## (invited) Introduction to IT Trends in Korea

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Over the last few years, Korea has made vigorous efforts to build the wired and wireless telecom infrastructures across the nation. As a result, Korea has 31 million mobile subscribers, equivalent to 67% of the total population in 2002. Furthermore, the number of people with a broadband Internet connection stood at 10 million subscribers, or 70% of total households in Korea, which is the highest penetration rate throughout the world [1].

For many Koreans, the Internet has truly become part of daily life. They search information, conduct financial transaction, receive online education and engage in many other activities, hooking up to the Internet. This earned Koreans most active and sophisticated Internet users in the world. As for the companies, through e-commerce and online networking among small businesses, they enhance transparency as well as efficiency of the corporate management, ultimately strengthening the competitive edge of the overall industry. The government opened an era of e-Government to allow the people to enjoy a broad range of public services in the comfort of their own homes. At the same time, the government tries to realize a transparent and fair society.

Korea's IT industry has recorded a solid growth since the 90's. In terms of production, Korea's IT industry has grown tenfold, from 15.2 trillion KRW(Korean won) in 1990 to 150.5 trillion KRW in 2001. The IT industry, despite the lackluster economy in 1997 showed 27.1% in growth, and maintained 16.7%, 30.4% and 26.3% growth in 1998, 1999 and 2000, respectively. Although the growth rate recorded only 3.7% in 2001 due to the worldwide decline in IT demand, it is anticipated that Korea's IT industry will rebounded in 2002.

Domestic sales for Korea's IT industry has also shown remarkable growth, from 13.9 trillion KRW in 1990 to 139.3 trillion KRW in 2001. Exports by Korea's IT industry increased from 9.2 billion USD in 1990 to 38.4 billion USD in 2001. At the same time, imports increased from 7.5 billion USD in 1990 to 27.9 billion USD in 2001, recording a continuing surplus in the sector's trade balance. Major export items of the Korea's IT industry include memory semiconductors, mobile telephone, monitors, LCDs, PCs and satellite broadcast receivers, while major import items include non-memory semiconductors, transmission equipment and large-size computers.

International comparison of the IT industry indicates the followings. The value added by the Korea's IT industry is estimated at around 72.5 billion USD as of 1999. It accounts for 11.9% of GDP, which is the largest share in any of the 21 OECD member countries under comparison except Ireland and Finland. From 1995 to 1999, the added-value of the IT industry rose at an average annual rate of 24.4%, the highest rate of 11 OECD countries compared. Korea was the second fastest after Finland in IT manufacturing and recorded the highest growth in IT service. In 2000, Korea recorded 56 billion USD in IT exports, making it the third largest exporter of IT products among the OECD countries after the U.S. and Japan. In 2001, IT exports dropped to around 40 billion USD due to the industry's slump, but Korea is still expected to be among the top five IT exporters [2].

As Korea's informatization efforts have garnered the interest from the rest of the world as a successful case for national informatization, Korea can confidently work towards the realization of an

advanced nation of the 21st century. Specifically, the third master plan for informatization promotion through e-KOREA VISION 2006 provides the blueprints for building the information society of the future [3].

The successful development of core technologies will raise the status of the IT industry and will have a positive impact on increasing the exports of IT products. Total IT exports from 2002 to 2006 is expected to reach 350 billion dollars. The establishment of new knowledge-intensive industries such as BT, NT, CT, ET, ST, etc., will help to sustain economic growth. The industry's growth will also be fueled by introduction of IMT-2000 service, wireless Internet service, and expanded digital broadcasting service coupled with increased demand for peripherals and components. Informatization of all industries will raise the level of productivity to the level of G7 countries, which will lead many Korea's companies to become major players in the global market. Approximately 30% of total transactions in major industries are expected to be online and 25% for other industries by the year of 2006.

By the year of 2005, the government plans for every household to be equipped with universal access to the broadband Internet with minimum transmission speeds of 1 Mbps irrespective of income, age or region. As for the government, online services will be expanded to encompass all civil services and customized digital civil services will be offered by 2006. Also, civil services will be delivered at any location with the establishment of a mobile government information infrastructure. E-civic forums that enable citizens to participate in the policymaking processes of the government through the Internet will be made formal within the public administration system.

## References

- [1] IT Korea 2002, Ministry of Information and Communication, Korea, Dec. 2002.
- [2] IT Industry Outlook of Korea 2003, Korea Information Society Development Institute, 2003.
- [3] e-Korea Vision 2006, Ministry of Information and Communication, Korea, Apr. 2002.