KOREA'S GAME SOFTWARE INDUSTRY: CURRENT STATUS AND PROSPECTS

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A Rosy Industry Laying Golden Eggs

A few months ago, the Ministry of Culture and Tourism designated the game software industry as one of the strategic industries in the coming century. As a result of that decision, various plans are being prepared to support this goal. Particularly, the government is planning to invest $13.4 million for building a game software complex, originally planned to open next month, for the purpose of housing game developers and facilitating them in development and commercialization of software programs. The government plans to create a support fund amounting to $43 million by next year, so as to induce start-ups in the game software industry. Other incentives like tax benefits will be offered to companies and other private institutions making investments in developing game softwares.

So far, Koreans have paid relatively little attention to the game industry, despite its high value-added. One reason is the relative apathy toward the industry stemming from prejudice. The game industry, which focuses on "fun", has been undervalued in Confucian Korea. However, the industrial landscape has changed rapidly; as perception of the game software industry as being in high demand and generating high profits became widespread, both the public and private sectors are taking on a more positive attitude toward computer games.

All these encouraging signs highly motivate some 200 small- and medium-sized game software ventures in operation to pursue development. These fledglings nonetheless have tremendous growth potential; for example, Mari Information Telecommunication Co. (Mari) developed an online game software program named Archmage last year. The developers of this game are only in their twenties and do not have much field experience; however, Archmage was valued at $20 million by industrialists in Silicon Valley and Mari's website was ranked as the top in the world by Internet users in February 1999. Furthermore, Mari's advertising sales are expected to reach $7.7 million this year. In the future, similar cases are expected to mushroom, especially due to the government's positive policies. At any rate, it seems evident that more and more people are considering the game software industry as another promising golden goose.

Factors Making the Korean Market Attractive

The exact market size of Korean game software industry is not known; experts estimate that the total market size will be between $0.5 and $1 billion this year. In the case of Japan, the estimated market size is $7.5 billion. The global market ranges approximately from $60 to $110 billion.

There are reasons to believe the Korean market to be very attractive in the future. First, the government's support plans are creating a boom in the development of game software among talented young Koreans. It is thereby a matter of time before a bonanza of high-quality products hits the market. As more and more consumers are taking an interest in those products, the market size will accordingly grow

bigger in the near future. In turn, it is expected that domestic products will undermine the market shares of foreign products.

Second, the recent crackdown on the illegal reproduction of computer software is expected to expand the market size on a large scale. It can even be said that the market size in the future depends on the degree of punitive actions taken by the government. Such efforts to banish piracy is stimulating legitimate purchases and boosting developers' morale.

Third, the "educational" aspect of the game is being added on to the "fun" aspect; the understanding that game software can be a useful tool for developing children's creativeness is becoming pervasive amidst the general public. In place of parents' prohibition of their children from spending time on computer games, encouragement by parents can boost sales of game software products.

The Government Policies

The Korean government has recently decided to nurture the multimedia contents industry as the kernel of high value-added industries. Business conditions in Korea are improving on account of wide distribution of facilities, such as electronic communication networks, and price markdowns. Nevertheless, there still remain aspects to be desired—e.g. marketing, acquisition of quality certificates, and protection of copyrights, just to name a few. Being a cutting-edge technology, the software industry requires reliability in both price and quality. Korean products should avoid the impression of having low quality owing to their low price and instill in the minds of customers a positive image of sophisticated technology. Acquiring international quality guarantees such as ISO 9000 may improve reliability. The public sector can also help by giving incentive endowments to firms that achieve international quality control certificates. Moreover, the government policy should be directed toward training proficient professionals for outsourcing orders from advanced countries.

The copyright and piracy issues need immediate attention. Fortunately, from the beginning of 1999, the Korean government has launched crackdowns against any illegal activities of software companies; so far it has eradicated piracy of software package programs. Even with the aim of preventing a shrunken domestic market, the government needs to take drastic measures by running specialized organizations which will constantly work to level any undesirable influence of piracy, which is a threat to the establishment of and the investment in the s/w businesses.

The Korean Software Incubator, a support center established by the Korean government in Silicon Valley, has furnished a turning point to Korean firms to seek cooperation from their counterparts in developed countries and opportunities of mutual business expansion. Thanks to this mutual connection, joint investment, strategic tie-ups, business contracts and joint product development are under way.

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Not only the central government but local governments are said to be planning to launch construction projects of "software parks". Establishing such complexes in cities will spur new businesses, as game software developers can work anywhere with computers and information networks.

Fostering Technopros

As the range of software application expands, the demand for technicians, as well as experts in mathematics, culture and economy is growing in the software industry. Human resources policy, training programs for experts and other

(continued on p.22)

(Cont'd from p. 19)

measures are being put into practice to meet this growing need. More than 200 universities are devoted to training quality technopros: at Korea Advanced Institute of Science and Technology and other institutes which offer top-notch education, highly qualified specialists are receiving training at relatively low costs.

The economic crisis led to massive business failures, creating a new social group of unemployed technopros, most of whom were ready to start new ventures. It is estimated that by the year 2000, there will be a great shortage of software specialists: already the Korean software industry is experiencing a shortage of human resources with advanced academic degrees. Attempts are being made to fill this gap, such as creating more software-related curricula, opening game-related departments in colleges and collaborating with foreign educational institutions. Most of these attempts are the fruit of educational-industrial joint efforts to meet the ever growing need for elite human resources.

Investment Sources

Unlike the package program industry, the game software industry is experiencing rapid development; this speedy growth in both number and scale is apt to continue well into the early 21st century. During the economic crisis in Korea, the most critical shortfall has been the problem of financing or investment: lately, however, venture funds are being injected in the industry, with the help of the active KOSDAQ market and other investment measures. Although the resources mainly take the form of loans at present, diversified forms of investment in the future, such as spontaneous investment and donation, will maximize the efficiency of investment. Active involvement of venture capital and angel investors is crucial for the assured growth of the industry. The first angel investor club was set up last year in Korea and the number of officially recognized clubs is five, as of present. Even though the level of their investment is rather limited at present, those clubs are sure to be a significant source of investment in the near future.

Another meaningful role of the game software industry lies in its potential as a leading export sector. Contrary to the pre-crisis environment in which the game software industry grew mainly by domestic consumption, the industry from now will become more export-oriented, taking advantage of relatively talented human resources and the government's support. The first decade of the 21st century will witness the game software industry assuming the role of main axis in the process of transforming Korea into a knowledge-based economy. VIP