export of ICT application devices such as medical equipment, refrigerators, office supplies and batteries also maintained a gradual increase. However, due to the continued decrease in price from oversupply of memory semiconductors, the level of semiconductor exports decreased 16.0% from 2007 and reached USD 32.8 billion, which was the first negative-growth rate in 7 years since 2001.

ICT exports in 2009 are expected to experience slower growth or even a slight decrease because of the economic conditions of other countries including the United States. However, semiconductor exports are expected to face negative growth until later in 2009 due to the lack of demand in replacing computers despite the reduced production and accelerated reform of the industry structure.

Top Countries in Exports and Imports

The top five countries in terms of ICT exports from Korea in 2008 were China (including Hong Kong), US, Japan, Mexico and Taiwan. Their share in total export volume was 61.5% in 2004 and reached 64.9% in 2008, maintaining a share around 65%.

Table 30 Top Five Countries in ICT Exports (in USD 100 million, %)

Type		2004	2005	2006	2007	2008	CAGR('04~'08)
1	China (including Hong Kong)	278.6	361.0	406.0	466.3	**488.5**	15.1
	(Increase Rate)	39.7	29.6	12.5	14.9	**4.8**	
	(Share)	27.9	33.3	34.1	35.8	**37.2**	
2	US	181.8	145.8	139.8	153.7	**169.6**	-1.7
	(Increase Rate)	25.7	-19.8	-4.1	10.0	**10.3**	
	(Share)	18.2	13.5	11.7	11.8	**12.9**	
3	Japan	76.1	79.6	97.2	93.7	**79.8**	1.2
	(Increase Rate)	19.4	4.5	22.1	-3.6	**-14.9**	
	(Share)	7.6	7.4	8.2	7.2	**6.1**	
4	Mexico	18.4	23.2	41.7	51.6	**60.4**	34.6
	(Increase Rate)	21.1	26.0	80.2	23.7	**17.0**	
	(Share)	1.8	2.1	3.5	4.0	**4.6**	
5	Taiwan	58.2	62.1	70.7	69.3	**53.0**	-2.3
	(Increase Rate)	32.6	6.8	13.7	-2.0	**-23.5**	
	(Share)	5.8	5.7	5.9	5.3	**4.0**	
For Reference	EU	181.9	201.0	201.4	223.5	**218.0**	4.6
	(Increase Rate)	46.2	10.5	0.2	10.9	**-2.4**	
	(Share)	18.2	18.6	16.9	17.2	**16.6**	

The top five countries in terms of ICT imports into Korea in 2008 were China (including Hong Kong), Japan, US, Taiwan and Singapore. Their share in total import volume increased 0.3% from 80.8% in 2004 to 81.2% in 2008, showing a much more concentration in imports than in exports.

Table 31 Top Five Countries in ICT Imports (in USD 100 million, %)

Type		2004	2005	2006	2007	2008	CAGR('04~'08)
1	China (including Hong Kong)	106.7	138.0	177.8	207.0	**240.9**	22.6
	(Increase Rate)	40.2	29.3	28.8	16.4	**16.4**	
	(Share)	19.7	23.3	27.5	29.7	**32.8**	
2	Japan	148.8	141.1	133.9	140.3	**136.1**	-2.2
	(Increase Rate)	14.7	-5.2	-5.1	4.8	**-3.0**	
	(Share)	27.4	23.8	20.7	20.1	**18.5**	
3	US	96.3	101.6	103.9	93.7	**84.1**	-3.3
	(Increase Rate)	9.2	5.4	2.3	-9.8	**-10.2**	
	(Share)	17.8	17.1	16.1	13.4	**11.4**	
4	Taiwan	53.7	57.1	67.6	70.3	**72.0**	7.6
	(Increase Rate)	32.6	6.5	18.3	4.0	**2.4**	
	(Share)	9.9	9.6	10.5	10.1	**9.8**	
5	Singapore	32.9	40.1	43.6	52.8	**63.7**	17.9
	(Increase Rate)	6.8	21.9	8.5	21.3	**20.7**	
	(Share)	6.1	6.8	6.7	7.6	**8.7**	
For Reference	EU	44.0	48.9	50.6	56.3	**60.6**	8.4
	(Increase Rate)	17.1	11.2	3.6	11.2	**7.6**	
	(Share)	8.1	8.2	7.8	8.1	**8.2**	

8. INFORMATION SECURITY

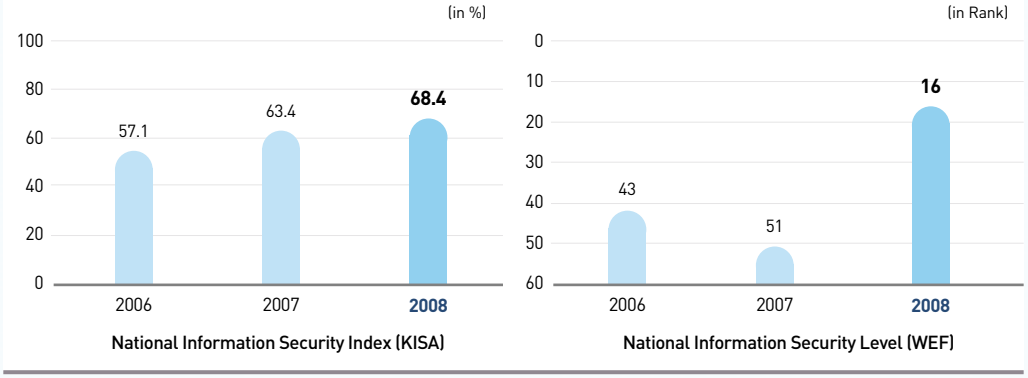
A. Information Security Status

Level of National Information Security

Korea Internet & Security Agency has been involved in researching and developing the 'National Information Security Index' since 2004 for evaluating the level of Korea's information security from a more objective point of view.

The Information Security Index of 2008 was 68.4 points, a 5 point increase from 2007, whereas the Adverse Effect Index of 2008 increased 0.24 points from 2007 to 8.76 points due to the increase in hacking, virus attacks and personal information infringement, signifying the adverse effects have become more serious. Korea was also placed in the 16th ranking by the World Economic Forum (WEF) in terms of the global information security level, climing up 35 notches from the 51st ranking in 2007.

Figure 33 Information Security Level of Korea

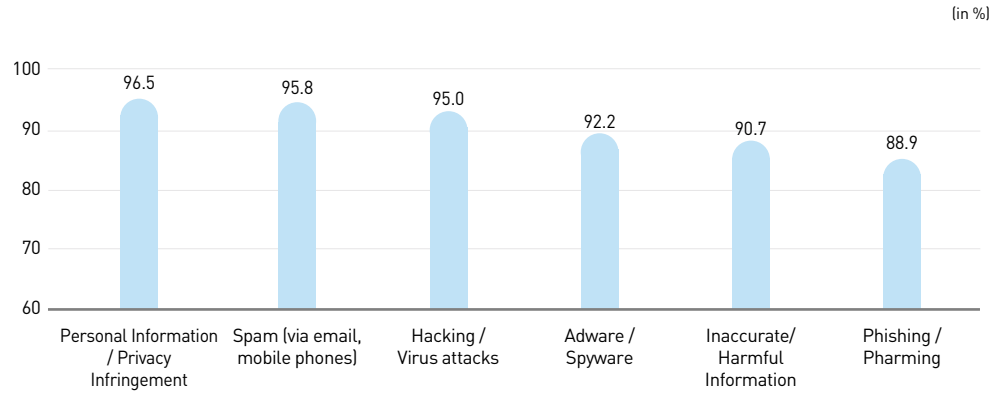


Information Security Status in the Private Sector

According to KISA's Survey on Private Sector Information Security Status in 2008, it showed that regarding the awareness of the importance of information security, 98.2% (1.7%p increased) of the Internet users answered they are aware of the importance and 59.9% (4.5% point increase) answered they think it is very important.

Also in terms of the adverse effects of informatization, 94.8% said they are seriously aware of the adverse effects. Among them, 96.5% answered that they especially find the infringement of personal information or privacy very serious, showing that it was the most concerned adverse effect.

Figure 34 Awareness of Severity of Adverse Effects from Informatization



Source: Korea Internet & Security Agency, '2008 Status Survey on Information Security', December 2008.

In terms of experiencing the adverse effects of the Internet, experiences of personal information/privacy infringement (16.4%→29.6%), the following damage experiences (average 4.66 cases→4.73 cases) and experiences of hacking damages (15.4%→18.8%) increased, signifying that these issues need to be addressed more thoroughly.

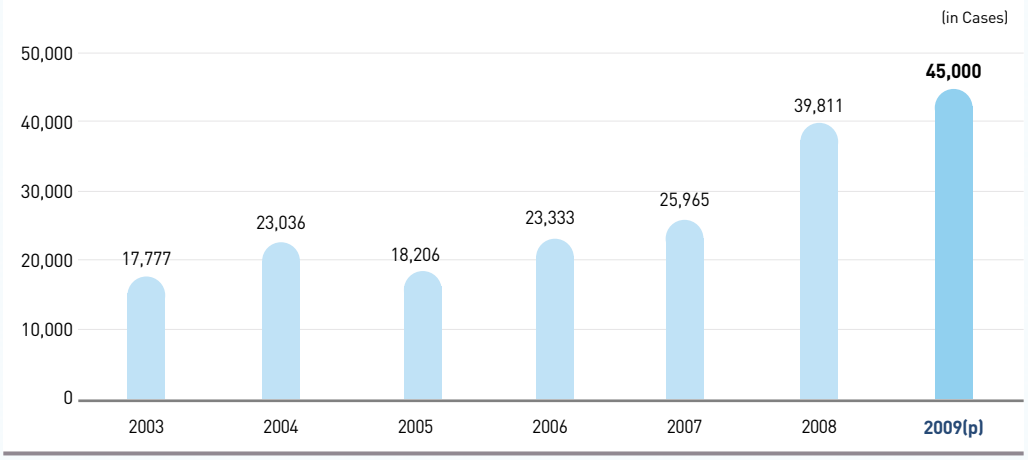
As for activities of businesses regarding information security, it seemed to have improved overall, with the proportion of businesses that invested in information security having increased (49.2% →55.5%) while the share without any activities for information security decreased (61.9%→61.1%). The share of businesses that have documented guidelines in case of personal information infringement increased (29.2%→32.8%) and their insurance purchase rate in case of cyber security incidents increased as well (3.5%→4.3%).

On the otherhand, in terms of the experiences of adverse effects, the rate of economic damage occurrence caused by the Internet incidents increased to a substantial level (sales loss 1.9%→ 7.3%; decreased work efficiency 12.1%→23.6%; damage recovery 10.5%→26.0%; data loss 2.6%→10.7%).

Status of Personal Information Protection

The number of reports received by KISA's Personal Information Infringement Report Center and the Personal Information Dispute Mediation Committee in 2008 was 39,811, a 53% increase from the 25,971 received in 2007.

Figure 35 Reports on Personal Information Infringement



Source: Personal Information Infringement Report Center of Korea Internet & Security Agency.

As the types of reports and consultations received by the Agency and the Committee, the cases of 'infringing personal information not covered by the law' accounted for 60.7% (24,171 cases) and 'damaging/infringing/stealing other persons' information such as the resident ID' took 25.5% (10,148 cases), signifying that these two types experienced the most damages, accounting for 86.2% of the total damages.

B. Information Security Industry and Technology Development

Status of Information Security Industry

The domestic information security market in 2008 grew approximately 8.0% from the previous year and reached KRW 772.4 billion. It showed a trend in which the market is reorganized around the top-level businesses with increasing cases of market entry targeting a niche market.

The breakdown of the information security market in Korea in 2008 shows that the information security products for system/network increased by 6.8% from 2007 to KRW 644.2 billion and the information security services increased relatively more by 14.5% to KRW 128.2 billion. The share of information security products for system and network was 83.4% and the services 16.6%.

Table 32 Sales in Information Security Industry (in KRW 1 million)

Type	2007	2008	Increased Rate(%)	Share in sales (%)
Information Security Products for System/Network	602,949	644,174	6.8	83.4
Information Security Services	111,995	128,238	14.5	16.6
Total	**714,944**	**772,412**	**8.0**	**100.0**

Information Security Technology Development

The amount of investment by domestic information security businesses into technology development in 2008 was KRW 85.2 billion and the average amount of investment per business was KRW 990 million, which was a 24% increase from KRW 800 million in 2007. The investment for technology development in 2008 accounted for approximately 17.7% of the total sales.

After carrying out an evaluation on the research level of domestic information security businesses for each core technology, it was found out that the businesses evaluated their research level as relatively low with the fundamental research level at 78.5%, application research level at 80.1% and commercialization research level at 80.9%, respectively.

A self-evaluation on the level of technological development competency in information security businesses also showed a relatively weak level with their competency in product planning at 75.7%, product design at 81.8%, product commercialization and services at 81.5% and product enhancement at 82.6%, respectively.

Table 33 Domestic Information Security Businesses' Investment in Technology Development (in KRW 1 million)

Year	No. of Businesses	Total Amount	Average Amount per Business	Share in Sales
2007	87	69,440	798.2	18.8%
2008	86	85,159	990.2	17.7%
2009 (planned)	**85**	**102,935**	**1,211.0**	**18.2%**

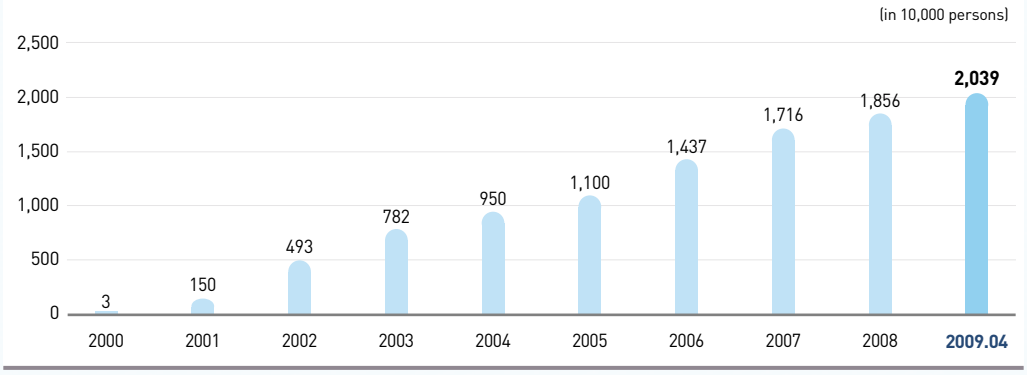
Use of Authorized Certificates

Authorized certificates provide better functions in protecting personal information and non-repudiation in e-commerce transactions than the traditional identification method in which IDs and passwords are used.

In this regard, it was required by law to use authorized certificatesin Internet banking (September 2002) and online stock trading (March 2003). Government policies were also promoted to facilitate the use of authorized certificates, such as recommending credit card companies to use the certificates in payment during e-commerce transactions.

The authorized certificates were first used mainly in the electronic finance sector such as Internet banking and online stock trading. However with the implementation of government policies, their use is expanding to all areas of e-Commerce transactions including 'apartment application', 'electronic civil service application', 'parent service on finding out more about their children' of the Ministry of Education, Science and Technology, 'tax adjustment and income tax return' and 'e-procurement'. The number of authorized certificate users as of April 2009 was 20.39 million people, which was 83% of the 24.46 million persons who were economically active at that time.

Figure 36 Number of Authorized Certificate Users



Source: Ministry of Public Administration and Security, May 2009.

Annex : Infomatization Key Statistics

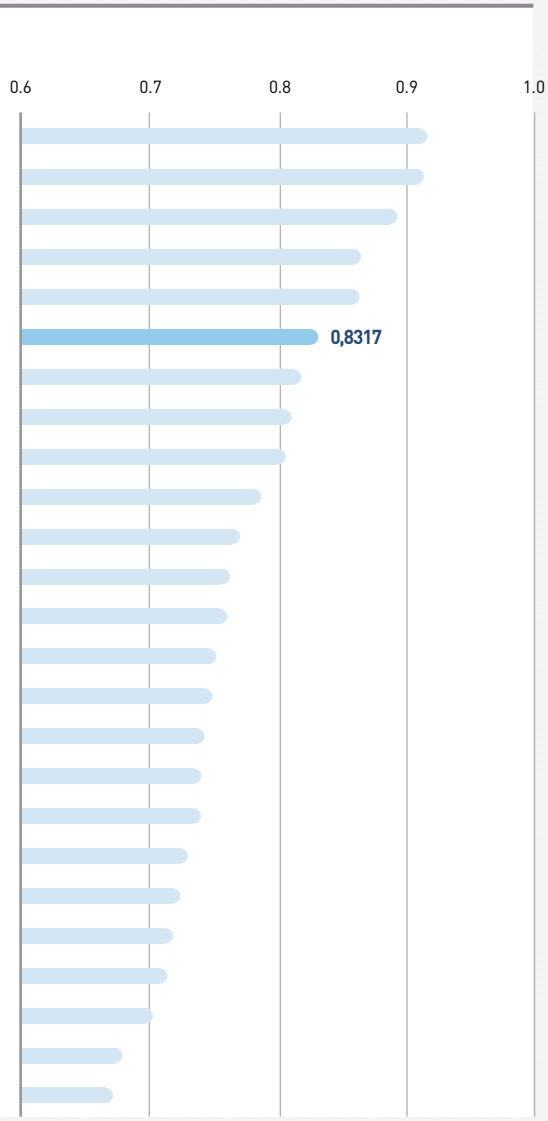
Global Data

Domestic Data

GLOBAL DATA_ Global Indices on Informatization

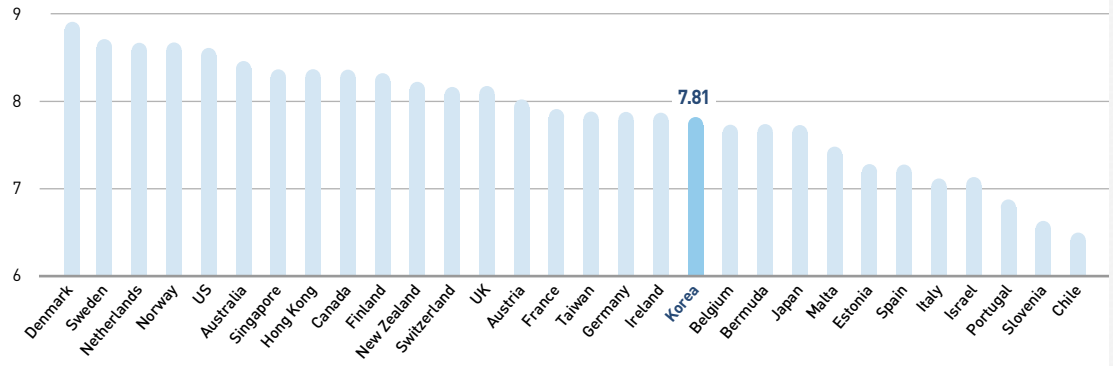
1 e-Government Readiness Index Rankings

Country	General Index (2008)	Rank (2008)	Component Index (2008)		
			Web Measure Index	Infrastructure Index	Human Capital Index
Sweden	0.9157	1	0.9833	0.7842	0.9776
Denmark	0.9134	2	1.0000	0.7441	0.9933
Norway	0.8921	3	0.9465	0.7375	0.9908
US	0.8644	4	0.9532	0.6663	0.9711
Netherlands	0.8631	5	0.7893	0.8140	0.9881
Korea	**0.8317**	**6**	**0.8227**	**0.6886**	**0.9841**
Canada	0.8172	7	0.7659	0.6966	0.9908
Australia	0.8108	8	0.7525	0.6884	0.9933
France	0.8038	9	0.8294	0.5992	0.9818
UK	0.7872	10	0.6923	0.7022	0.9699
Japan	0.7703	11	0.7425	0.6232	0.9462
Switzerland	0.7626	12	0.5585	0.7900	0.9455
Estonia	0.7600	13	0.7124	0.5958	0.9734
Luxembourg	0.7512	14	0.6087	0.7336	0.9157
Finland	0.7488	15	0.6321	0.6246	0.9933
Austria	0.7428	16	0.6656	0.5989	0.9664
Israel	0.7393	17	0.6656	0.6085	0.9461
New Zealand	0.7392	18	0.6421	0.5851	0.9933
Ireland	0.7293	19	0.6756	0.5217	0.9932
Spain	0.7228	20	0.6990	0.4834	0.9868
Iceland	0.7176	21	0.4615	0.7210	0.9779
Germany	0.7136	22	0.5753	0.6164	0.9532
Singapore	0.7009	23	0.6120	0.5853	0.9080
Belgium	0.6779	24	0.5385	0.5222	0.9771
Czech Republic	0.6696	25	0.6455	0.4279	0.9362



Source: UN, 'UN E-government Survey 2008', January 2008.

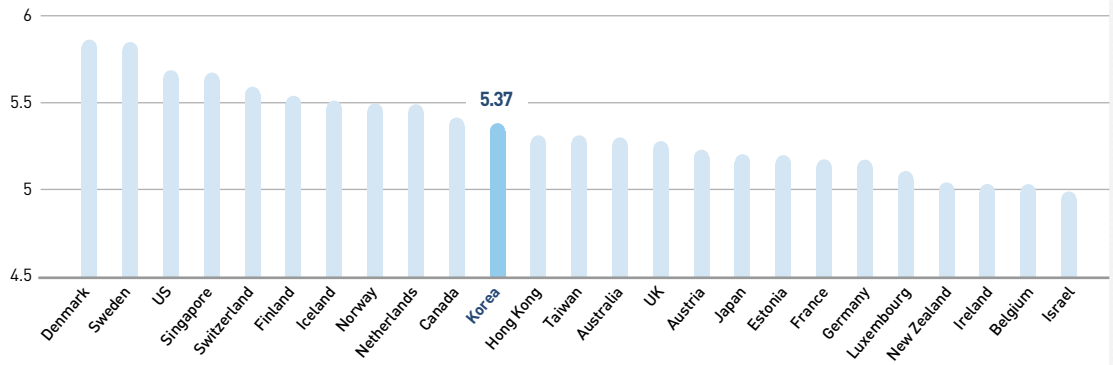
2 e-Readiness Index Rankings



Country	Rank			Overall Scores (2009)	Component Index (2009)					
	2009	2008	Note		Connectivity & Technology Infrastructure (20%)	Business Environment (15%)	Social & Cultural Environment (15%)	Legal Environment (10%)	Government Policy and Vision (15%)	Consumer & Business Adoption (25%)
Denmark	1	5	4(▲)	8.87	9.50	8.03	8.53	8.10	9.65	8.90
Sweden	2	3	1(▲)	8.67	9.10	7.85	8.63	8.50	9.15	8.63
Netherlands	3	7	4(▲)	8.64	9.50	7.80	8.23	8.70	8.50	8.75
Norway	4	11	7(▲)	8.62	9.10	7.83	8.13	8.05	8.75	9.15
US	5	1	4(▽)	8.60	8.25	7,65	9.03	8.70	9.55	8.60
Australia	6	4	2(▽)	8.45	8.60	7.96	8.67	8.50	8.70	8.33
Singapore	7	6	1(▽)	8.35	8.15	8.15	7.57	8.70	9.18	8.48
Hong Kong	8	2	6(▽)	8.33	8.20	8.20	7.47	9.00	9.18	8.28
Canada	9	12	3(▲)	8.33	8.45	8.16	8.03	8.25	8.65	8.35
Finland	10	13	3(▲)	8.30	9.10	8.17	8.40	8.25	7.45	8.23
New Zealand	11	16	5(▲)	8.21	7.70	7.73	8.80	8.45	8.50	8.29
Switzerland	12	9	3(▽)	8.15	9.35	8.06	8.10	7.93	7.45	7.78
UK	13	8	5(▽)	8.14	8.85	7.03	7.93	8.10	8.00	8.48
Austria	14	10	4(▽)	8.02	8.00	7.28	7.93	8.70	8.05	8.23
France	15	22	7(▲)	7.89	7.75	7.35	7.83	7.85	8.80	7.85
Taiwan	16	19	3(▲)	7.86	7.70	7.53	8.10	7.38	8.55	7.84
Germany	17	14	3(▽)	7.85	8.40	7.66	8.13	8.05	6.50	8.08
Ireland	18	21	3(▲)	7.84	8.30	7.62	7.73	8.00	6.75	8.25
Korea	**19**	**15**	**4(▽)**	**7.81**	**8.05**	**6.99**	**8.57**	**7.28**	**9.20**	**7.05**
Belgium	20	20	(=)	7.71	8.10	7.32	7.50	8.45	7.25	7.75
Bermuda	21	17	4(▽)	7.71	8.60	8.04	6.63	8.35	8.35	6.80
Japan	22	18	4(▽)	7.69	7.15	6.82	7.90	7.55	8.60	8.04
Malta	23	23	(=)	7.46	6.60	7.17	7.10	8.20	8.15	7.83
Estonia	24	28	4(▲)	7.28	7.35	7.07	6.87	8.40	8.20	6.60
Spain	25	26	1(▲)	7.24	6.90	7.07	7.77	8.00	7.05	7.13
Italy	26	25	1(▽)	7.09	7.10	6.24	7.77	8.70	6.35	7.00
Israel	27	24	3(▽)	7.09	7.40	7.18	7.50	7.15	6.90	6.63
Portugal	28	27	1(▽)	6.86	6.10	6.68	6.97	8.00	6.55	7.23
Slovenia	29	29	(=)	6.63	6.25	6.86	6.90	7.15	7.00	6.23
Chile	30	32	2(▲)	6.49	4.95	7.71	6.83	7.40	6.45	6.43

Source: EIU, 'E-readiness rankings 2009', June 2009.

3 Network Readiness Index Rankings

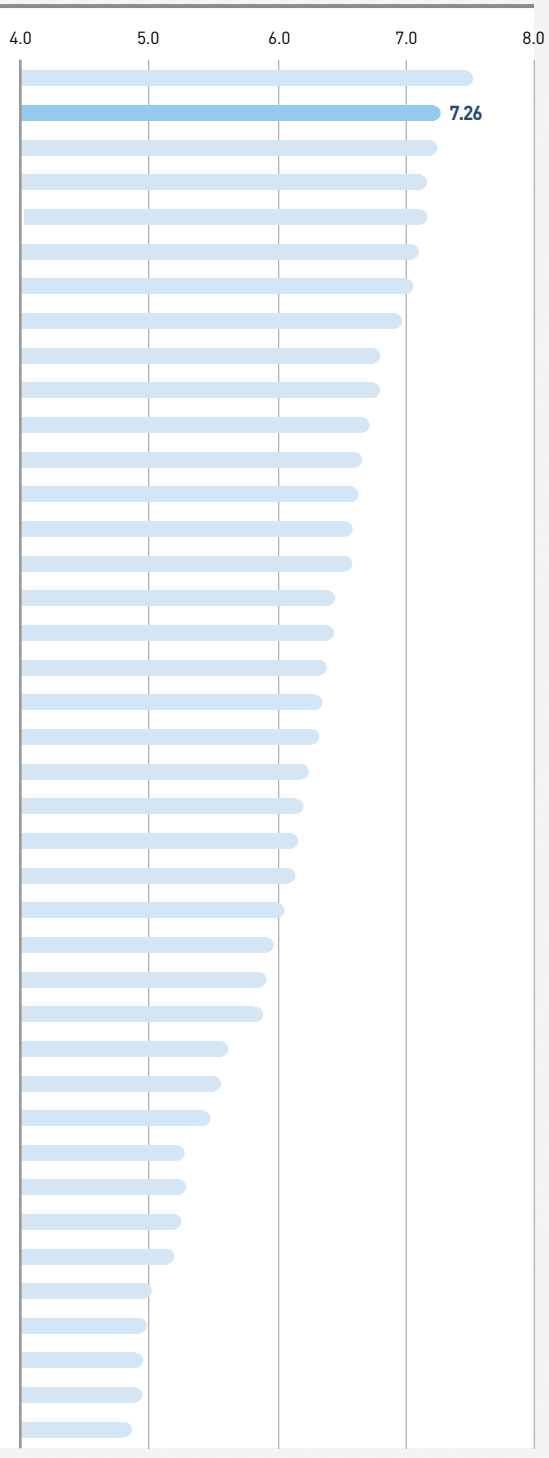


Country	Rank			NRI Index (2008~2009)	Component Index											
					Environment				Readiness				Usage			
	2008~2009	2007~2008	Note			Market	Political/Regula-tory	Infra-struc-ture		Individual	Busi-ness	Govern-ment		Individual	Busi-ness	Govern-ment
Denmark	1	1	(=)	5.85	5.51	5.14	6.03	5.35	5.97	6.32	5.72	5.85	6.07	5.96	6.15	6.09
Sweden	2	2	(=)	5.84	5.59	5.11	5.92	5.73	5.95	6.26	5.86	5.72	5.98	6.06	6.15	5.72
US	3	4	1(▲)	5.68	5.59	5.59	5.45	5.72	5.81	6.14	5.83	5.46	5.63	5.05	6.06	5.79
Singapore	4	5	1(▲)	5.67	5.34	5.58	6.30	4.13	6.01	6.50	5.62	5.92	5.67	5.21	5.77	6.02
Switzerland	5	3	2(▽)	5.58	5.44	5.43	5.85	5.05	5.83	6.43	6.00	5.07	5.48	5.29	6.11	5.02
Finland	6	6	(=)	5.53	5.51	5.35	5.97	5.20	5.90	6.54	5.78	5.38	5.18	4.59	6.04	4.92
Iceland	7	8	1(▲)	5.50	5.64	5.10	5.80	6.02	5.62	6.30	5.27	5.28	5.24	4.94	5.91	4.86
Norway	8	10	2(▲)	5.49	5.39	4.90	5.87	5.40	5.64	6.09	5.33	5.49	5.45	5.18	5.85	5.33
Netherlands	9	7	2(▽)	5.48	5.20	5.15	5.78	4.68	5.58	6.11	5.63	4.98	5.65	6.39	5.74	4.82
Canada	10	13	3(▲)	5.41	5.39	5.07	5.52	5.57	5.53	6.26	5.31	5.03	5.31	4.93	5.77	5.23
Korea	**11**	**9**	**2(▽)**	**5.37**	**5.02**	**5.08**	**5.20**	**4.79**	**5.77**	**6.22**	**5.40**	**5.70**	**5.32**	**4.31**	**5.70**	**5.95**
Hong Kong	12	11	1(▽)	5.30	5.03	5.61	5.79	3.68	5.46	6.27	5.09	5.02	5.42	5.17	5.46	5.64
Taiwan	13	17	4(▲)	5.30	4.98	5.43	4.54	4.96	5.61	6.22	5.49	5.14	5.30	4.60	5.74	5.55
Australia	14	14	(=)	5.29	5.22	4.79	5.81	5.06	5.52	6.18	5.24	5.14	5.14	4.47	5.40	5.55
UK	15	12	3(▽)	5.27	5.12	5.09	5.45	4.82	5.43	6.02	5.38	4.88	5.28	5.45	5.65	4.73
Austria	16	15	1(▽)	5.22	4.99	4.77	5.93	4.28	5.58	6.24	5.55	4.94	5.11	4.26	5.87	5.18
Japan	17	19	2(▲)	5.19	4.97	5.10	5.52	4.29	5.47	5.90	5.60	4.90	5.12	4.85	6.09	4.43
Estonia	18	20	2(▲)	5.19	4.71	4.85	5.26	4.01	5.48	6.06	4.94	5.44	5.37	4.83	5.29	6.00
France	19	21	2(▲)	5.17	4.91	4.72	5.53	4.48	5.55	6.11	5.51	5.03	5.06	4.13	5.65	5.40
Germany	20	16	4(▽)	5.17	5.09	4.88	5.83	4.56	5.48	5.97	5.78	4.70	4.93	4.51	6.04	4.25
Luxembourg	21	24	3(▲)	5.10	4.82	5.02	5.59	3.84	5.26	5.95	4.78	5.05	5.21	5.69	5.29	4.64
New Zealand	22	22	(=)	5.04	5.07	4.59	5.58	5.02	5.20	6.04	4.98	4.59	4.86	4.25	5.23	5.09
Ireland	23	23	(=)	5.03	5.09	5.16	5.53	4.56	5.44	6.04	5.63	4.66	4.56	3.95	5.14	4.59
Belgium	24	25	1(▲)	5.02	4.79	4.69	5.24	4.44	5.51	6.32	5.67	4.55	4.75	4.37	5.55	4.34
Israel	25	18	7(▽)	4.98	4.75	5.00	4.74	4.51	5.45	5.80	5.42	5.11	4.74	3.67	5.78	4.75

Source: WEF, 'Network Readiness Index', March 2009.

4 ICT Development Index

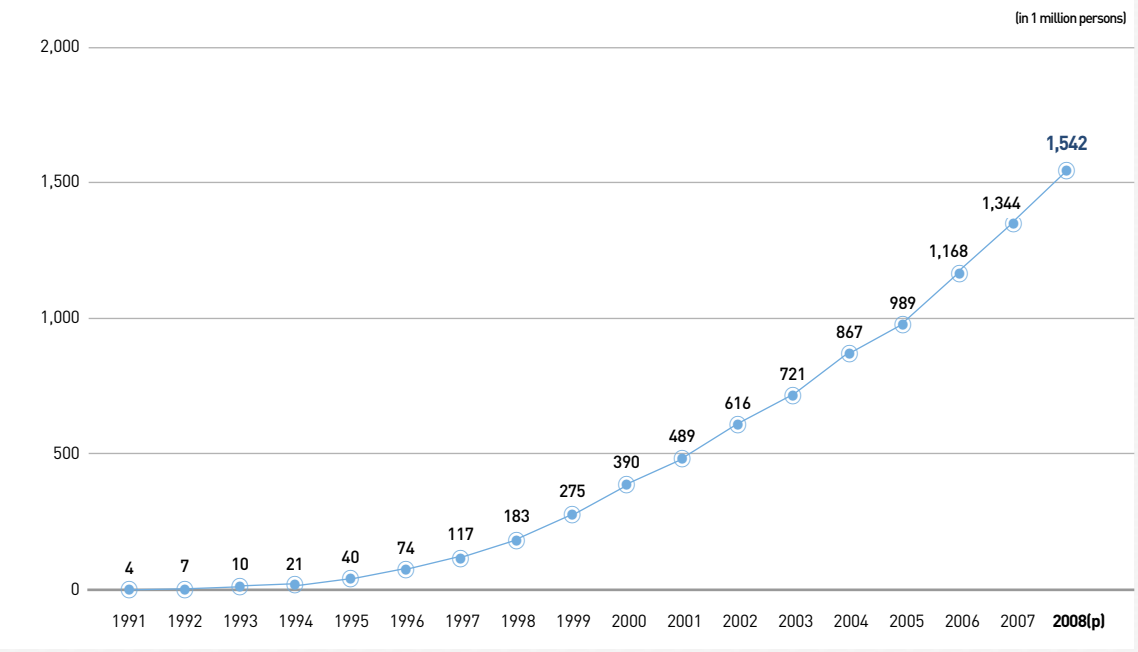
Country	Rank 2007	IDI 2007
Sweden	1	7.50
Korea	**2**	**7.26**
Denmark	3	7.22
Netherlands	4	7.14
Iceland	5	7.14
Norway	6	7.09
Luxembourg	7	7.03
Switzerland	8	6.94
Finland	9	6.79
UK	10	6.78
Hong Kong	11	6.70
Japan	12	6.64
Germany	13	6.61
Australia	14	6.58
Singapore	15	6.57
New Zealand	16	6.44
US	17	6.44
Ireland	18	6.37
Canada	19	6.34
Austria	20	6.32
Macao	21	6.25
Italy	22	6.18
France	23	6.16
Belgium	24	6.14
Taiwan	25	6.04
Estonia	26	5.97
Spain	27	5.91
Slovenia	28	5.88
Israel	29	5.60
Malta	30	5.54
Portugal	31	5.47
UAE	32	5.29
Lithuania	33	5.29
Greece	34	5.25
Hungary	35	5.19
Latvia	36	5.01
Cyprus	37	4.97
Slovenia	38	4.95
Poland	39	4.95
Czech Republic	40	4.88



Source: ITU, 'Measuring the Information Society - The ICT Development Index', March 2009.

GLOBAL DATA_ Internet

1 Worldwide Internet Users

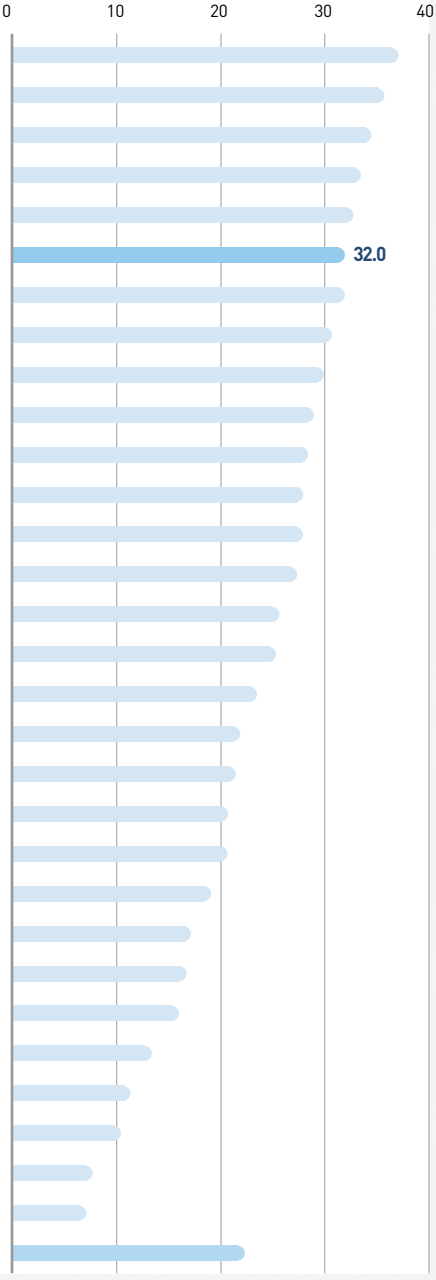


Source: ITU, 2009.

2 Broadband Subscribers in OECD Countries (as of December 2008)

(no. of subscribers per 100 inhabitants)

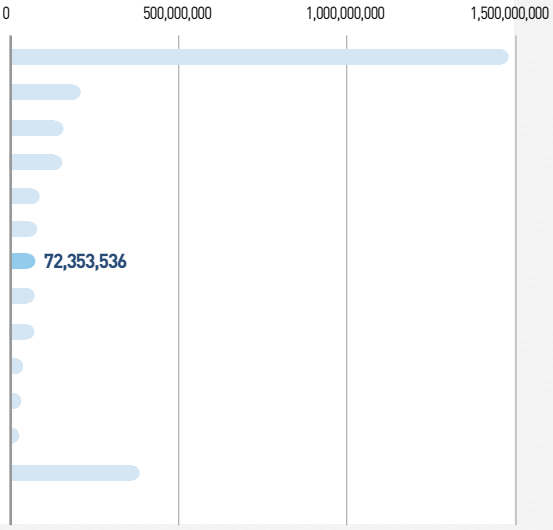
Rank	Country	number of Subscribers per 100 Inhabitants					Total subscribers
		DSL	Cable	Fiber/ LAN	Other	Total	
1	Denmark	22.6	9.9	3.6	1.1	37.2	2,021,404
2	Netherlands	21.8	13.4	0.6	0.0	35.8	5,855,000
3	Norway	23.8	6.9	3.1	0.7	34.5	1,607,750
4	Switzerland	23.2	9.7	0.4	0.3	33.5	2,533,643
5	Iceland	31.6	0.0	0.6	0.6	32.8	99,883
6	**Korea**	**7.7**	**10.5**	**13.8**	**0.0**	**32.0**	**15,474,931**
7	Sweden	19.1	6.2	6.5	0.2	32.0	2,905,000
8	Finland	25.9	4.1	0.0	0.7	30.7	1,616,900
9	Luxembourg	25.6	4.2	0.1	0.0	30.0	141,584
10	Canada	13.0	15.6	0.0	0.4	29.0	9,577,648
11	United Kingdom	22.4	6.1	0.0	0.1	28.5	17,275,660
12	Belgium	16.4	11.4	0.0	0.3	28.1	2,962,450
13	France	26.6	1.4	0.1	0.0	28.0	17,725,000
14	Germany	25.4	1.9	0.0	0.0	27.4	22,532,000
15	United States	10.3	13.7	1.0	0.9	25.8	77,437,868
16	Australia	19.9	4.3	0.0	1.2	25.4	5,368,000
17	Japan	9.1	3.2	11.3	0.0	23.6	30,107,327
18	New Zealand	19.5	1.3	0.0	1.0	21.9	914,961
19	Austria	13.9	7.2	0.1	0.5	21.6	1,792,408
20	Spain	16.5	4.0	0.1	0.2	20.8	9,156,969
21	Ireland	15.1	2.4	0.1	2.9	20.6	896,346
22	Italy	18.5	0.0	0.5	0.1	19.2	11,283,000
23	Czech Republic	6.8	3.7	0.7	6.0	17.2	1,769,684
24	Hungary	7.9	7.6	0.5	0.9	16.8	1,696,714
25	Portugal	9.4	6.3	0.0	0.2	16.0	1,692,306
26	Greece	13.5	0.0	0.0	0.0	13.5	1,506,614
27	Slovak Republic	6.6	1.2	2.1	1.6	11.5	618,871
28	Poland	7.2	3.1	0.0	0.1	10.5	3,995,458
29	Turkey	7.7	0.1	0.0	0.0	7.8	5,736,619
30	Mexico	5.1	1.9	0.0	0.2	7.2	7,604,629
	OECD	13.3	6.4	2.2	0.4	22.4	263,906,627



Source : OECD, 'OECD Broadband Statistics', May 2009.

3 IPv4 Addresses (as of June 2009)

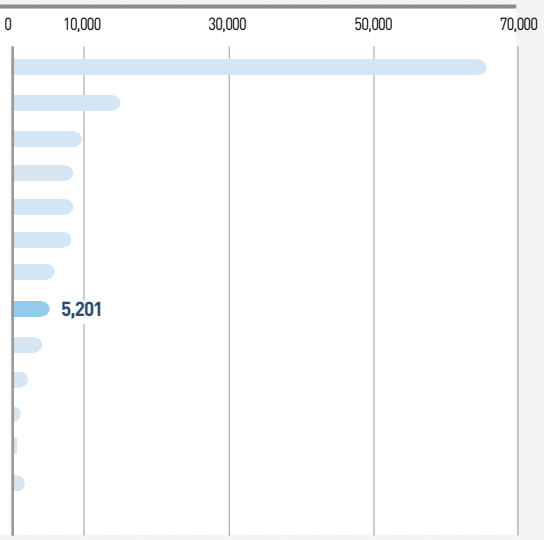
Rank	Country	No. of IPv4 Addresses
1	US	1,480,703,232
2	China	206,341,888
3	Japan	155,468,544
4	EU	150,450,307
5	Germany	85,884,824
6	Canada	76,557,312
7	**Korea**	**72,353,536**
8	UK	71,084,632
9	France	68,288,192
10	Italy	33,116,608
11	Brazil	31,852,032
12	Russia	25,849,032
13	Others	380,536,480
Total		2,876,132,955



Source: Korea Internet & Security Agency, September 2009.

4 IPv6 Addresses (as of June 2009)

Rank	Country	No. of IPv6 Addresses (in /32)
1	Brazil	65,728
2	US	14,916
3	Germany	9,759
4	Japan	8,334
5	France	8,328
6	Australia	8,247
7	EU	6,158
8	**Korea**	**5,201**
9	Italy	4,163
10	Poland	2,110
11	UK	1,218
12	Netherlands	626
13	Others	1,661
Total		138,759

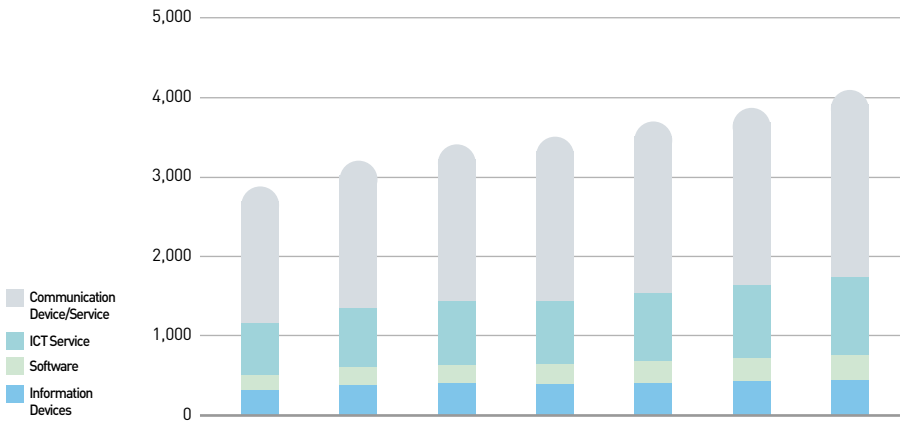


Source: Korea Internet & Security Agency, September 2009.

GLOBAL DATA_ ICT Industry

1 ICT Market Volume and Forecast

(in USD billion, %)

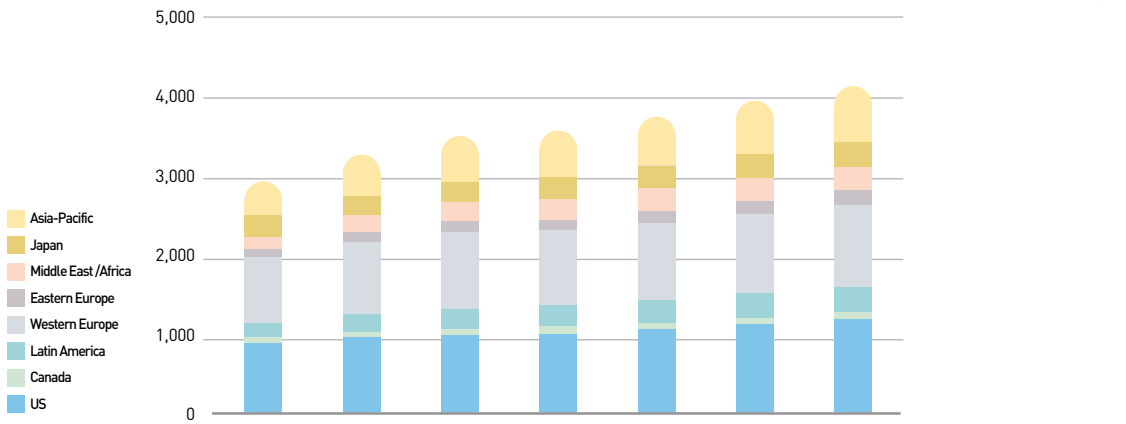


Type		2006	2007	2008	2009	2010	2011	2012	Yearly Average Growth Rate
Information Devices	Volume	349	384	401	381	396	413	429	2
	Growth Rate	-	10	4	-5	4	4	4	
Software	Volume	171	201	229	244	266	290	315	9
	Growth Rate	-	17	14	7	9	9	9	
ICT Service	Volume	679	752	820	827	873	929	991	6
	Growth Rate	-	11	9	1	6	6	7	
Communication Device/Service	Volume	1,665	1,853	1,980	2,052	2,146	2,249	2,351	5
	Growth Rate	-	11	7	4	5	5	5	
Total	Volume	**2,865**	**3,190**	**3,430**	**3,505**	**3,680**	**3,881**	**4,086**	**5**
	Growth Rate	**-**	**11**	**8**	**2**	**5**	**5**	**5**	

Source: Gartner, 'Dataquest Market Databook', December 2008.

2 ICT Market Volume and Forecast by Region

(in USD billion, %)

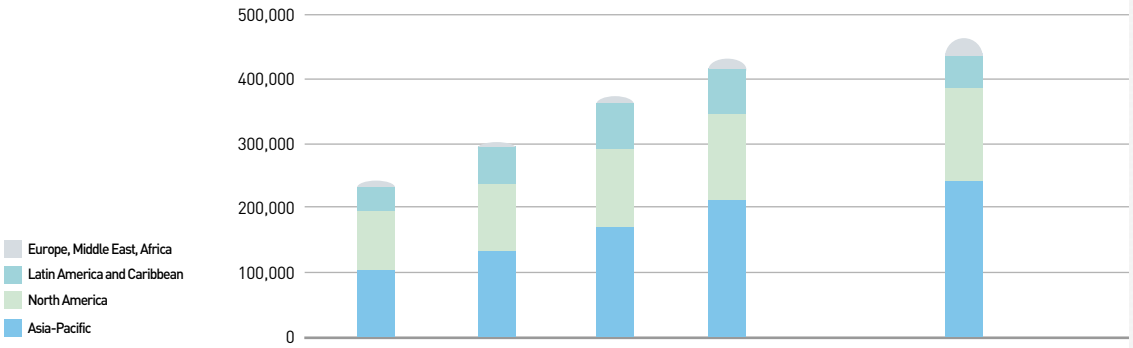


Region		2006	2007	2008	2009	2010	2011	2012	Yearly Average Growth Rate
US	Volume	881	941	974	988	1,040	1,107	1,174	5
	Growth Rate	-	7	3	1	5	6	6	
Canada	Volume	67	74	79	79	83	87	91	4
	Growth Rate	-	11	7	0	4	5	5	
Latin America	Volume	190	223	253	266	281	295	309	7
	Growth Rate	-	17	13	5	6	5	5	
Europe Western	Volume	789	879	936	921	943	974	1,007	3
	Growth Rate	-	11	7	-2	2	3	3	
Eastern Europe	Volume	116	143	161	166	175	184	193	6
	Growth Rate	-	23	13	3	5	5	5	
Middle East / Africa	Volume	149	180	209	231	252	269	287	10
	Growth Rate	-	21	16	10	9	7	6	
Japan	Volume	266	270	291	290	296	300	303	2
	Growth Rate	-	1	8	0	2	1	1	
Asia-Pacific	Volume	406	481	528	564	611	666	721	8
	Growth Rate	-	19	10	7	8	9	8	

Source: Gartner, 'Dataquest Market Databook', December 2008.

3 CDMA Subscribers

(in 1,000 persons, %)



Region		2004	2005	2006	2007	2008		
Asia-Pacific	Subscribers	102,000	130,900	170,025	210,800	239,300		
	Share	42.5	43.4	45.5	48.9	51.5		
North America	Subscribers	92,100	107,500	123,380	137,500	148,300		
	Share	38.3	35.6	33.0	31.9	31.9		
Latin America and Caribbean	Subscribers	42,200	58,300	71,600	69,200	48,800		
	Share	17.6	19.3	19.2	16.0	10.5		
Europe, Middle East, Africa	Subscribers	3,900	5,200	8,498	13,600	Europe	Subscribers	3,570
							Share	0.8
						Middle East	Subscribers	5,250
	Share	1.6	1.7	2.3	3.2		Share	1.1
						Africa	Subscribers	19,480
							Share	4.2
Total	Subscribers	**240,200**	**301,900**	**373,503**	**431,100**	**464,700**		
	Share	**100**	**100**	**100**	**100**	**100**		

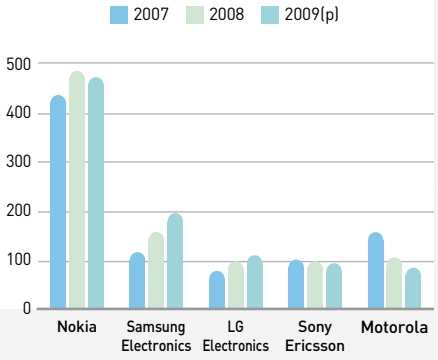
Source: CDG (CDMA Development Group), 'www.cdg.org', 4Q 2008.

4 Mobile Terminal Shipments by Producer

(in million terminals, %)

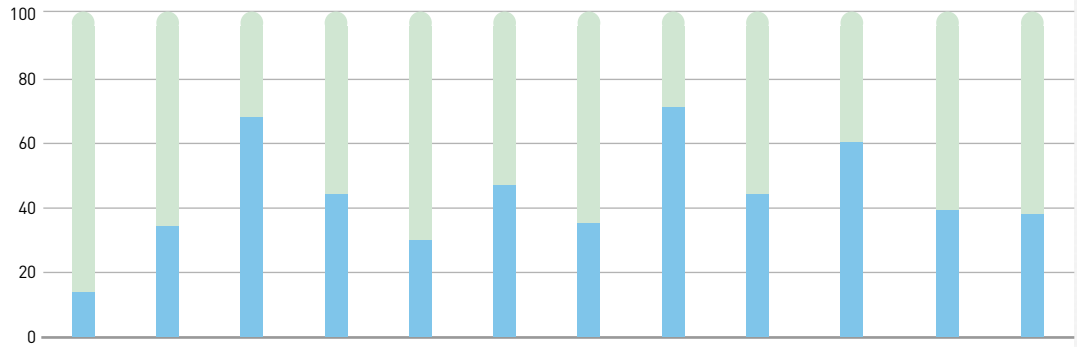
Producer	2007		2008		2009(p)	
	Shipment	Share	Shipment	Share	Shipment	Share
Nokia	437	38.1	484	38.9	**472**	**38.4**
Samsung Electronics	118	14.0	161	15.7	**195**	**17.9**
LG Electronics	80	7.0	101	8.1	**112**	**9.1**
Sony Ericsson	103	9.0	100	8.0	**94**	**7.7**
Motorola	159	13.9	108	8.7	**87**	**7.1**

Source: Korea Development Bank Research Institute,'Issue Analysis', January 2009.



5 Household Analog/Digital TV Penetration

(in %)



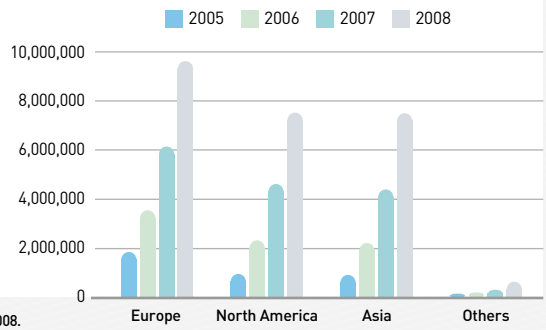
Type	UK	France	Germany	Italy	US	Canada	Japan	Poland	Spain	Netherlands	Sweden	Ireland
Analogue	14	34	68	44	30	47	35	71	44	60	39	38
Digital	86	66	32	56	70	53	65	29	56	40	61	62
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Ofcom, 'The International Communications Market 2008', November 2008.

6 Worldwide IPTV Subscribers by Region

(in number of households)

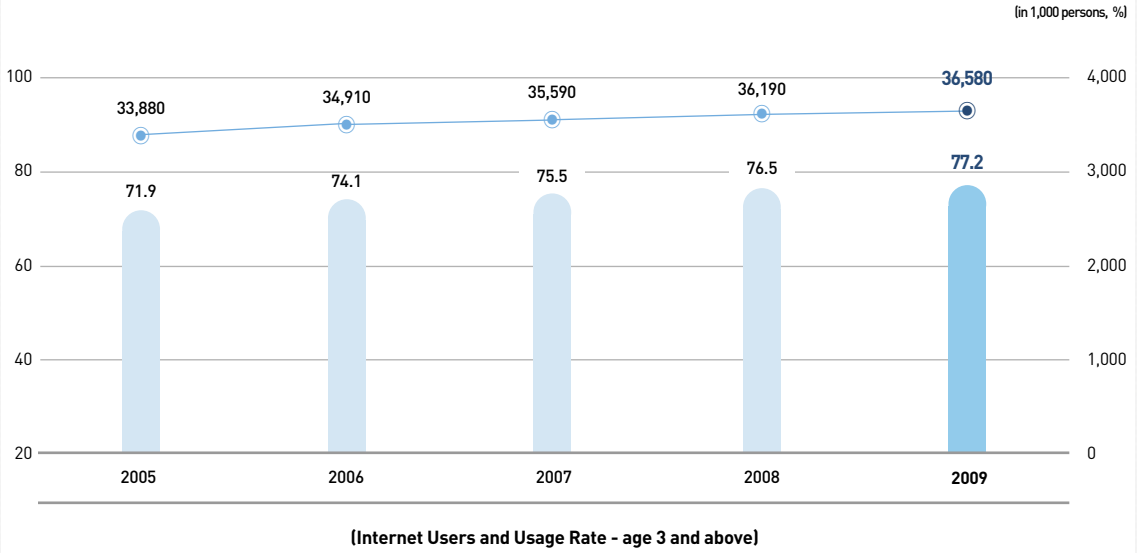
Region	2005	2006	2007	2008
Europe	1,856,300	3,517,300	6,156,800	9,662,800
North America	970,277	2,350,680	4,594,533	7,541,836
Asia	941,800	2,215,800	4,349,800	7,504,800
Others	13,700	71,000	250,000	635,000
Total	**3,782,077**	**8,154,780**	**15,351,133**	**25,344,438**



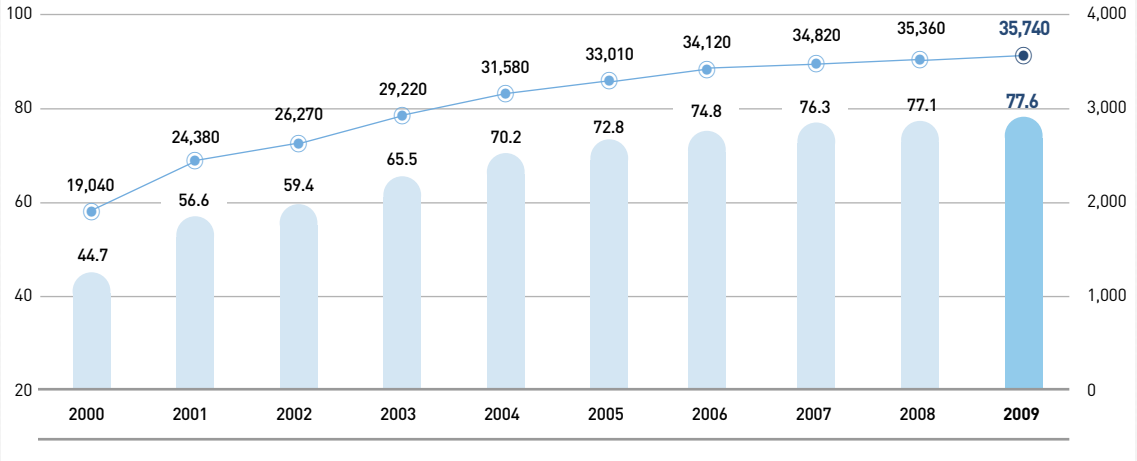
Source: Korea Communications Commission, 'IPTV Service Usage Survey Report', December 2008.

DOMESTIC DATA_ Internet

1 Internet Users and Usage Rate



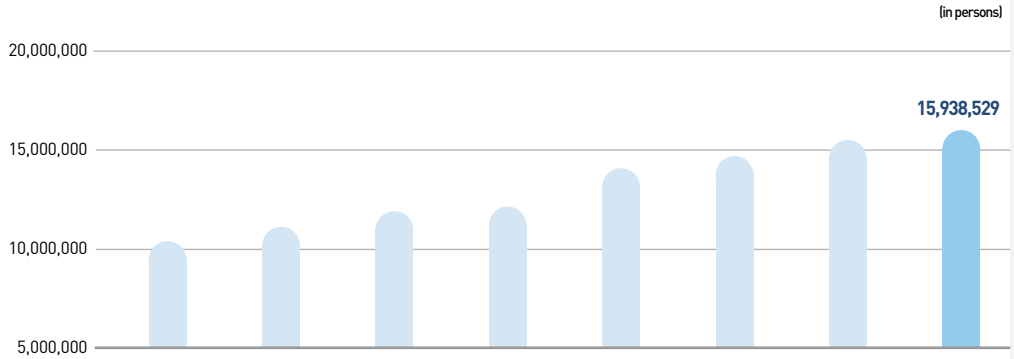
(Internet Users and Usage Rate - age 3 and above)



(Internet Users and Usage Rate - age 6 and above)

Note : 1. Wireless Internet on a mobile communication network was included from 2004 and the definition of 'Internet users' was changed from 'people using the Internet once a month or more on average' to 'those who have used the Internet during the last one month'.
2. Survey population is expanded in 2005 to those aged 3 and above (age 7 and above in 2000~2001; age 6 and above in 2002~2004)
Source : Korea Internet & Security Agency, '2009 Status Survey on Internet Usage- Summary Report', September, 2009.

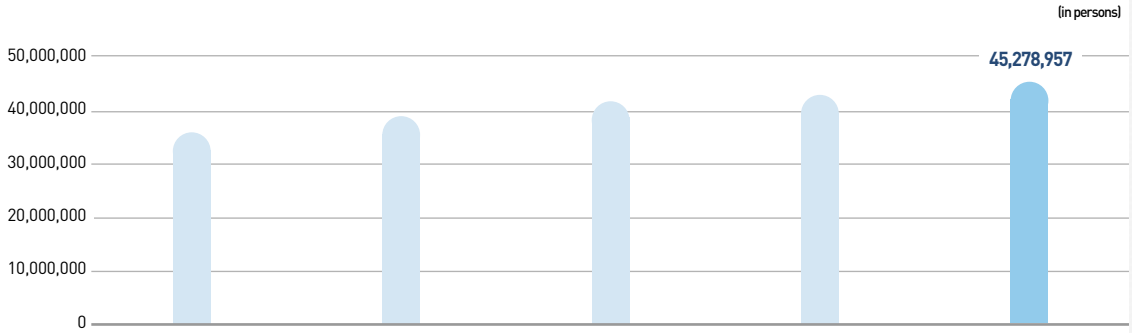
2 Broadband Internet Service Subscribers



Provider	2002.12.	2003.12.	2004.12.	2005.12.	2006.12.	2007.12.	2008.12.	2009.06.
KT	4,922,395	5,589,058	6,077,694	6,241,789	6,352,542	6,515,541	6,711,538	6,738,094
SK Broadband	-	-	-	-	-	-	3,543,669	3,748,554
Dreamline	169,528	149,598	133,927	99,723	28,370	1,512	417	78
LG Dacom	146,336	201,704	206,197	213,272	111,905	67,793	28,589	17,930
LG Powercomm	-	-	-	261,916	1,204,293	1,721,328	2,182,362	2,378,998
Cable TV System Operator	-	-	-	-	2,262,403	2,507,210	2,786,276	2,829,859
Cable TV Relay Operator	-	-	-	-	15,251	16,008	13,132	13,498
Network Operator	-	-	-	-	55,408	58,061	50,475	45,208
Non-facilities based Carrier	174,012	177,047	218,456	256,666	179,621	164,430	158,473	166,310
Hanaro Telecom	2,872,351	2,725,563	2,748,934	2,773,213	3,612,749	3,658,115	-	-
Thrunet	1,301,620	1,293,364	1,287,916	836,625	-	-	-	-
Onse Telecom	452,109	423,062	391,289	353,001	220,156	-	-	-
Value-added Carrier	367,135	619,103	857,026	1,154,506	-	-	-	-
Total	**10,405,486**	**11,178,499**	**11,921,439**	**12,190,711**	**14,042,698**	**14,709,998**	**15,474,931**	**15,938,529**

Note: Hanaro Telecom has merged into SK Broadband.
Source: Korea Communications Commission, 'Status of Broadband Internet Subscribers', August 2009.

3 Wireless Internet Subscribers

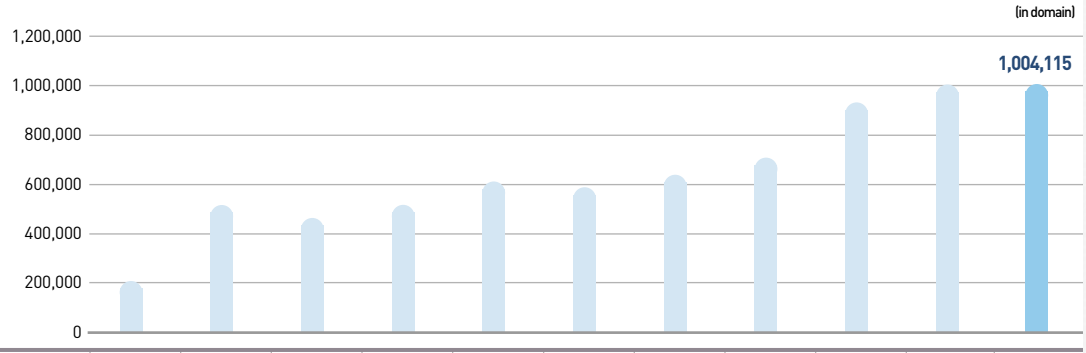


Provider	2005.12.		2006.12.		2007.12.		2008.12.		2009. 6.	
	WAP/ME	ISMS	WAP/ME	ISMS	WAP/ME	ISMS	WAP/ME	ISMS	WAP/ME	ISMS
SKT	18,208,012	178,242	19,600,608	46,810	21,284,414	25,935	21,125,152	13,189	22,869,513	9,653
KTF	11,593,601	311,020	12,632,940	157,212	12,689,245	123,418	13,594,881	97,312	14,176,189	76,123
LGT	5,468,876	164,385	6,300,712	156,059	7,316,144	158,921	7,748,237	161,188	7,988,474	159,005
Subtotal	35,270,489	653,647	38,534,260	360,081	41,289,803	308,274	42,468,270	271,689	45,034,176	244,781
Total	**35,924,136**		**38,894,341**		**41,598,077**		**42,739,959**		**45,278,957**	

Note: 1. 'ISMS' stands for the service that enables Internet connection and search without web browsers by connecting the Internet gateway to ISMS system, and is therefore not just a simple SMS.
2. Number of subscribers = number of terminals

Source: Korea Communications Commission, 'Status of Wired/Wireless Communication Service Subscribers', July 2009.

4 Number of .kr Domains by Year



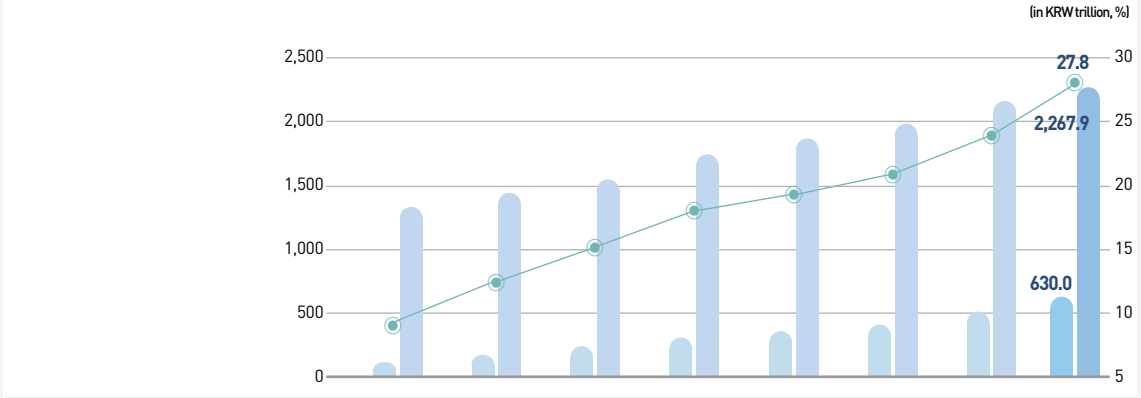
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009. 6.
No. of .kr domains	206,973	517,354	457,450	515,200	611,548	590,800	642,770	705,775	930,485	1,001,206	**1,004,115**

Note: Data is collected every end of December except in 2009.

Source: Korea Internet & Security Agency, July 2009.

DOMESTIC DATA_ e-Commerce

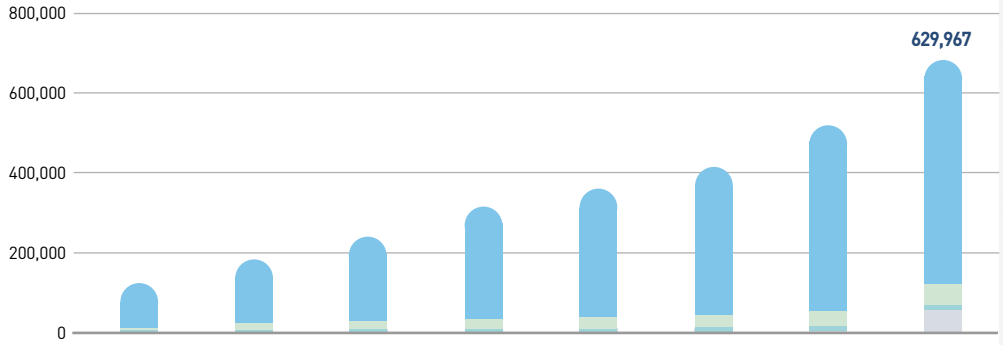
1 e-Commerce Transaction Volume and Rate



Type	2001	2002	2003	2004	2005	2006	2007	2008(p)
Total Volume of e-Commerce Transactions	**119.0**	**177.8**	**235.0**	**314.1**	**358.5**	**413.6**	**516.5**	**630.0**
Estimated Total Amount	1,328.6	1,443.4	1,551.2	1,746.1	1,865.8	1,985.3	2,159.9	2,267.9
e-Commerce Usage Rate (%)	9.0	12.3	15.1	18.0	19.2	20.8	23.9	27.8

Note: 1. Finance Insurance industry is excluded.
2. Total transaction amount for 2008 is estimated by applying an economic growth rate of 5.0% to the 2007 data.
Source: 1. National Statistical Office, 2009-1Q e-Commerce and Cyber Shopping Trend, May 2009.
2. Total Amount: National IT Industry Promotion Agency, 2009.

2 e-Commerce Transaction Volume by Type

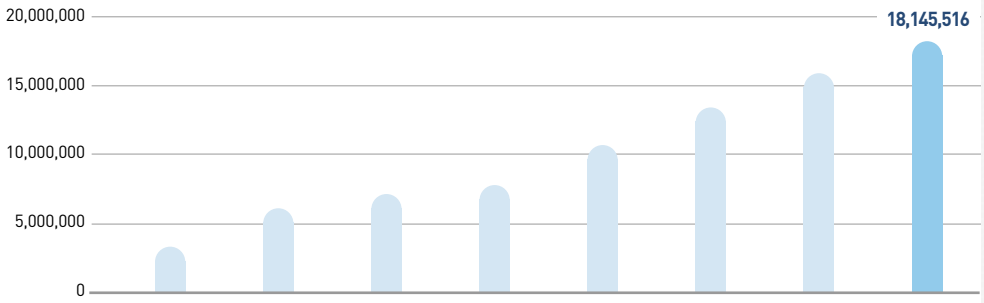


Type	2001	2002	2003	2004	2005	2006	2007	2008(p)
Total Transaction Volume	**118,976**	**177,810**	**235,025**	**314,079**	**358,450**	**413,584**	**516,514**	**629,967**
B2B	108,941	155,707	206,854	279,399	319,202	366,191	464,456	560,135
B2G	7,037	16,632	21,634	27,349	29,036	34,436	36,801	52,266
B2C	2,580	5,043	6,095	6,443	7,921	9,132	10,226	11,660
Others (C2C, etc.)	418	427	442	888	2,292	3,826	5,032	5,907

Note: Data consists of rounded-off figures and may not add up to the exact total.
Source: National Statistical Office, '2008-4Q and Annual e-Commerce and Cyber Shopping Trend', February 2009.

3 Transaction Volume of Online Shopping Malls

(in KRW million)

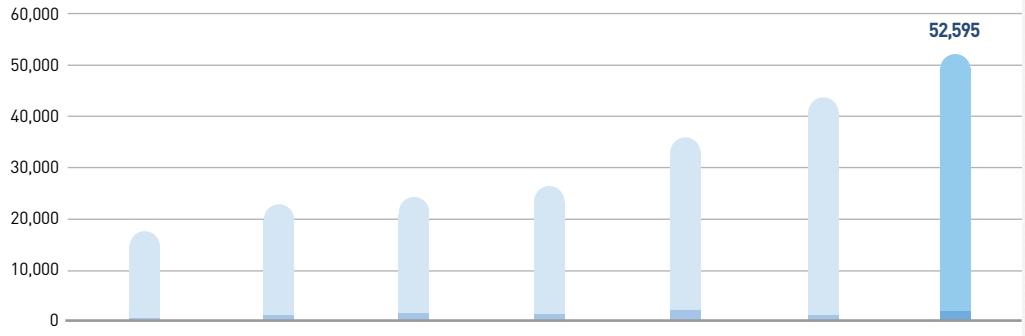


Type		2001	2002	2003	2004	2005	2006	2007	2008(p)
Total Transaction Volume		**3,347,067**	**6,029,876**	**7,054,817**	**7,768,105**	**10,675,595**	**13,459,595**	**15,765,573**	**18,145,516**
By Merchandise	General Malls	2,259,715	4,389,126	5,108,126	5,620,687	7,415,033	9,570,678	11,121,748	12,964,202
	Specialty Malls	1,087,352	1,640,751	1,946,692	2,147,418	3,260,563	3,888,917	4,643,824	5,181,314
By Operation	Online Malls	1,390,662	1,973,686	2,401,107	3,824,930	5,913,345	8,285,365	10,006,876	12,061,352
	Online and Offline Malls	1,956,405	4,056,191	4,653,711	3,943,175	4,762,250	5,174,229	5,758,697	6,084,164
By Organization	Individual Companies	66,403	131,593	139,133	143,397	216,416	270,301	-	-
	Corporations	3,224,465	5,792,979	6,788,567	7,478,700	9,736,295	12,456,223	-	-
	Others	56,198	105,305	127,117	146,009	722,885	733,070	-	-

Note: Data consists of rounded-off figures and may not add up to the exact total.
Source: National Statistical Office, '2008-4Q and Annual e-Commerce and Cyber Shopping Trend', February 2009.

4 Registered Internet Banking Users

(in 1,000 persons or Businesses)



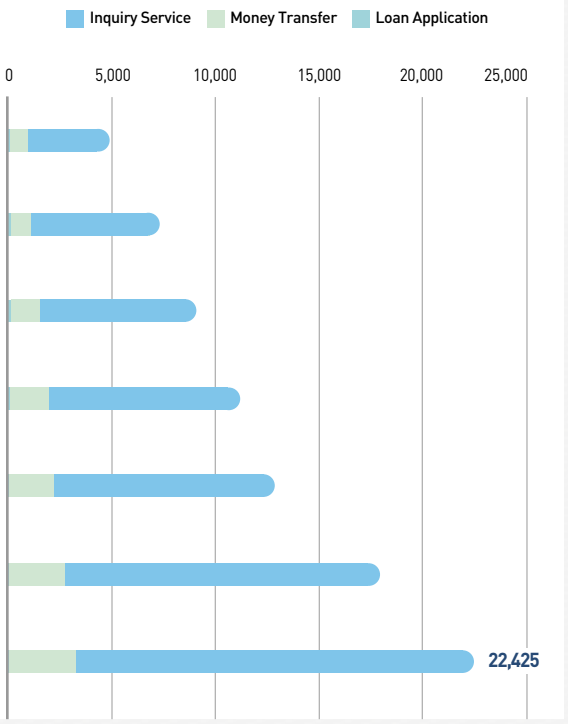
Type	2002	2003	2004	2005	2006	2007	2008
Individuals	17,015	21,752	23,094	25,303	34,123	42,396	50,075
Businesses	695	1,002	1,177	1,434	1,789	2,302	2,520
Total	**17,710**	**22,754**	**24,271**	**26,737**	**35,912**	**44,698**	**52,595**

Note: 1. Samples include 17 domestic banks, HSBC and Post Office, and the data include customers who have registered in more than two financial institutions.
2. The increase in the number of individual users is mainly caused by increased registrations in order to benefit from the convenience of Internet use made compulsory for new apartment subscriptions.
Source: Bank of Korea, '2008 Status of Domestic Internet Banking Usage', January 2009.

5 Mobile Banking Service Usage, Daily Average

(in 1,000 cases, KRW 100 million, %)

Type		Inquiry Service	Money Transfer	Loan Application	Total
2002	Cases (%)	3,926 (81.4)	887 (18.4)	9 (0.2)	4,822 (100)
	Amount	-	57,409	840	58,249
2003	Cases (%)	6,159 (85.3)	1,055 (14.6)	5.0 (0.1)	7,219 (100)
	Amount	-	77,905	940	78,845
2004	Cases (%)	7,501 (83.4)	1,492 (16.6)	2.3 (0.0)	8,996 (100)
	Amount	-	89,910	158	90,068
2005	Cases (%)	9,199 (82.7)	1,924 (17.3)	1.8 (0.0)	11,125 (100)
	Amount	-	125,182	115	125,297
2006	Cases (%)	10,596 (82.8)	2,204 (17.2)	1.9 (0.0)	12,802 (100)
	Amount	-	150,903	137	151,040
2007	Cases (%)	15,177 (84.7)	2,740 (15.3)	2.0 (0.0)	17,919 (100)
	Amount	-	185,570	135	185,705
2008	Cases (%)	**19,093 (85.1)**	**3,330 (14.8)**	**2.5 (0.0)**	**22,425 (100)**
	Amount	**-**	**228,426**	**160**	**228,586**

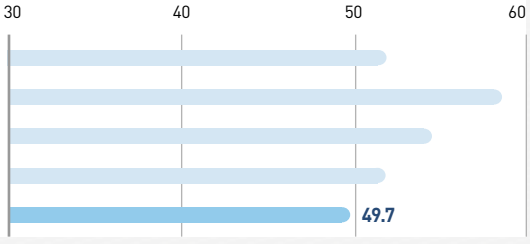


Note: Electronic ARC (account receivable collateral) loans and corporate purchase fund loans are excluded.
Source: Bank of Korea, '2008 Status of Domestic Internet Banking Usage', January 2009.

6 Online Stock Trading

(in KRW 1 trillion, %)

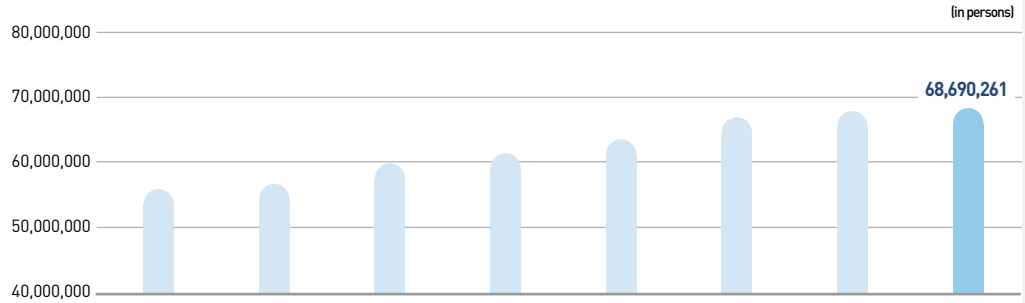
Year	Total Stock Trading (A)	Online Stock Trading (B)	Online Share (B/A)
2004	1,423.0	736.6	51.8
2005	2,465.3	1,442.2	58.5
2006	2,552.0	1,388.3	54.4
2007	3,724.5	1,926.1	51.7
2008	**3,190.2**	**1,586.3**	**49.7**



Note: Total Stock Trading (A) and Online Stock Trading (B) are the total amount of buying and selling.
Source: Korea Exchange, '2008 Stock Statistics Report', March 2009.

DOMESTIC DATA_ Telecommunication & Broadcasting Service

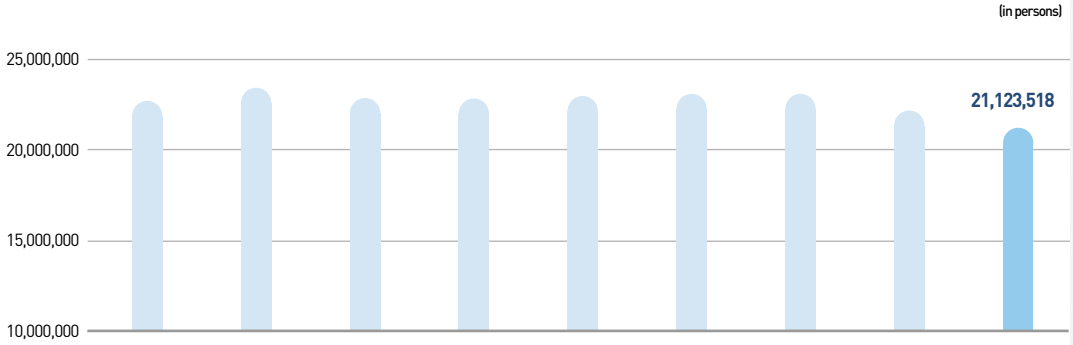
1 Wired and Wireless Service Subscribers



Type	2002.12.	2003.12.	2004.12.	2005.12.	2006.12.	2007.12.	2008.12.	2009. 6.
Local Phone	23,490,130	22,877,019	22,870,615	22,920,151	23,119,170	23,130,253	22,131,737	21,123,518
Mobile Phone	32,342,493	33,591,758	36,586,052	38,342,323	40,197,115	43,497,541	45,606,984	47,071,199
Wireless Paging	140,284	73,160	45,634	42,003	42,690	39,328	41,082	42,795
TRS	210,894	279,896	311,457	322,830	321,125	332,747	353,267	360,025
Wireless Data Communication	80,499	104,608	111,051	111,433	97,272	100,354	90,984	88,988
GM-PCS	-	-	-	-	-	4,412	3,897	3,736
Total	**56,264,300**	**56,926,441**	**59,924,809**	**61,738,740**	**63,777,372**	**67,104,635**	**68,227,951**	**68,690,261**

Source: Korea Communications Commission, 'Status of Wired/Wireless Communication Service Subscribers', July 2009.

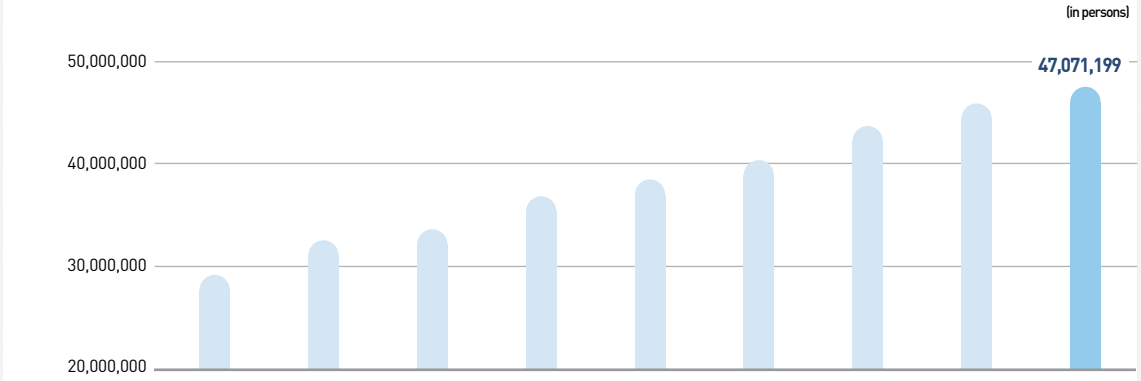
2 Wired Phone (Local Phone) Subscribers



Provider	2001.12.	2002.12.	2003.12.	2004.12.	2005.12.	2006.12.	2007.12.	2008.12.	2009. 6.
KT	22,021,230	22,550,278	21,875,638	21,457,342	21,353,086	21,288,733	20,918,566	19,866,278	19,057,189
SK Broadband	703,438	939,852	1,001,381	1,413,273	1,521,117	1,745,266	2,030,862	1,934,981	1,711,761
LG Dacom	-	-	-	-	45,948	85,171	180,825	330,478	354,568
Total	**22,724,668**	**23,490,130**	**22,877,019**	**22,870,615**	**22,920,151**	**23,119,170**	**23,130,253**	**22,131,737**	**21,123,518**

Note: 1. Figures for KT consist of the total number of people subscribing to household phones (business phones excluded), group phones, DID, and ISDN.
2. Figures for SK Broadband consist of the total number of people subscribing to household phones (business phones excluded), in-house communication, and ISDN.
3. Figures for LG Dacom consist of the total number of people subscribing to general fixed lines (wire lines no. 1 and 2) and trunks (DID/DOD trunks and DOD channels).
Source: Korea Communications Commission, 'Status of Wired/Wireless Communication Service Subscribers', July 2009.

3 Mobile Phone Subscribers



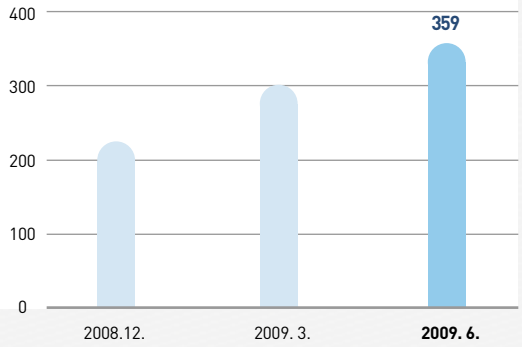
Provider	2001.12.	2002.12.	2003.12.	2004.12.	2005.12.	2006.12.	2007.1.2	2008.12.	2009. 6.
SKT	11,867,289	17,219,562	18,313,135	18,783,338	19,530,117	20,271,133	21,968,169	23,032,045	23,830,886
Shinsegi Telecom	3,311,774								
KTF	9,590,698	10,332,770	10,441,766	11,728,932	12,302,357	12,913,699	13,720,734	14,365,233	14,712,823
LGT	4,275,835	4,790,161	4,836,857	6,073,782	6,509,849	7,012,283	7,808,638	8,209,706	8,527,490
Total	**29,045,596**	**32,342,493**	**33,591,758**	**36,586,052**	**38,342,323**	**40,197,115**	**43,497,541**	**45,606,984**	**47,071,199**

Note: SK Telecom acquired Shinsegi Telecom in January 2002.
Source: Korea Communications Commission, 'Status of Wired/Wireless Communication Service Subscribers', July 2009.

4 VoIP Subscribers

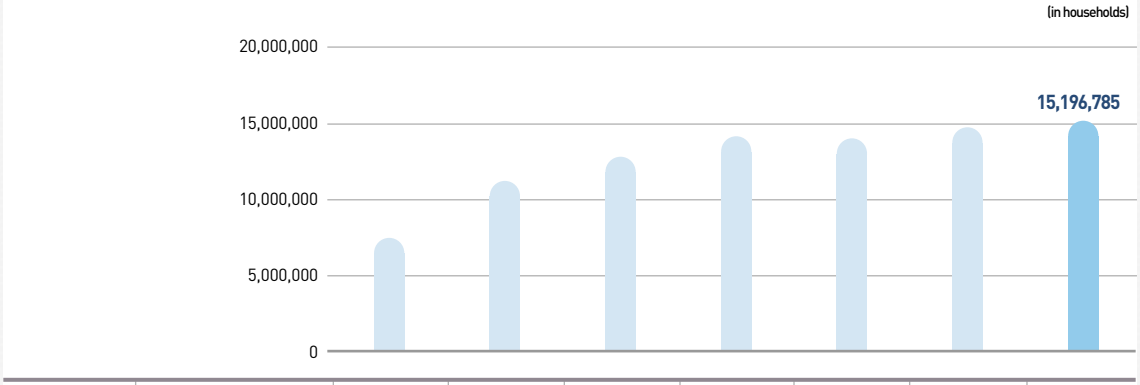
(in 10,000 persons)

Provider	2008.12.	2009. 3.	2009. 6.
LG Dacom	120	140	157
KT	32	50	63
Samsung Networks	37	44	43
KCT	24	34	45
SK Broadband	11	33	51
Total	**224**	**301**	**359**



Source: ATLAS, 'www.arg.co.kr', June 2009.

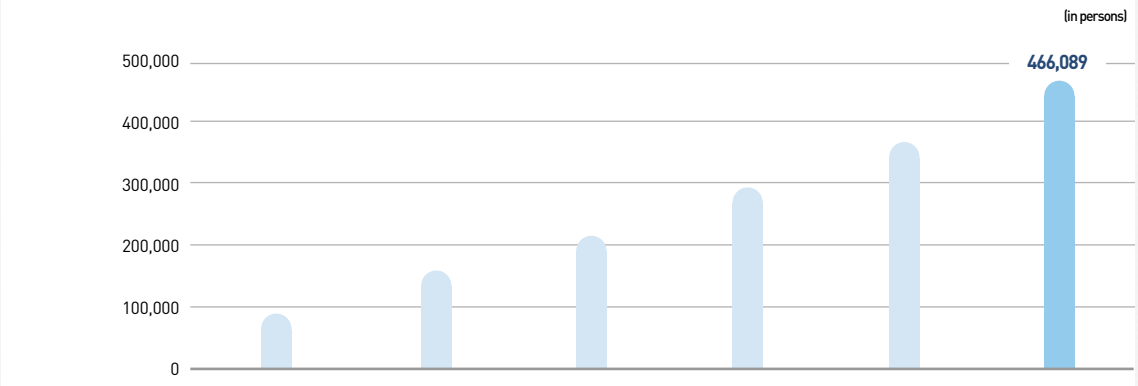
5 Digital Cable TV Subscribers



Type	Year-end Basis	2002	2003	2004	2005	2006	2007	2008
Subscribers (No. of terminals)	Analogue Broadcasting	7,454,822	11,404,632	12,906,779	14,129,314	13,881,782	13,908,616	13,282,667
	Digital Broadcasting	-	-	-	-	287,159	855,571	1,914,118
	Total	**7,454,822**	**11,404,632**	**12,906,779**	**14,129,314**	**14,168,941**	**14,764,187**	**15,196,785**

Note: Number of subscribers equals the total number of TV terminals.
Source: Korean Cable TV Association, '2008-12 Status of Cable TV Subscribers', March 2009.

6 Real-time IPTV Subscribers

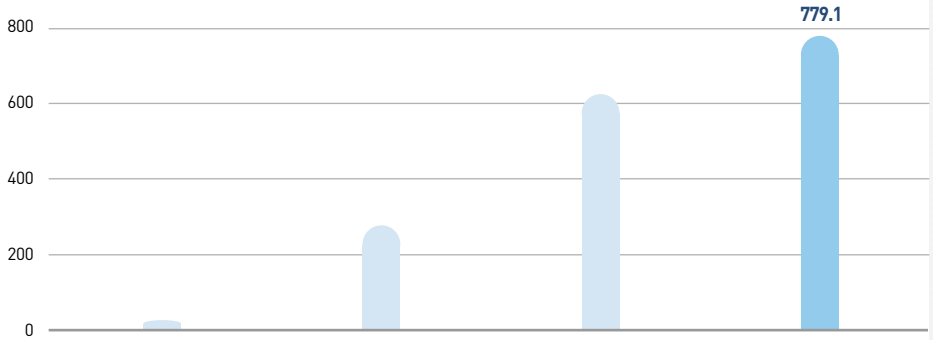


Provider	2009. 1.	2009. 2.	2009. 3.	2009. 4.	2009. 5.	2009. 6.
Qook TV	75,000	120,000	150,000	170,000	195,000	228,000
MyLGtv	12,089	27,877	50,217	85,483	116,127	150,745
Broad&TV	2,608	8,137	17,017	38,226	52,626	87,344
Total	**89,697**	**156,014**	**217,234**	**293,709**	**363,753**	**466,089**

Source: ATLAS, 'www.arg.co.kr', July 2009.

7 T-DMB Terminal Sales

(in 10,000 terminals)

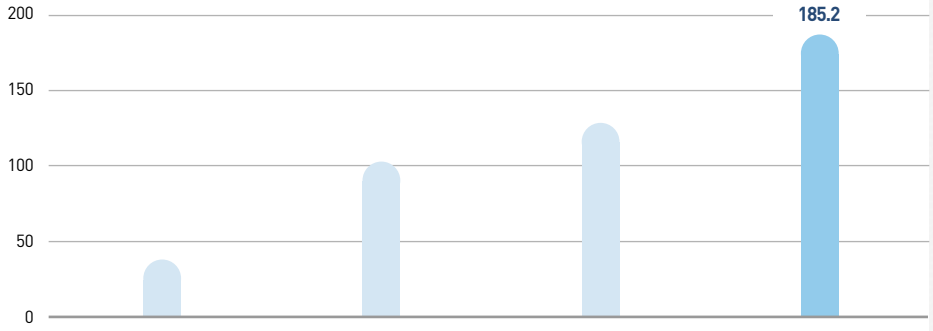


Type	2005	2006	2007	2008
Terrestrial DMB	12.0	273.9	626.2	**779.1**

Note: T-DMB service was launched in December 2005.
Source: Korea Radio Promotion Association and providers, 2009.

8 S-DMB Subscribers

(in 10,000 terminals)



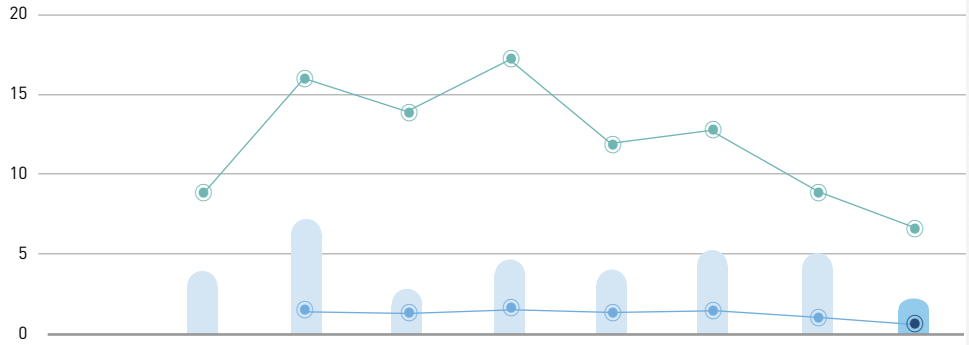
Type	2005	2006	2007	2008
Satellite DMB	36.9	101.8	127.3	**185.2**

Note: S-DMB service was launched in May 2005.
Source: Korea Radio Promotion Association and TU Media Corp., 2009.

DOMESTIC DATA_ ICT Industry

1 ICT Industry Share of GDP and its Contribution to Growth

(in %, %p)



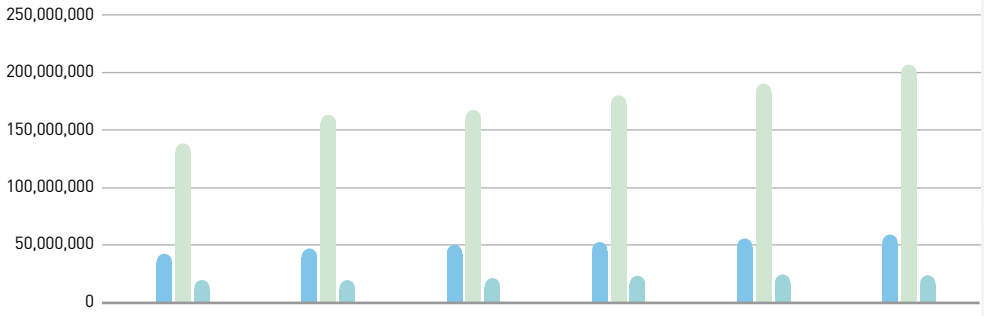
Type	2000	2001	2002	2003	2004	2005	2006	2007	2008(p)
GDP Growth Rate	-	4.0	7.2	2.8	4.6	4.0	5.2	5.1	**2.2**
ICT Industry Growth Rate	-	8.7	15.9	13.7	17.1	11.7	12.6	8.7	**6.4**
ICT Contribution	-	-	1.3	1.1	1.4	1.0	1.1	0.7	**0.5**
ICT Industry Share of GDP	5.7	6.0	6.4	7.1	8.0	8.6	9.2	9.5	**9.9**

Note: 1. ICT industry includes the manufacturing of ICT apparatuses (office appliances, semiconductors and other ICT appliances) and ICT services (broadcasting, software, and computer-related services).
2. Reference year is 2005.

Source: Bank of Korea '2008 National Accounts (provisional)', March 2009.

2 ICT Industry Production

(in KRW 1 million)



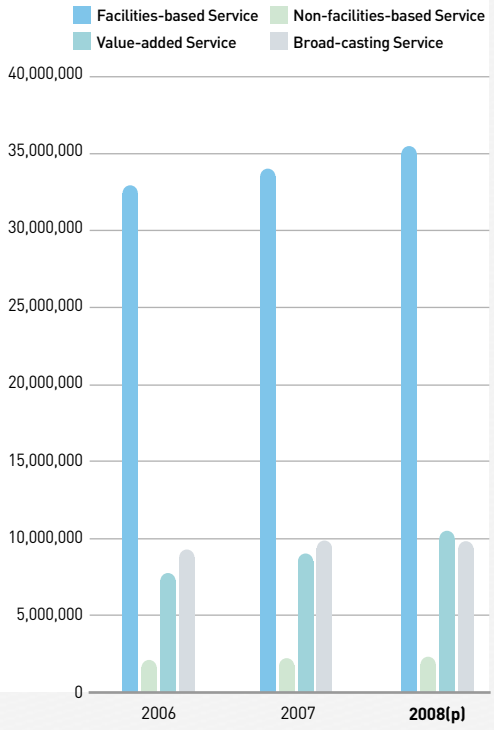
Type	2003	2004	2005	2006	2007	2008(p)
ICT Service	41,604,537	45,994,129	49,083,058	51,865,454	55,158,906	58,158,396
ICT Equipment	137,546,541	162,851,477	166,477,248	179,373,704	189,456,358	205,646,431
SW & Computer-related Service	18,439,580	18,658,818	20,082,720	21,968,008	23,056,803	24,379,501
Total	**197,590,658**	**227,504,424**	**235,643,026**	**253,207,166**	**267,672,067**	**288,184,328**

Source: Korea Association of Information and Telecommunication, April 2009.

3 ICT Service Production

(in KRW 1 million)

Service Type		2006	2007	2008(p)
Facilities-based Service	Wired	14,135,194	14,099,046	14,223,824
	Wireless	18,826,532	19,926,242	21,342,134
	Subtotal	**32,961,726**	**34,025,288**	**35,565,958**
Non-facilities-based Service	Stocked Facility Resale	372,885	404,365	421,867
	Non-stocked Facility Resale	1,401,357	1,590,127	1,644,312
	In-house Communication	214,894	267,141	280,072
	Subtotal	**1,989,136**	**2,261,633**	**2,346,251**
Value-added Service	Network	540,853	654,767	787,928
	Internet Connection & Management	1,090,674	1,286,387	1,489,068
	Value-added Communication Application	2,079,853	2,256,925	2,409,088
	Contents	4,048,798	4,783,230	5,694,234
	Others	32,780	35,470	36,654
	Subtotal	**7,793,048**	**9,016,779**	**10,416,972**
Broad-casting Service	Ground-wave	3,647,346	3,760,606	3,621,464
	Cable	1,410,433	1,576,215	1,661,331
	Satellite	439,236	473,893	467,324
	Program Production and Distribution	3,684,116	4,044,492	4,079,096
	Subtotal	**9,121,544**	**9,855,206**	**9,829,215**
Total		**51,865,454**	**55,158,906**	**58,158,396**

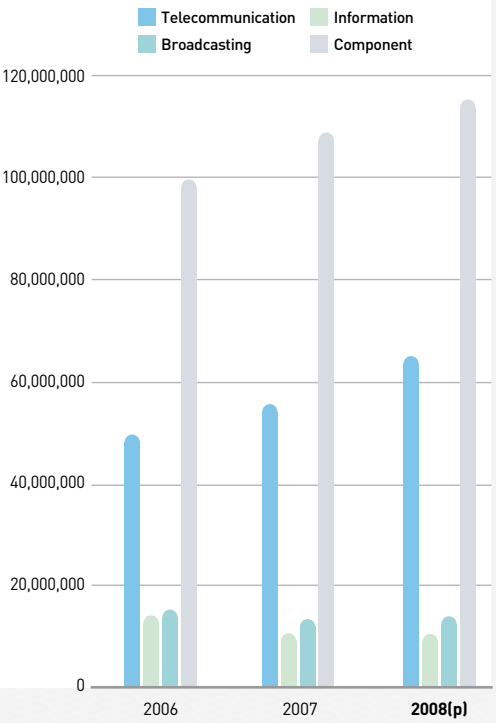


Source: Korea Association of Information and Telecommunication, 'ICT Industry Monthly (December 2008)', May 2009.

4 ICT Equipment Production

(in KRW 1 million)

Equipment Type		2006	2007	2008(p)
Telecommunication		**49,932,475**	**55,640,376**	**65,357,810**
	Wired Communication	10,531,546	12,275,344	13,547,711
	Wireless Communication	39,400,929	43,365,032	51,810,099
Information		**14,245,314**	**11,223,958**	**10,662,620**
	PC Main Board	1,807,943	1,067,002	1,060,082
	PC Peripherals	7,077,573	6,500,771	6,454,862
	Biometrics	307,805	20,295	18,163
	Information Equipment Parts	4,231,750	2,701,673	2,537,387
	Others	820,243	934,217	592,126
Broadcasting		**15,320,106**	**13,645,989**	**14,339,258**
	Broadcasting Equipment	8,056,690	6,883,900	7,285,074
	Digital Media Equipment	3,180,141	3,087,293	3,212,552
	Broadcasting Equipment Parts	4,083,275	3,674,796	3,841,632
Component		**99,875,809**	**108,946,035**	**115,286,743**
	Semiconductor(active parts)	36,260,809	39,208,414	35,421,015
	Display Panels	40,580,408	45,141,593	53,285,133
	General Parts	22,457,897	23,848,625	25,796,652
	Other Parts	576,695	747,403	783,943
Total		**179,373,704**	**189,456,358**	**205,646,431**

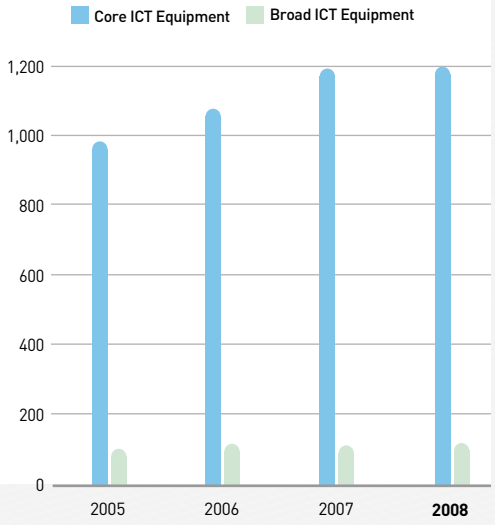


Source : Korea Association of Information and Telecommunication, 2009.4.

5 ICT Equipment Exports

(in USD 100 million)

Equipment		2005	2006	2007	2008
Core ICT Equipment	Electronic Components	461	578	655	637
	PCs and Peripherals	134	119	129	98
	Communication and Broadcasting Equipment	274	271	307	360
	Image and Sound Equipment	104	103	94	90
	Magnetic Optical Equipment	9	9	10	10
	Subtotal	**983**	**1,079**	**1,194**	**1,195**
Broad ICT Equipment	Medical Precision and Optical Instrument	15	19	23	27
	Domestic Appliance	44	44	43	40
	Office Appliances and Machinery	4	4	5	5
	Electronic Machinery	36	46	35	44
	Subtotal	**99**	**112**	**107**	**116**
Total		**1,083**	**1,191**	**1,301**	**1,312**

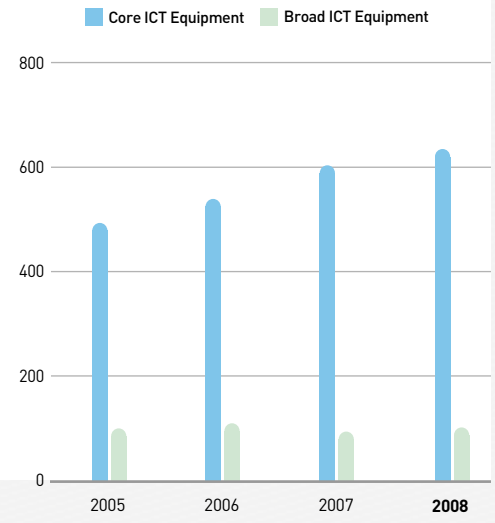


Note: Data was adapted to these ICT categories by the National IT Industry Promotion Agency, which garnered the statistics from the Korea Customs and Trade Development Institute.
Source: National IT Industry Promotion Agency, April 2009.

6 ICT Equipment Imports

(in USD 100 million)

Equipment		2005	2006	2007	2008
Core ICT Equipment	Electronic Components	344	367	415	435
	PCs and Peripherals	70	80	86	85
	Communication and Broadcasting Equipment	41	51	56	66
	Image and Sound Equipment	28	27	29	32
	Magnetic Optical Equipment	9	12	14	14
	Subtotal	**492**	**536**	**601**	**632**
Broad ICT Equipment	Medical Precision and Optical Instruments	51	56	64	69
	Domestic Appliance	7	8	9	9
	Office Appliances and Machinery	3	4	3	2
	Electronic Machinery	40	43	21	23
	Subtotal	**101**	**111**	**96**	**103**
Total		**593**	**647**	**697**	**735**

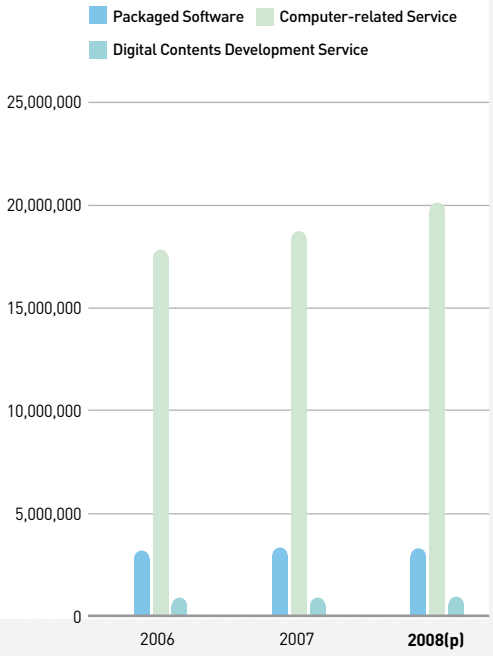


Note: Data was adapted to these ICT categories by the National IT Industry Promotion Agency, which garnered the statistics from the Korea Customs and Trade Development Institute.
Source: Korea Association of Information and Telecommunication, April 2009.

7 Software and Computer-related Service Production

(in KRW 1 million)

Service Type		2006	2007	2008(p)
Packaged Software	System Software	1,041,145	1,099,400	1,144,435
	Development Software	227,461	217,068	217,724
	Application Software	1,738,262	1,817,024	1,819,427
	Others	207,905	194,930	161,176
	Subtotal	**3,214,773**	**3,328,422**	**3,342,762**
Computer-related Service	Consulting/Planning & SI	12,451,872	12,830,183	13,625,654
	System Management & Maintenance	5,117,586	5,749,268	6,288,262
	Others	277,360	224,494	201,056
	Subtotal	**17,846,818**	**18,803,945**	**20,114,972**
Digital Contents Development Service	Digital Information Contents	123,855	131,405	131,112
	Games	359,917	378,768	389,018
	Digital Publishing	12,973	17,594	16,043
	Digital Multimedia	300,897	306,900	297,342
	Others	108,775	89,769	88,252
	Subtotal	**906,417**	**924,436**	**921,767**
Total		**21,968,008**	**23,056,803**	**24,379,501**

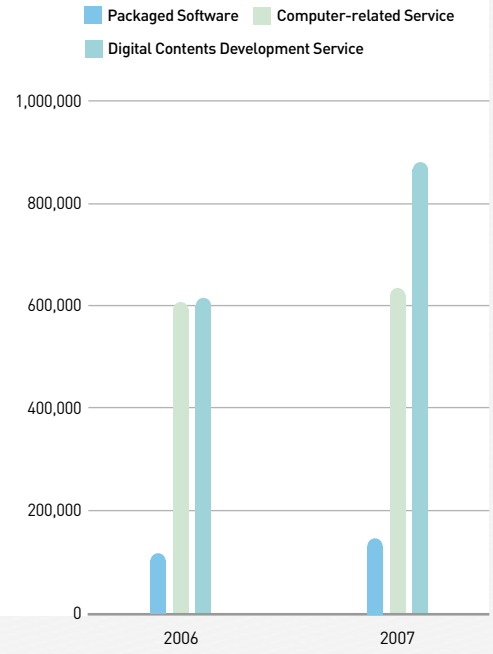


Source: Korea Association of Information and Telecommunication, April 2009.

8 Software and Computer-related Service Exports

(in USD 1,000)

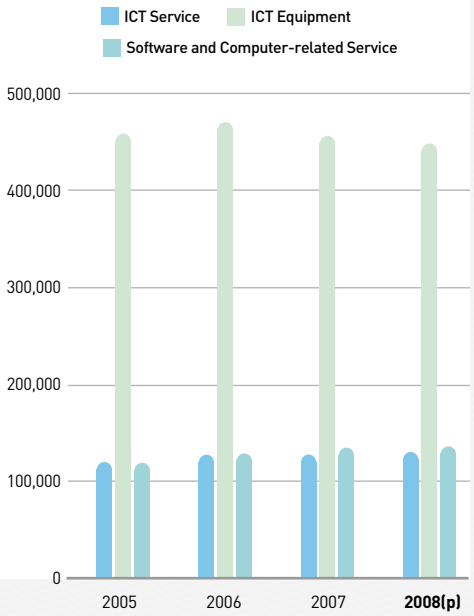
Service Type	2006	2007
Packaged Software	**117,175**	**147,921**
System Software	24,178	45,403
Development Software	13,540	5,725
Application Software	62,356	79,301
Others	17,101	17,492
Computer-related Service	**609,873**	**632,588**
Consulting/Planning & SI	481,025	361,763
System Management & Maintenance	115,453	262,509
Others	13,395	8,316
Digital Contents Development Service	**615,846**	**877,314**
Digital Information Contents	32,868	69,778
Digital Entertainment/Game Contents	496,687	767,965
Digital Publishing Development Service	1,088	510
Digital Multimedia Development Service	63,079	38,209
Others	22,124	851
Total	**1,342,894**	**1,657,823**



Source: Korea Association of Information and Telecommunication, February 2009.

9 ICT Industry Employees

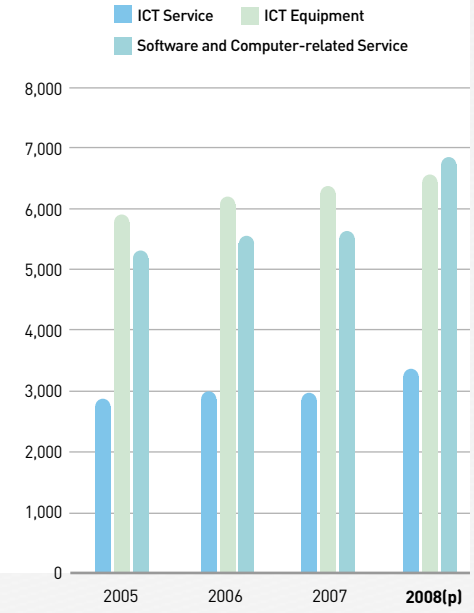
Service Type		2005	2006	2007	2008(p)
ICT Service	Facilities Based Service	43,848	43,454	40,719	39,381
	Non-facilities Based Service	6,400	6,664	6,964	7,498
	Value-added Service	43,044	50,824	52,015	54,953
	Broadcasting Service	27,048	26,714	28,503	29,958
	Subtotal	**120,340**	**127,656**	**128,201**	**131,790**
ICT Equip-ment	Telecommunication Equipment	116,737	116,237	117,634	118,565
	Information Equipment	39,603	39,198	29,255	24,142
	Broadcasting Equipment	41,267	40,193	37,202	37,155
	Parts	262,831	276,616	271,541	268,771
	Subtotal	**460,438**	**472,244**	**455,632**	**448,633**
Software and Computer -related Service	Packaged Software	28,689	30,059	31,912	-
	Computer-related Service	82,120	88,131	92,087	-
	Digital Contents Development Service	9,293	9,464	9,647	-
	Subtotal	**120,102**	**127,654**	**133,646**	**135,400**
Total		**700,880**	**727,554**	**717,479**	**715,823**



Note: The number of employees under the Software category for 2008 will be reported in the December-2009 issue of 'ICT Industry Monthly'. The ICT Equipment category is based on companies with 10 or more employees.
Source: Korea Association of Information and Telecommunication, 'ICT Industry Monthly (Dec 2008)', May 2009.

10 Number of ICT Companies

Service Type		2005	2006	2007	2008(p)
ICT Service	Facilities Based Service	27	46	49	49
	Non-facilities Based Service	162	202	215	236
	Value-added Service	2,165	2,242	2,237	2,441
	Broadcasting Service	523	495	478	629
	Subtotal	**2,877**	**2,985**	**2,979**	**3,355**
ICT Equip-ment	Telecommunication Equipment	1,607	1,741	1,811	1,781
	Information Equipment	659	682	675	753
	Broadcasting Equipment	816	801	802	784
	Parts	2,819	2,972	3,070	3,239
	Subtotal	**5,901**	**6,196**	**6,358**	**6,557**
Software and Computer -related Service	Packaged Software	2,080	2,035	1,980	2,194
	Computer-related Service	2,678	2,966	3,112	4,036
	Digital Contents Development Service	552	556	528	615
	Subtotal	**5,310**	**5,557**	**5,620**	**6,845**
Total		**14,088**	**14,738**	**14,957**	**16,757**



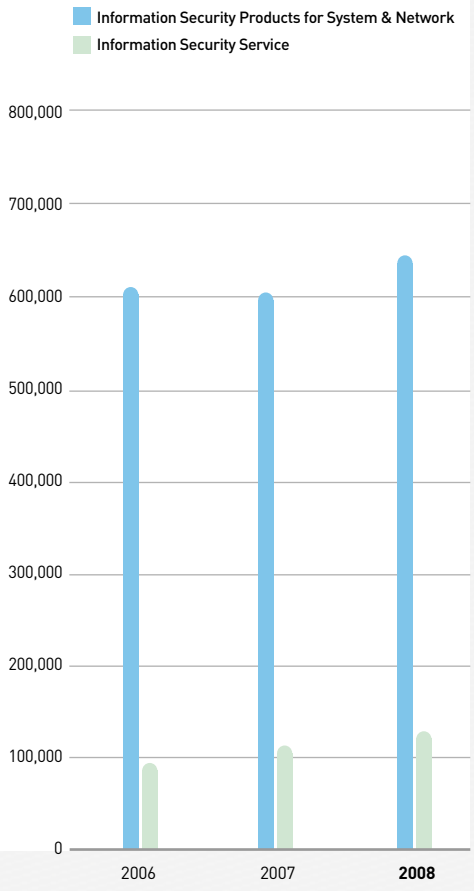
Note: ICT Equipment category is based on companies with 10 or more employees.
Source: Korea Association of Information and Telecommunication, 'ICT Industry Monthly (Dec 2008)', May 2009.

11 Information Security Sales

(in KRW 1 million, %)

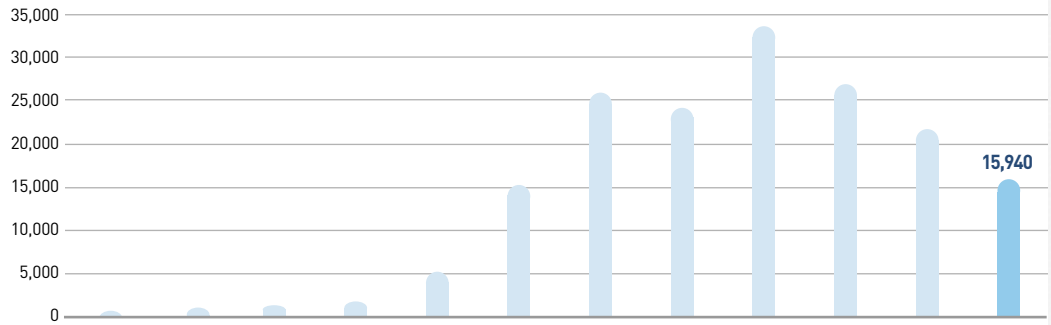
Type		2006	2007	2008	Increase Rate
Information Security Products for System & Network	Intrusion Blocking (Firewall)	69,185	70,729	74,696	5.6
	Intrusion Prevention System (IPS)	72,830	62,943	65,756	4.5
	Unified Threat Management (UTM)	29,950	31,303	32,695	4.4
	Security Management	65,008	68,415	70,793	3.5
	Virtual Private Network (VPN)	50,501	33,502	33,707	0.6
	Authentication Product	19,647	14,450	17,360	20.1
	Anti-Virus	72,082	65,414	70,622	8.0
	Anti-Spam	10,610	6,940	7,487	7.9
	Secure OS	22,121	25,554	27,183	6.4
	PC Security	35,662	31,926	40,991	28.4
	DB/Contents Security	57,585	51,793	55,075	6.3
	Public Key Infrastructure (PKI)	22,081	26,474	26,954	1.8
	Access Management	17,296	25,507	35,242	38.2
	Biometric Identification Product	56,697	68,317	75,362	10.3
	Others	10,351	19,682	10,251	-47.9
	Subtotal	**611,606**	**602,949**	**644,174**	**6.8**
Information Security Service	Maintenance and Repair	24,360	26,093	28,489	9.2
	Security Consulting	27,045	26,339	29,912	13.6
	Security Control	29,270	31,329	38,553	23.1
	Authentication Service	4,875	20,645	24,463	18.5
	Others	8,091	7,589	6,821	-10.1
	Subtotal	**93,641**	**111,995**	**128,238**	**14.5**
Total		**705,247**	**714,944**	**772,412**	**8.0**

Source: Korea Information Security Industry Association, '2008 Survey on Domestic Information Security Industry Market', December 2008.



DOMESTIC DATA_ Adverse Effects of Informatization

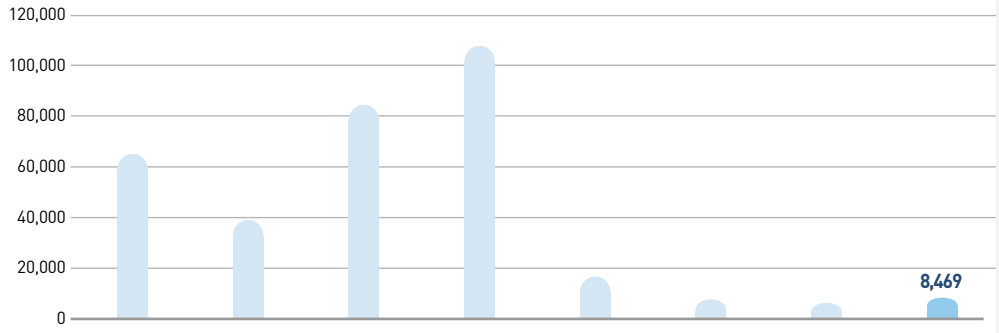
1 Hacking



Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
No. of Cases Reported	64	158	572	1,943	5,333	15,192	26,179	24,297	33,633	26,808	21,732	**15,940**
Increase Rate (%)	-44	147	262	240	174	185	72	-7	38	-20	-19	**-27**

Note: The number of forged websites in 2006 has significantly decreased from the previous year.
However, the risks are increasing due to the illicit use of websites as route for hiding malicious codes and/or phishing.
Source: Korea Internet & Security Agency, 'Monthly Internet Incidents and Analysis', December 2008.

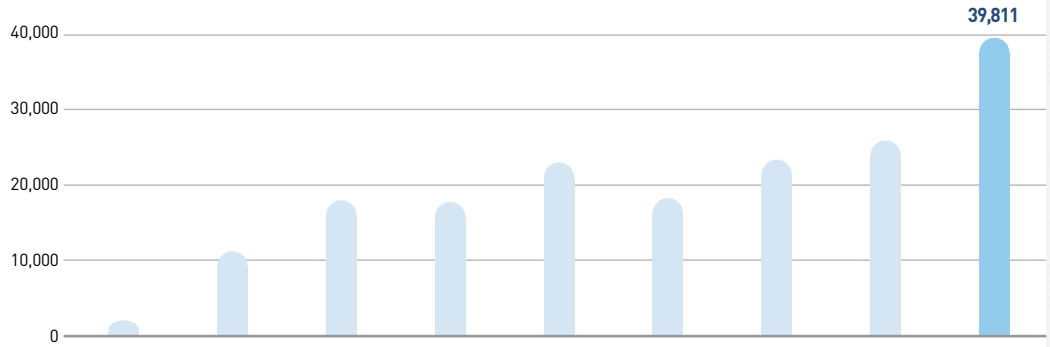
2 Worm/Virus Attacks



Type	2001	2002	2003	2004	2005	2006	2007	2008
No. of Damage Cases Reported	65,033	38,677	85,023	107,994	16,093	7,789	5,996	**8,469**

Note: 1. Data on worm/virus attacks are the aggregated figure of statistics from KISA, AhnLab, and Hauri.
2. The decrease in number of damage cases reported in 2007 is caused by the significant decrease in damage cases reported from email viruses such as Netsky and Bagle.
However, the spread of damages are prevalent from malicious codes and trojans, which are not self-spreadable.
Source: Korea Internet & Security Agency, 'Monthly Internet Incidents and Analysis', December 2008.

3 Personal Information Breach

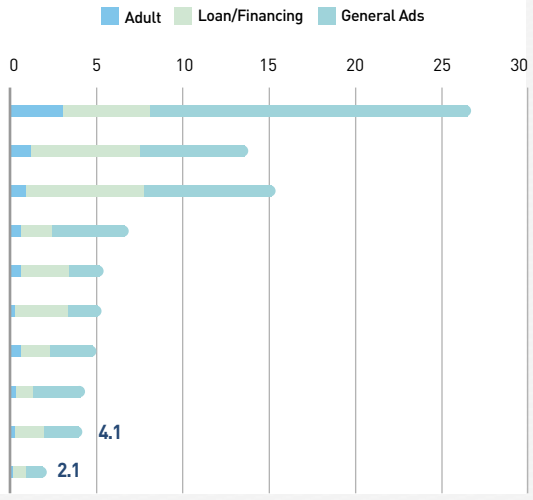


Type	2000	2001	2002	2003	2004	2005	2006	2007	2008
No. of Cases Reported	2,035	11,164	17,956	17,777	23,036	18,206	23,333	25,965	**39,811**

Source: Korea Internet & Security Agency, 2009.

4 Illegal Spam, Daily Average/Person

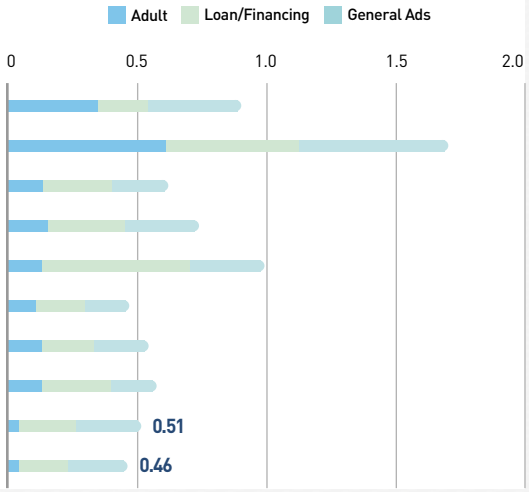
Year		Adult	Loan/Financing	General Ads	Total
2004	1st Half	3.0	5.1	18.6	26.7
	2nd Half	1.2	6.3	6.3	13.8
2005	1st Half	0.9	6.9	7.5	15.3
	2nd Half	0.6	1.8	4.5	6.9
2006	1st Half	0.6	2.7	2.1	5.4
	2nd Half	0.2	3.1	2.0	5.3
2007	1st Half	0.6	1.7	2.7	5.0
	2nd Half	0.3	1.0	3.0	4.3
2008	**1st Half**	**0.2**	**1.7**	**2.2**	**4.1**
	2nd Half	**0.1**	**0.8**	**1.2**	**2.1**



Source: Korea Internet & Security Agency, February 2009.

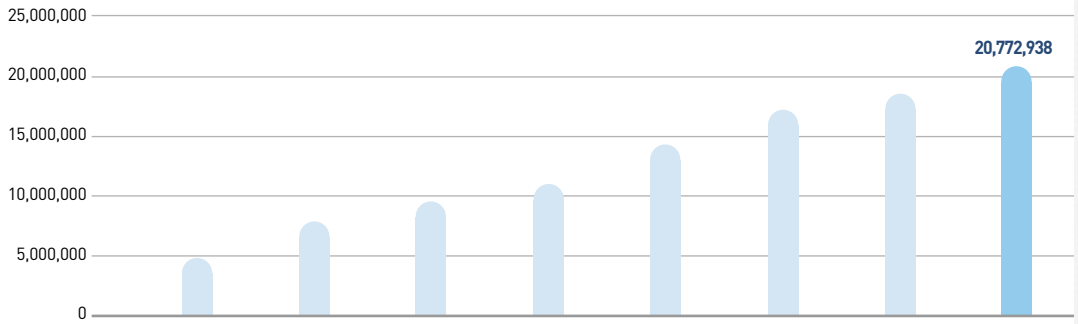
5 Mobile Spam, Daily Average/Person

Year		Adult	Loan/Financing	General Ads	Total
2004	1st Half	0.35	0.19	0.36	0.90
	2nd Half	0.61	0.51	0.58	1.70
2005	1st Half	0.13	0.27	0.22	0.62
	2nd Half	0.15	0.30	0.29	0.74
2006	1st Half	0.13	0.57	0.29	0.99
	2nd Half	0.11	0.19	0.17	0.47
2007	1st Half	0.13	0.20	0.21	0.54
	2nd Half	0.13	0.27	0.17	0.57
2008	**1st Half**	**0.04**	**0.22**	**0.25**	**0.51**
	2nd Half	**0.04**	**0.19**	**0.23**	**0.46**



Source: Korea Internet & Security Agency, February 2009.

6 Certificate Issuance



Type	2002	2003	2004	2005	2006	2007	2008	**2009. 6.**
No. of Certificates Issued	4,934,143	7,824,368	9,497,919	11,000,073	14,374,988	17,155,333	18,563,310	**20,772,938**

Source: Korea Internet & Security Agency

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