# 2008 White Paper on Korean Games

Guide to Korean Game Industry and Culture

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### on Korean Games

### **Glossary of Terms**

#### **Game Platform**

#### **Arcade Game**

A coin electronic game of the type that is often played in amusement arcades

#### **Online Game**

A game that connects many players together on a server that can be accessed over the Internet by individual PC terminals

PC Game (PC Stand-alone Game)
A game installed on a PC through an optical storage device such as a CD-ROM or a DVD-ROM and requires no server to play

#### Video Game

A game inserted into a game console system that is connected to a TV set \*\*Game Console : A machine designed to play video games stored in CDs, DVDs or ROM cartridges(e.g., Xbox, Playstation, Game Cube)

#### **Mobile Game**

A game played on mobile phones or portable handheld systems

#### **Game Place**

Internet(PC) Cafe(e.g., PC Room, PC Bang)
A place where people can play online games
and access the Internet

#### Arcade Hall / Game Center

A place where people can play coin-op games

**Video**(Console) **Game Room**(e.g., Playstation Room)

A place where people can play video console games

#### **Game Users**

#### **Hardcore Gamer**

A person who plays games for over 2 hours a day on average

#### **General Gamer**

A person who has played a game at least once

#### **Potential Gamer**

A person who has never played a game before but could become a casual gamer, or is a casual player who plays games for less than 30 minutes a day

#### Non-Gamer

A person who does not play any games at all

#### **Others**

#### e-Sports

e-Sports(electronic sports) are sports among a group of people in cyberspace, which stands for the entertainment industry and culture including all surrounding activities among the related subject (such as pro-gamers, game teams, game broadcasting, community activities and so on)

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Guide to Korean Game Industry and Culture

Chapter I

### **Policy and Industry**

- 1. Policy Trends in the Game Industry
- 2. 2007 Trends in the Korean Game Industry
- 3. Rating Classification for Games in Korea
- 4. Current Status of e-Sports

### **Policy Trends in the Game** Industry

In 1999, the Korean game industry was starting to make its presence felt. Prior to this, games were not yet recognized as an independent sector of the culture industry. In fact, the game policy was promoted as one of the comprehensive cultural policies involving those for youth, leisure, film, comic art, etc. Given the growth of PC games, online games, and mobile games, however, the existing arcade games started to draw attention as an independent industry sector by the latter part of 1998. In August 1998 in particular when jurisdiction over the game industry was transferred from the Ministry of Health and Welfare to the Ministry of Culture and Tourism (currently known as the Ministry of Culture, Sports, and Tourism or MCST), securing full-fledged support for the game industry commenced led by MCST as the managing authority in policymaking in cooperation with other government agencies and organizations.

In February 1999, the government began to support the game industry actively by enacting the Music, Video, and Game Software Act as the legal and policy basis of the game industry and founded the Game Promotion Center (currently known as Korea Game Industry Agency) in the same year. At the end of the 1990s when the game contents industry started to draw the public's attention with its strong, value-added growth, the government recognized the game industry as an independent industrial sector due to the difference between game contents and cultural contents (in April 2006) and established the Game Industry Promotion Act as a special law. The amendment of the law in January 2007 laid down the legal grounds for the relevant policies on the promotion and regulation of the game industry. Various policies have also been executed constantly since then.

Along with the establishment and enforcement of general plans for the promotion of the game industry, the enactment and amendment of laws and regulations aimed at promoting the game industry have laid down the legal foundation for comprehensive government support such as invigorating start-up businesses, training professionals and specialists, developing technology, pursuing cooperative R&D and standardization, establishing order in the circulation, promoting export and cooperation, helping companies advance to overseas markets, and conducting investigations. The provisions of the Game Industry Promotion Act stipulate the creation of a sound game culture, invigoration of e-sports, and establishment of the Game Rating Board to create a favorable environment for the game culture and to secure specialized game rating standards.

Amended in February 2007 in the aftermath of the 2006 Sea Story scandal (a gambling-related scandal) that rocked our society, the Game Industry Promotion Act strictly distinguishes speculative gambling activities from ordinary games. For example, it stipulates the permit system of a game provider, scope of games, prize types, etc., and contains restrictive gambling clauses that prohibit businesses of converting prizes into money or arranging for their conversion. Moreover, the Act reflects a variety of characteristics of games; it has set a standard for reserving the granting of a grade for the beta version of a game and has put in place independent review regulations to control the changes in game contents (including patches, etc.), thereby establishing itself as a law that faithfully reflects the realities. Since the early part of 1988, the government has been exerting allout efforts in various ways such as reflecting the realities and actual conditions of the ever-changing game industry and reasonably easing many regulations and restrictions related to the industry. The amendment of game-related laws and regulations is currently underway as part of such efforts.

Founded to back policy-supported projects for the game industry, Korea Game Industry Agency implements multifaceted projects in support of the infrastructure for developing games, promotion of game export, and other game-related human resources including the operation of Korea's Game Industry Total Information Service System (GITISS) in addition to the game library, technology development, policy research, and promotion of the game culture.

Above all, the Korean government periodically publishes not only the "White Paper on Korean Games" but also the "Trends in the Game Industry" as one of the support projects for the annual game-related information service and policy research. It also publishes more than 10 kinds of policy reports dealing mainly with the recent and current issues in the game industry and provides a variety of information and materials on the game industry and market analyses and on the game trends in America, Europe, China, Japan, and other countries. Such materials and reports are systematically provided online and offline at the GITISS website (www.gitiss.org) and through game library. Aside from research on the amendment of laws and regulations on the promotion of the game industry and collection of game-related disputes, a forum is operated to establish mid- and long-term strategies for the integration of broadcasting and telecommunications, international commerce and game platforms, etc. Seminars and conferences on key issues are also held to collect opinions.

The government incubated new game providers by operating start-up business support facilities from 1999 to 2006 and introduced an investment and loan service system for the development and marketing of game contents. Many programs including "Excellent Game of the Month," "Grand Korean Game Awards," "Pre-manufacturing support program for good games," "Game Scenario and Independent Game Competition," and "Special-purpose Serious Game Competition" are in place to find well-organized game contents earlier and promote the development of creative and competitive games. Furthermore, an investment support system is under construction using the in-depth evaluations of games and focusing mostly on reinforcing networks by visiting game providers and holding regular meetings aimed at strengthening communication with game providers.

Since 1998, Korean game providers have been assisted in their participation in reputable overseas game fairs and exhibits such as E3, ECTS, TGS, and GC. As a result, more than 350 game makers have advanced into foreign markets. To develop overseas markets, market exploration teams are sent to the United States, Japan, Southeast Asia, South America, East Europe, etc., in cooperation with the organizations concerned. Road shows and conferences on exports and

investments are held to explore overseas markets particularly to expand the export markets for Korean games. More specifically, an international game conference called Korea Game Conference (KGC) has been held since 2004 to give game specialists a feel of the markets and allow them to exchange information with foreign experts. In the same vein, an international game exhibit dubbed "G-Star (Game Show and Trade)" has been held annually since November 2005 to offer not only leading Korean game providers but also their large foreign counterparts a venue for business information exchange and demonstration of next-generation games. Held annually since 2001, the World Cyber Games (WCG) has been participated in by more than 20,000 people from more than 70 countries worldwide. Today, WCG is recognized as a world-class game festival.

The Game Academy was established by the government in November 2000. Managed by Korea Game Industry Agency, the Game Academy annually produces more than 250 students who are well-trained thanks to a two-year regular education course and offers a short-term re-education course for field workers. It also operates training courses on game development and marketing and education programs to produce the industry's top game programmers. Included in such programs are the development and distribution of game-related texts and teaching materials and support for game experts' overseas studies. Aside from offering operational support to local game academies (in 4 regions) and to designated game research centers in colleges (10 colleges), the government implements projects to train local game experts and reinforce the academic society's game research function.

Since its establishment in 2002 by the government, the Council for the Promotion of the Game Culture has pursued projects aimed at promoting the game culture led by Korea Game Industry Agency. In fact, it has laid down the foundation for transforming games into a kind of sound recreation culture to be enjoyed by the whole family in several ways such as game camp, game music concert, game culture campaign, etc. To prevent maladaptive behavior on game play, which has recently emerged as a social issue, government agencies continue to develop counseling systems, train professional counselors, provide the less privileged with the opportunity to experience the game culture, establish comprehensive service and counseling system for games, and conduct surveys on the game culture. Early this year, the Game Culture Foundation was established as the breeding ground for private sector-led game cultures. Today, we are pursuing change in the attitude of society toward games and activities contributing to its development.

On the other hand, we have conducted basic research such as e-sports development strategies and established plans to stabilize the operation of a system for pro-gamers and pro-teams. To make Korea the Mecca of e-sports, the international e-sports symposium has been held annually since 2006 featuring a variety of programs to expand the e-sports culture.

Aside from these support programs for the game industry based on mid- and long-term strategies, mid- and long-term plans for the development of the game industry (from 2003 to 2007) were announced in 2003 to lay down the foundation for detailed strategies and policy directions for this strategic industry. Since then, interest in the game culture has increased. An e-sports development policy (2005~2007) was announced in 2004, and an action plan for strengthening the creation of a sound game culture, disclosed a year later. Many projects designed to invigorate esports and game culture promotion policies are actively being implemented. Established in October 2005, the 2010 Game Industry Strategy Committee consists of 8 divisions (general vision, industrial promotion, training, overseas collaboration, game culture, e-sports, game technology, and law system) and 3 special subcommittees made up of a total of 100 experts in the relevant academic circles, business, non-government agencies, and institutions concerned including the government. After coming up with policies and identifying areas for improvement to promote the game industry and help Korea rank as the world's third largest game producing/consuming country, the committee released its "Executive Strategy Report 2010" in May 2006.

The consistently high growth recorded by the game industry has translated into increasing worldwide interest but worsening international competition in the game industry. In the course of technology development, emergence of a new game culture, and expansion of the need for the development of a new type of creative game contents, the Korean game industry has gotten another opportunity to take a great leap forward. This requires more specific and policy strategies, however. As the managing authority for the game industry, MCST is set to announce its new mid- and long-term policies covering the period 2008~2012 for the industry some time this year. The ministry braces itself to cope aggressively with the rapidly changing game environment, propose political directions, and execute policies to help the Korean game industry gain international competitiveness and solidify its position as a global leader.

#### **Korea Game Industry Agency's Key Projects for 2008**

#### 1. Reinforcing the ability to develop game contents

#### 1) Offering an environment conducive for the development of creative game contents

- Building the game evaluation and investment support system
- Reinforcing the ability to reinvent the game industry
- Reinforcing the ability to promote excellent game contents
- Supporting the development and export of board games

#### 2) Reinforcing the functions of game industry policies and information

- Setting up strategies and operating a council dealing with game industry policies
- Providing effective information on game industry policies

#### 2. Active international exchange and exports in the game field

#### 1) Supporting game companies in their bid to enter strategic key foreign markets

- Promoting exports to key markets and new ones
- Providing assistance in attracting investment from foreign venture capitalists
- Expanding global business matching opportunities and promotional activities in overseas markets

- Operating offices (Shanghai and Beijing) in China
- Expanding overseas collaborative networks
- Assisting participants in arcade exhibits

#### 2) Promoting international exchange in the game industry

- Holding the international game conference (KGC)
- Holding the G-Star (Game Show and Trade)
- Operating a Korean PR booth in the German Game Convention

#### 3. Reinforcing the supporting infrastructure for the game industry

- Operating GITISS (Game Industry Total Information Service System)
- Operating the Internet Data Center
- Operating the game library

#### 4. Producing experts in the game field

#### 1) Operating the Game Academy

- Training field workers through regular training courses
- Expanding re-education programs for those involved in the game industry

#### 2) Expanding industry-academe programs to produce experts

- Supporting the operation of a local Game Academy
- Operating overseas training programs for game experts
- Designing global training courses to improve creativity
- Executing industry-academe projects

#### 3) Operating game-related distance learning systems

- Developing contents for distance education
- Managing distance learning system courses

#### 5. Helping promote sound games

- Operating a game ombudsman system
- Supporting the operation of a computer game addiction counseling center

#### 6. Providing support to invigorate e-sports

- Holding a national e-sports competition for disabled students
- Holding a national amateur e-sports competition

#### 7. Projects aimed at sharing game cultures

- Operating a game culture class
- Holding a Korean game culture festival
- Improving the leisure culture for the less privileged through sound games
- Developing a 'KOGIA Game Cognition & Behavior Model'

#### 8. Strengthening the global leadership of Korean games

- Introducing global online game awards
- Creating a free market for global online games

### 2007 Trends in the Korean **Game Industry**

In 2007, the Korean game market shrank by 30.9% compared to the previous year's KRW 5,143.6 billion. Online and video games recorded huge sales increases last year, however. The online game market expanded by at least 26% compared to 2006, reaching KRW 2,240.3 billion. The video game market grew by an astounding 208% to KRW 420.1 billion. Sales of mobile games also rose by 5% to KRW 251.8 billion, and PC games, by 33% to KRW 35 billion. In contrast, arcade games plummeted by 95% compared to the previous year, recording sales of only KRW 35.2 billion. Indeed, the biggest stunner in the consumer market was the collapse of arcade games. Sales in the arcade hall decreased by at least 98% compared to the previous year. Meanwhile, sales at internet cafes and video game rooms rose by 11.6% and 6.2%, respectively, compared to those of the previous year.

#### 1. Expanded Growth of Online Games: Globalization, More M&A Activities

Online games got the lion's share in the domestic game market both in 2006 and 2007. According to the 2007 survey, the online game market was valued at KRW 2.24 trillion or 43.5% of the total market volume of KRW 5.14 trillion. It has also held on to its position as the most important sector in the relevant production and distribution markets since 2003. Exports in the same year stood at USD 0.75 billion, growing by 24.4% compared to the previous year. The government's continued investments in high-speed networks and policies in support of the game industry are credited for such growth. Moreover, the efforts made by Korean game developers since the early 2000s began to bear fruit in 2005. This online game sector is currently dominating both the domestic and foreign markets, making up 95.5% of the total game exports.

Aside from the successful expansion to foreign markets, another key feature of the 2007 online game industry is the rapid manner by which business environments have gone global. As seen in EA's investment of USD 0.1 billion in Neowiz, large overseas publishers continue to enter Korea. At the same time, major local companies are continuously importing games developed by large overseas companies. Partnerships being forged between Korean game business enterprises and those from China, Japan, and America are also on the rise. We can take these developments to mean that the world recognizes the local online game industry's technical strength.

The year 2008 saw the full-fledge increase in the number of M&A transactions in the industry. For example, T3 Entertainment took over HanbitSoft, and NHN, Webzen via NHN Games. Such M&A activities in the industry are expected to be resorted to more actively as a kind of strategy for gaining competitiveness through the economy of scale.

Meanwhile, the continued popularity of the FPS genre in 2007 following the trend in 2006 was ensured with massive FPS game releases. Hyosung CTX released Landmass®, with Neowiz introducing AVA®. HanbitSoft's TAKEDOWN, NTREEV Soft's Black Shot, and NHN's WolfTeam also competed actively in the market. Still, they were no match for Special Force or Sudden Attack, considered the centerpieces of the early market. With FPS products enjoying immense popularity, the production of MMORPG, a large-scale game product accounting for a large portion of online games, increased compared to the previous year. Unfortunately, the laudable efforts by the MMORPG genre game providers did not translate into a favorable market response. As such, few games were simultaneously played by more than 20,000 users.

Similar to the RPG game, which developed the online game market in its early stage, the emergence of products offering new popular genres such as the causal and FPS games is translating into more online game users. In fact, the entire age range of those playing games has widened from adolescents and people in their 20s to those in their 30s and 40s, women, and even children. We expect the domestic online game industry to record continued growth by banking on the solid user base of all age brackets.

#### 2. Deceleration of Arcade Games: Sharp Market Shrinkage Due to Stiffer Regulations

In 2007, the arcade game market decelerated further due to the stricter regulations imposed by the government in response to the mushrooming of gambling game centers such as "Sea Story" across the country. In fact, the entire market for arcade games rapidly shrank; sales of arcade halls plummeted 98.1% to KRW 51.8 billion. Arcade games also recorded a 95.5% drop in sales (KRW 35.2 billion) compared to 2006.

Worst of all, the failure to introduce an independent classification system for adult arcade game genre products forced most of the adult game centers to either close down or shift to other businesses. Developers and distributors of adult games either went bankrupt or closed down as well. Thus, a chronic, painful depression swept the arcade game markets in 2007. Currently, only a few companies that develop and distribute arcade games for adults are barely surviving.

Given the increasing difficulty in operating adult game businesses due to the tougher regulations imposed on arcade games, enlargement or conversion into multiplex centers led by adult game centers is underway in an attempt to shake off such stagnation. Still, the supply of new game equipment is anything but smooth; thus hampering efforts by adult game centers to improve their business profitability.

The arcade game and arcade halls(centers) are likely to try converting into multi-business game providers who will operate simultaneously entertainment facilities, karaoke, or restaurant business as a way out of dire straits. On the other hand, the market for arcade games is expected to return

gradually to normal in the future backed by the government's will to foster it.

#### 3. Huge Growth of Video Games: Boom of Nintendo Game

Although the Korean video game market has dramatically grown for two years since its birth in 2002, its growth slowed down slightly in 2004. It got back on track in 2005, thanks to the aggressive introduction of portable games in the market. After falling into a slump again in 2006, the market size tripled in 2007 compared to the previous year with the release of Nintendo DS. Actually, the domestic market of video games in 2007 increased by KRW 200 billion to KRW 420.1 billion, surpassing its all-time best sales performance in 2003. The increased popularity of Nintendo DS resulting in the sale of 1 million hardware and 2.2 million software until the end of the previous year was responsible for such huge growth.

Looking back at the videogame console sales, we can see how PS2 sales increased by 20% from 0.1 million units in 2006 to 0.12 million units in 2007. Xbox360 also recorded 25% more sales compared to the previous year with 0.1 million units. In addition, 35 thousand units of the PS3 released in the domestic market last year were sold. Sales of PSP also increased by 50% from 0.1 million units in 2006 to 0.15 million units in 2007.

Nonetheless, we expect the release of Nintendo Wii in the local market in 2008 to intensify the competition further among next-generation consoles including MS Xbox360, Sony PS3, and Nintendo itself. Given the common characteristic of these next-generation consoles with online functions, however, domestic developers with competitive edge in online game technology and know-how will have more opportunities. The domestic video game market for 2008 is also forecasted to record a 51% increase in continuation of its success story in 2007 through the domestic developers' active exploration of the production market and expansion of the consumer market.

After recording a low growth in 2007 compared to that of 2006, the video game rooms' market is hardly making its presence felt with sales of less than KRW 30 billion. The market of video game room has been sluggish because distributors sell videogame consoles only for use at home, not for commercial use unlike the internet cafes. The domestic market is also centered on online games.

#### 4. Mobile Game's Steady, Slow Growth

In contrast to its rapid growth in the early stages, the mobile game market recorded steady, slow growth during the period 2004~2006. Sales of domestic mobile games rose by 5.4% to KRW 251.8 billion. Meanwhile, the phenomenon of top companies dominating the market persisted. While the sales of large companies including Com2us, which was listed in the stock market last year, Nexon Mobile, and Gamevil rose gradually, the number of closures of small and mediumsized companies skyrocketed. The market entries and ensuing expansions of handheld game consoles such as NDS were behind such sudden restructuring of the market.

The changes in the publishing environment make for one of the key features characterizing the 2007 status of mobile games. With mobile carrier-specific publishers sprouting in the market, more developers preferred releasing games via the publisher to releasing them directly since they gain more leeway in their development schedules.

The most serious issue currently facing mobile game providers is the shrinking consumer market. Since 2004, the major target consumers of mobile games have been middle and high school students. Understandably, more than 95% of the released games have been produced for middle and high school students. While more than 90% stop playing mobile games upon graduating, the ratio of the students who begin to play them is less than 30%; hence the rapid shrinking of the consumer market.

In terms of the fee system, the number of cases where fees apply only to some parts of the games is gradually increasing. Such fee system is a kind of service designed to allow users to select and purchase only the functions that they think are necessary in the course of playing the game. In the future, the profit model types of mobile games will be more diversified.

Although recording a huge increase in 2006, exports of domestic mobile games decreased last year. The large CP-led development of overseas markets contributed to exports to some degree. With the degree of expansion of the domestic and overseas mobile market falling short of expectations, the increase in domestic consumption and export was limited. In particular, the domestic mobile game market was constructed such that users pay both the contents service fee and line charge. Thus, the increased burden of cost borne by the users as a result of the change of games going large-scale is hampering market expansion. Despite such unfavorable situation, we expect the mobile game sector to continue its steady growth in 2007 considering some positive factors such as the government's policy of opening up the wireless network market, the introduction of new services including SNS (Social Networking Service), the development of new profit sources including an item shop, the steady introduction of various fee-related options, and the expansion of WiBro services.

#### 5. PC Package Games' Low Growth, Market Size Still at the Negligible Level

Although the PC package game market had continuously declined since 2000, it began to grow in 2007. Market size as of 2007 reached KRW 35 billion, increasing by 33% compared to the previous year. Meanwhile, most of the domestic PC game developers switched to online game sectors because of the illegal reproduction of the games and barely kept their businesses alive in limited areas such as military simulation games or those targeting children. Therefore, PC games will likely remain sluggish for a while if efforts such as penetration of a niche market by providing PC games that are different from other platforms to users who prefer PC games but want something new and development of new systems are not made.

#### 6. 16.2% Increase in Export Led by Online Games

The export of domestic games in 2007 was USD 781 million or double the amount of imported games (USD 389.55 million), increasing by 16.2% compared to 2006. With online games making up 95.5% of the total export in 2007, the tendency of the online games leading the export has intensified. Japan and China were the main export markets, accounting for 62% of the total export. In the future, the export of domestic games is expected to continue recording a two-digit growth rate.

### **Rating Classification for Games in Korea**

In Korea, games currently have to be previewed and assigned relevant ratings prior to their distribution by the Game Rating Board (GRB) as per Game Industry Promotion Act (Game Act). GRB was established pursuant to the Game Act enacted in October 2006. Prior to GRB's establishment, however, the Video Rating Board used to preview the games.

#### 1. Rating Classification for Online PC Games

Online PC games are classified into two: those provided through the Internet or other communication facilities and game-on-demand (GOD) products and PC package games that can be played using either CDs or programs downloaded from networks. In providing rating services, however, GRB classifies both as Online PC games.

PC games refer to those circulated through sale, distribution, or rental transactions in devices storing game contents including visual information such as CDs or DVDs.

Online games pertain to those types of games played by connecting to a relevant server computer via wired or wireless networks. Examples include those games wherein one user plays together with other users who are connected to the common server computer via a communication network at the time he/she plays the games. Here, the media (network distribution, conventional CD or DVD-ROM) originally provided is not used at the time of circulation. Unlike arcade or video games, these online games are subject to GRB preview even if they have yet to be commercialized at the time of preview.

Pursuant to the Game Act, game producers or distributors must report to GRB any and all modifications or updates (excluding corrections of technical defects or other errors) of the contents of online games at least 7 days prior to their provision. GRB shall then review the reports and take appropriate actions if it finds anything deemed to affect the previously assigned ratings in the course of the review. This is to ensure that game producers or developers submit those games for review again.

The following describes the applications for online PC game ratings and finally assigned ratings as of 2007:

< Table 1-1> Ratings Applied for & Finally Assigned Ratings for Online PC Games in 2007

Classification	Rating Applied for	Assigned Rating
Everyone	905	815
Aged 12 and above	76	117
Aged 15 and above	142	127
Adult only	902	619
Total	2,025	1,678
Rating application rejected	_	359

A total of 2,025 rating applications for PC online games were filed in 2007. In the same year, games assigned ratings or whose rating application was rejected numbered 2,037. The number of applications differed from the number of cases handled because the applications filed at the end of 2006 were processed at the same time as those filed in 2007. 815 or 90% of the 905 applying for the "everyone" rating were finally rated as such; the remaining 10% were assigned other ratings. Only 76 applied for the "aged 12 and above" rating, but 117 games were rated as such. This was because some of those applying for the "everyone" rating were classified as those belonging to the next level considering the strict screening for ratings. Out of the 142 games applying for the "aged 15 and above" rating, only 127 were finally rated as such. A total of 902 applied for the "adult only" rating, but only 619 were rated as such; the rating applications of the rest were rejected. Most of the PC online games whose rating applications were rejected were web board games. 359 out of the 2,037 rating applications were rejected, for a rejection rate of 17.6%.

< Table 1-2> Rating Status of Online PC Games by Genre in 2007

Genre	Number of Cases
Action	171
Shooting (FPS)	91
Adventure	36
Role Playing	237
Sports	129
Simulation(strategy/management)	67
Casual	169
Puzzle	212
Board	549
Edutainment	17
Total	1,678

In terms of the rating status of online PC games by genre in 2007, web board games got the lion's share with 549 out of a total of 1,678 games. Role playing games came next with 237 cases, followed by puzzle games with 212 cases.

#### 2. Rating Classification for Mobile Games

There are two kinds of mobile games: one requires the use of portable game devices such as mobile phone, PDA, and PMP where a downloaded client program runs; the other is the networktype mobile game that requires access to the network. In assigning ratings, the Game Rating Board categorizes both of these types as mobile games.

Since the playing time for mobile games is usually short, and players' preference changes rapidly, many of the rating applications covered games that were simple and easy and were played for a relatively short period of time.

The rating applications of mobile games involving gifts, nonexistence of a limit on the money to be transferred, or excessively high monthly rate are usually rejected by GRB.

< Table 1-3> Ratings Applied for & Finally Assigned Ratings for Mobile Games in 2007

Classification	Rating Applied for	Assigned Rating
Everyone	709	640
Aged 12 and above	19	65
Aged 15 and above	12	18
Adult only	191	198
Total	931	921
Rating application rejected	_	5

In 2007, mobile games took the second spot with 931 rating applications or 24.5% of 3,804 games next to PC online games. Games belonging to this genre are usually rated "everyone" and "adult only."

Most of the rating applications in this games (709 cases) targeted "everyone," followed by "adult only" with 191 applications.

<Table 1-4> Rating Status of Mobile Games by Genre in 2007

Genre	Number of Cases
Action	121
Shooting (FPS)	25
Adventure	25
Role Playing	84
Sports	94
Simulation(strategy/management)	89
Casual	156
Puzzle	101
Board	217
Edutainment	9
Total	921

In terms of the rating status of mobile games by genre, web board games accounted for the biggest share with 217 cases or 23.6% of a total of 921 games rated. Casual and action games came next with 156 and 121 cases, respectively. Although there were very few cases of rating applications, edutainment games were assigned ratings in 9 cases.

#### 3. Rating Classification for Arcade Games

In general, arcade game refers to the game provided at arcade halls(centers). After inserting coins, users play using buttons, joy sticks, touch methods, or body sensing methods.

Rating applications covering arcade games in 2007 numbered 351, accounting for 9.2% of a total of 3,804 applications. This was the lowest application rate among game platforms.

Whereas other game platforms are classified into four kinds of ratings, arcade games are classified into two: "everyone" and "adult only."

< Table 1-5> Arcade Game Ratings by Year

Classification	2004	2005	2006	2007
Adult only	1,085	1,335	1	1
Everyone	169	124	21	192

2007 was undoubtedly a difficult year for the arcade game business, what with the Game Act stipulating more restrictive measures on gambling games. In principle, the offering of gifts as prizes is prohibited. For games rated "everyone," the Game Act allows gifts worth less than KRW 5,000 to be drawn through gift dispensers.

For games rated "adult only," however, GRB defers decision making on ratings amid worries that such move may promote gambling activities.

#### 4. Rating Classification for Video (console) Games

Video games are those played by connecting the game console to the TV or monitor at home. They include home video games (consoles) such as Play Station 1, 2, 3, X-BOX, X-BOX360, Game Cube, and Nintendo Wii and handheld game consoles such as Play Station Portable (PSP), Game Boy Advance (GBA), and Nintendo DS.

< Table 1-6> Ratings Applied for & Finally Assigned Ratings for Video Games in 2007

Classification	Rating Applied for	Assigned Rating
Everyone	302	265
Aged 12 and above	109	112
Aged 15 and above	40	53
Adult only	46	59
Total	497	489
Rating application rejected	_	4

In 2007, video games covered 497 applications or 13.1% of a total of 3,804 cases. Applications for the "everyone" rating topped the list with 302, followed by 109 applications for the "aged 12 and above" rating. In terms of the results of rating assignments, the "everyone" rating was no. 1 with 265 cases followed by the "aged 12 and above" rating with 112 cases.

< Table 1-7> Rating Status of Video Games by Genre in 2007

Genre	Number of Cases
Action	167
Shooting (FPS)	54
Adventure	23
Role Playing	42
Sports	107
Simulation(strategy/management)	38
Casual	10
Puzzle	34
Board	6
Edutainment	8
Total	489

The table above shows that action games accounted for the biggest share with 167 of a total of 489 games rated, followed by sports games with 107 cases.

< Table 1-8> Rating Status of Video Games by Console in 2007

Console	Number of Cases
Nintendo DS(NDS)	68
Playstation2 (PS2)	43
Playstation3 (PS3)	99
Playstation Portable (PSP)	130
X-BOX360	134
XaviX	9
Game Boy Advance (GBA)	3
Others	3
Total	489

Based on the videogame console shown in the table above, X-BOX360 accounted for the biggest share with 134 out of a total of 489 games rated followed by PSP with 130 cases.

## **Current Status of e-Sports**

#### 1. Current Status of e-Sports in Korea

The relaunch of the Korea e-Sports Association (KeSPA) in 2005 under a new leadership, company-sponsored operation of sports teams, and cooperation between the private and public sectors; all these have helped e-Sports develop rapidly. South Korea's status as the cradle of esports has also been enhanced by the various international game tournaments sponsored by the country. In fact, these have played a key role in the internationalization of e-sports. Meanwhile, professional gamers, professional game teams, and broadcasting companies as well as the relevant associations and organizations have actively done their part in such development. More than a hundred official and non-official e-sports tournaments are held throughout the country every year, hosted by various entities such as local governments, universities, and companies.

#### 1) Professional Gamer

E-sports draw a lot of attention from various media and teenagers. They have gained acceptance as a kind of sports. Professional gamers greatly influence e-sports; they generally refer to persons engaged in a job that generates profit either directly or indirectly through participation in competitions using game products. Although professional gamers are popular among teenagers, the profession itself is generally considered to lack stability. In fact, according to some surveys of existing professional gamers, military service is their biggest worry. Since the average age of professional gamers is around 20, serving in the army at a time when they are supposed to play actively as professional gamers usually means quitting their jobs.

To address this problem, the Korean Air Force has been recruiting professional gamers specializing in computer programming as soldiers for the game team it has been managing since 2007. Last year, the Air Force created its 12th professional game team by recruiting five professional gamers. Today, the team has grown to 10 players. The air force game team promotes the Air Force itself to the general public by participating in e-sports game leagues and develops war games using professional gamers. In short, the Air Force has helped address professional gamers' military service problem and reaped positive effects at the same time.

Becoming a professional gamer entails meeting certain qualifications such as winning a prize

in an official contest and going through the process of "semi-professional gamer → professional gamer" (see Table 1-9).

< Table 1-9> Qualification Standards for Professional Gamers of KeSPA

Qualification	Requirements
	A player who has won officially recognized game contests more than
Professional gamer	two consecutive times in one year and completed a training course for
i Tolessional gamei	professional gamers; he/she was also registered as an official
	professional gamer
	A player who has won officially recognized game contests more than
Clinible for you introduce on professional groups	two consecutive times in one year but has yet to be registered as an
Eligible for registration as professional gamer	official professional gamer because he/she has yet to complete an
	education program for professional gamers
Comi munfaccional manage	A player who has won an official game contest at least once but who is
Semi-professional gamer	not eligible for registration as a professional gamer

The number of professional gamers registered with KeSPA rose by 19.3 % from 311 at the end of 2006 to 371 as of the first half of 2007. Credit for such increase goes to the growing number of professional gamers in the e-sports launched by Korean companies, e.g., Special Force. Another contributing factor was the registration of professional gamers who meet the requirements by winning prizes in contests such as the "National Amateur e-Sports Tournament."

< Table 1-10 > Number of Professional Gamers by Year

Year	Number of Professional Gamers		
i eai	Registered	Canceled	Total
2001	131	_	131
2002	63	-	194
2003	36	58	172
2004	73	26	219
First half of 2005	32	11	240
Second half of 2005	21	24	237
First half of 2006	61	18	280
Second half of 2006	53	22	311
First half of 2007	70	10	371

<sup>\*</sup> Source: KeSPA

The ages of professional gamers range from 15 to 30, with early 20s as the average. Professional gamers make money through the annual salary, prize money, and other revenues, although the annual salary and prize money are the main sources of income; the income from corporate events, commercials, and guestings in broadcasting programs is minimal. Note, however, that companies have started operating teams in response to the growing attention given to e-sports. Many professional league contests have also begun to be held. Both of these developments are driving up the income of professional gamers.

#### 2) Professional Game Teams

Professional game teams have been transforming drastically alongside the growth of e-sports. In general, a professional game team refers to an organization that scouts, trains, and supports professional gamers to promote its sponsor company and to win the prize money in various tournaments. As a rule, a professional game team should have a team logo and an exclusive practice room managed by more than one director or manager and at least two professional gamers.

Cognizant of the economic effects of e-sports, big Korean companies have taken over many professional game teams since 2006. As a result, 12 teams (including the Air Force's ACE) have been participating in the professional league tournament and enjoying stable financial support from their companies since 2007. With more big companies expected to participate in e-sports, we expect the industry to grow rapidly. While existing professional game teams have been centered on StarCraft, new teams for new games are being created in keeping with the diversification trend in domestic games. For example, professional game teams including "i-bank" are being operated for Special Force, the game boasting of the biggest participation among the local e-sports games. An official "Special Force" league consisting of 3~4 teams is slated to be launched in the second half of 2008.

< Table 1-11> Current Status of Professional Game Teams for "StarCraft"

Support Company	Name of Team	Date Established	Professional Gamers
KTF	MagicNs	December 1999	T (9), Z (9), P (7)
Samsung Electronics	KHAN	June 2000	T (7), Z (10), P (4)
HanbitSoft	STARS	May 2001	T (9), Z (6), P (6)
SKT	T1	April 2004	T (8), Z (9), P (7)
MBC Game	HERO	March 2006	T (6), Z (7), P (5)
Lecaf	OZ	March 2006	T (7), Z (9), P (5)
CJ	ENTUS	April 2006	T (6), Z (10), P (2)
OnGameNet	SPARKYZ	June 2006	T (7), Z (9), P (6)
IEG	eSTRO	October 2006	T (10), Z (8), P (4)
Air Force	ACE	April 2007	T (3), Z (4), P (3)
STX	Soul	June 2007	T (5), Z (8), P (4)
WeMade Entertainment	FOX	September 2007	T (8), Z (6), P (4)

<sup>\*</sup> T stands for Terran, Z, for Zerg, and P, for Protos.

#### 3) Game Media

Until e-sports were accepted as a new type of sport and institutionalized as part of culture, media had played the important role of creating an "audience" as an essential element of e-sports. For instance, the StarCraft professional league held in Gwangalli Beach, Busan every year attracted a crowd of 100,000 in 2004, 120,000 in 2005, and 100,000 in 2006. Thus, we can safely say that a crowd of about 100,000 gather every year to enjoy e-sports as a festival activity. This only goes to show that the media sector, by carrying out promotional activities such as broadcasting, has helped make e-sports part of the culture code among the youth in the 21st century.

Cable channels such as OnGameNet and MBC Game have propelled the recent rapid growth of the game broadcasting industry. Today, Gom TV is very popular; it broadcasts quality programs such as "Professional League," "Star League," and "Super Fight."

Introduced for the first time in 2007, the sale of the right to broadcast e-sports tournaments has emerged as another business model for the e-sports industry. E-sports are not just about games; they also create new added value by combining broadcasting and media. Unfortunately, broadcasting via Networks is difficult since e-sports have yet to be recognized as official athletic events. As such, exposing sponsors' logos or running an advertisement even indirectly during the broadcasting time is prohibited.

< Table 1-12> Current Status of e-Sports-Related Media

Туре	Company	Activities
Network TV	SBS	- Runs programs (Game Show, Joyful World)
Cable Channel	OnGameNet	<ul><li>Provides game-related programs 24 hours a day</li><li>Broadcasts, reviews, and previews e-sports games</li></ul>
Cable Charmer	MBC Game	<ul><li>Provides game-related programs 24 hours a day</li><li>Broadcasts, reviews, and previews e-sports games</li></ul>
	Gom TV	- Produces and broadcasts e-sports leagues
Internet TV	Pandora TV	- Broadcasts e-sports leagues
internet i v	Hana TV	- Provides VOD service related to e-sports leagues
	Mega TV	- Provides VOD service related to e-sports leagues
Internet Portal	Daum	<ul><li>Broadcasts e-sports leagues</li><li>Provides news on e-sports tournaments</li></ul>
	Naver	<ul><li>Broadcasts e-sports leagues</li><li>Provides news on e-sports tournaments</li></ul>
Satellite	TU Media	- Broadcasts e-sports leagues

#### 4) Game Tournaments

E-sports contests in Korea were launched centered on StarCraft. Despite the diversification of games into areas such as casual games, online games, and video games, StarCraft remains the force to reckon with among contests.

The e-sports contests held in Korea consist of official and non-official ones. Official contests are those open to the media, whereas the non-official ones are held by e-sports communities on the Internet such as cafes or guilds; since they are not open to the media or the press, keeping track of the exact number of non-official events is proving to be a challenge.

Official contests are classified into two types: professional and amateur. To be recognized as official, the event should be registered with the Korea e-Sports Association following certain procedures. Team-to-team and individual-to-individual competitions in the professional league contest are recognized as official; ditto for contests wherein one can earn the status of semiprofessional gamer.

The official contests held by broadcasting companies include those operated by OnGameNet, a cable TV program provider, and MBC Game. StarCraft-related leagues include the individual leagues hosted by OnGameNet and MBC Game and Shinhan Bank Professional League, both of which are supported by big companies. Moreover, contests are being held not only for StarCraft but also for games developed in Korea such as Kart Rider, Special Force, and Sudden Attack.

<Table 1-13> e-Sports Contests by Year

Year	1999	2000	2001	2002	2003	2004	2005	2006	First Half of 2007
Frequency	72	82	93	187	144	98	278	124	70
Prize Money(KRW bil)	1.5	2	3	3.5	4	4.5	5	3.3	1.8

<sup>\*</sup> Source: KeSPA

#### 2. Prospects of e-Sports in Korea

We expect the Korean e-sports market to grow continuously given the increase in the number of e-sports fans particularly teenagers and those in their 20s. Since students mostly make up the fan base for e-sports, the e-sports investment will most likely expand 5~10 years from now when students will have gained economic power. In other words, not only will today's fans spend more on e-sports; the importance of e-sports as effective marketing tools targeting fans will also grow as their economic power and spending increase.

Another factor driving the sharp increase in the market size is the likelihood of changes taking place in the profit-generation structures. Considering the continued increase in popularity of esports, we expect some events to attract viewers who are willing to pay admission fees. Even so, applying admission fees to contents that used to be free may elicit negative responses from viewers. Still, baduk or online music proves that the shift can be carried out successfully. Although still in the early stage, the marketing of e-sports items (e.g., peripheral devices such as mouse or headset) through sponsors is expected to expand. With the purchasing power of e-sports fans increasing over time, we can expect the emergence of corporate sponsors across all industries and substantial increase in sales.

Meanwhile, although the broadcasting fees for e-sports are minimal compared to other sports, profits can be generated by allowing the broadcasting of events through television or Internet as in other professional sports. In particular, the advertisement charge for live broadcasting of the events online and on television will most likely increase.

# 2008 White Paper on Korean Games

Guide to Korean Game Industry and Culture

Chapter II

### **Market Focus**

- 1. Market and Industry
- 2. Internet Cafes

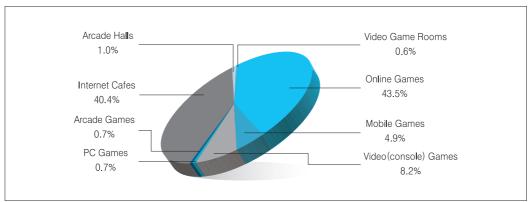
# **Market and Industry**

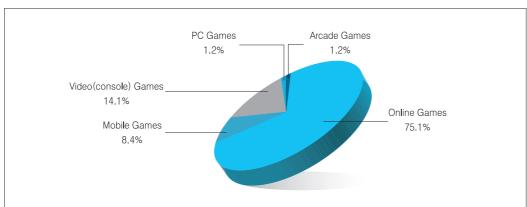
< Table 2-1> Analysis of Korea's Game Market as of 2007

Division	Revenue (KRW billion)	Market Share		
Online Games	2,240.3	43.5%		
Mobile Games	251.8	4.9%		
Video (console) Games	420.1	8.2%		
PC Games	35.0	0.7%		
Arcade Games	35.2	0.7%		
Internet Cafes	2,080.1	40.4%		
Arcade Halls	51.8	1.0%		
Video Game Rooms	29.3	0.6%		
Total	5,143.6	100.0%		

<sup>\*</sup> USD/KRW = 929.2 (annual average exchange rate in 2007)

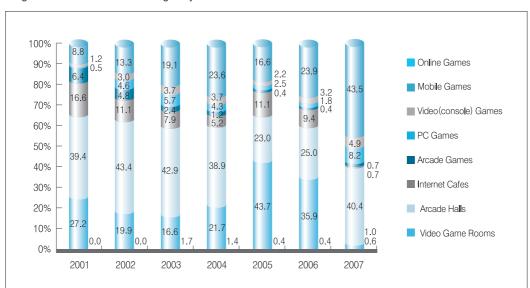
<Figure 2-1> 2007 Market Share by Revenue





<Figure 2-2> 2007 Platform Market Share by Revenue

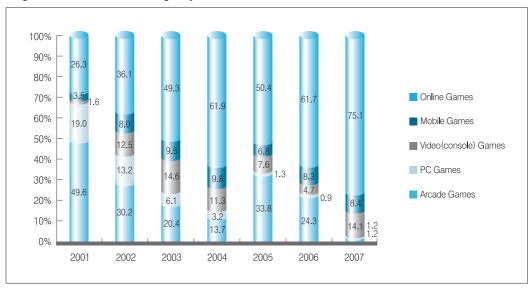
Korea's game market for 2007 was valued at KRW 5,143.6 billion (USD 5.54 billion). In particular, online games captured a market share of 43.5 percent and accounted for 75.1 percent or three fourths of the total game production and distribution industry market of 5 game platforms. While the games market in 2007 shrank by 30.9 percent compared to 2006, the games production and distribution industry market increased by 3.6 percent. Such drastic reduction of market size was attributed to the "Sea Story" scandal, a social issue that emerged in the speculative game markets covered by the game "Sea Story" and swept Korea; more specifically, the arcade game market for adults was not assessed, thereby collapsing after the Sea Story scandal.



< Figure 2-3> Market Share Changes by Field in the Entire Game Market from 2001 to 2007

By looking at the annual market share in the Korean games market, we can see that the market was completely reorganized at the center of online games as the most significant change in 2007. Fields related to online games such as those in the production and distribution market and Internet cafes in the retail market accounted for 84 percent of the entire market. The reorganization was the result of the drastic decrease in arcade games. Although Arcade Halls and arcade games made up 35.9 percent and 9.4 percent, respectively, of the entire market in 2006, their market shares shrank considerably to 1.0 percent and 0.7 percent, respectively. One of the most noticeable changes occurred in 2007 is that the market share of the video game industry, which has reached its peak in 2003 and decreased until 2006, has increased to 8.2%. This is 4.5 times greater than the last year.

This was attributed to the rapid distribution of Nintendo DS in Korea last year.



< Figure 2-4> Market Share Changes by Game Platform from 2001 to 2007

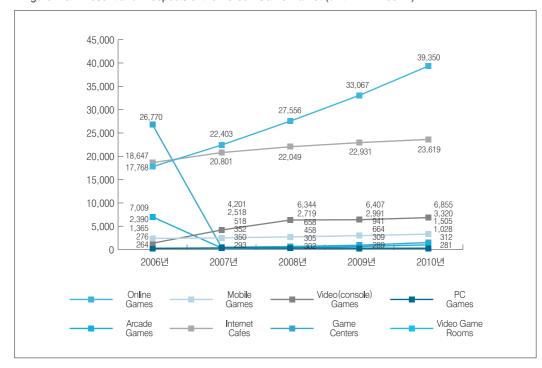
By looking at the annual trends in the market share by game platform, we can see that the online games tend to have expanded the market share except in 2005 when arcade games were predominant. In 2007, the Korean game market was particularly inclined to online games in the Korean game market. In fact, online games reached three fourths of the total number of platforms. On the other hand, the market share of the arcade games in 2007 is only 1.2% and this was significantly lower than already the record low 13.7% in 2003. Having shown steady increase until 2004, mobile games shrank slightly in 2005 and posted a slight increase in 2006 and 2007.

< Table 2-2> Present and Prospects of the Korean Game Market from 2006 to 2010 (unit: KRW bil)

Divi	sion	Online Games	Mobile Games	Video (console) Games	PC Games	Arcade Games	Internet Cafes	Arcade Halls	Video Game Rooms	Total
2006	Amount	1,776.8	239.0	136.5	26.4	700.9	1,864.7	2,677.0	27.6	7,448.9
2007	Amount	2,240.3	251.8	420.1	35.0	35.2	2,080.1	51.8	29.3	5,143.6
	Growth Rate	26.1%	5.4%	207.8%	32.6%	-95.0%	11.6%	-98.1%	6.2%	-30.9%
2008(E)	Amount	2,755.6	271.9	634.4	30.5	45.8	2,204.9	65.8	30.2	6,039.1
	Growth Rate	23.0%	8.0%	51.0%	-12.9%	30.1%	6.0%	27.0%	3.1%	17.4%
2009(E)	Amount	3,306.7	299.1	640.7	28.9	66.4	2,293.1	94.1	30.9	6,759.9
	Growth Rate	20.0%	10.0%	1.0%	-5.2%	45.0%	4.0%	43.0%	2.3%	11.9%
2010(E)	Amount	3,935.0	332.0	685.5	28.1	102.8	2,361.9	150.5	31.2	7,627.0
	Growth Rate	19.0%	11.0%	7.0%	-2.8%	54.8%	3.0%	59.9%	1.0%	12.8%

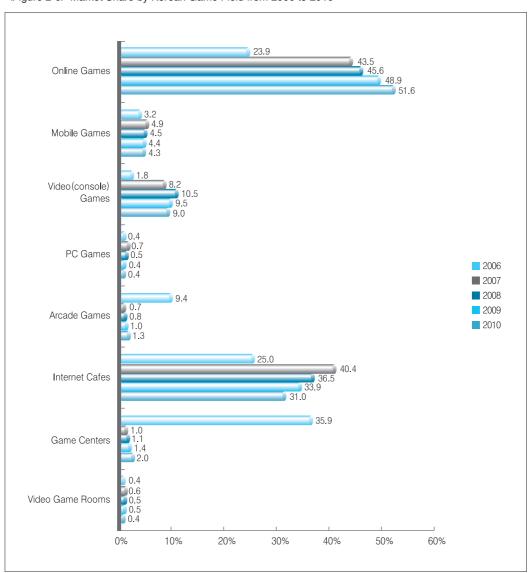
2006: USD/KRW = 954.97 (average exchange rate as of 2006) Since 2007: USD/KRW = 929.2 (average exchange rate as of 2007)

< Figure 2-5> Present and Prospects of the Korean Game Market (unit: KRW 100mil)



By 2008, the Korean game market is expected to increase by 17.4 percent to KRW 6,039.1 billion compared to this year. This is based on the assumption that online games and video games will continue to grow, and that arcade games and arcade halls will bounce back in the beginning 2008. Even after 2009, the Korean game market is forecasted to record a two-digit growth rate to reach KRW 6,759.9 billion in 2009 and KRW 7,627.0 billion in 2010. In the future, fields expected to lead such growth include online games and video games. The average annual growth rate for the 2006~2010 period will reach 22.0% and 49.7%.

< Figure 2-6> Market Share by Korean Game Field from 2006 to 2010

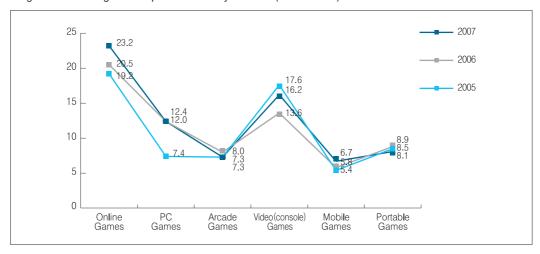


< Table 2-3> Exports and Imports in the Korean Game Industry from 2001 to 2009 (unit: USD mil)

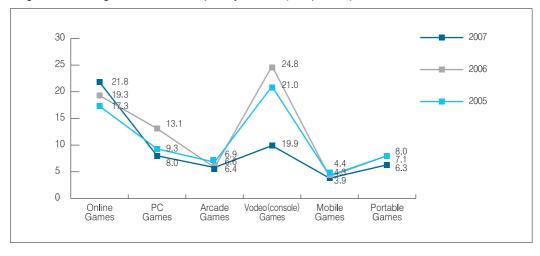
Year	2001	2002	2003	2004	2005	2006	2007	2008 (E)	2009 (E)
Exports	130.47	140.80	172.74	387.69	564.66	671.99	781.00	898.16	1,050.84
Imports	65.34	160.96	166.45	205.11	232.92	207.56	389.55	428.50	462.78

In 2007, Korean game exports were USD 781 million or double the imports (USD 389.55 million).

<Figure 2-7> Average Development Period by Platform (unit: months)

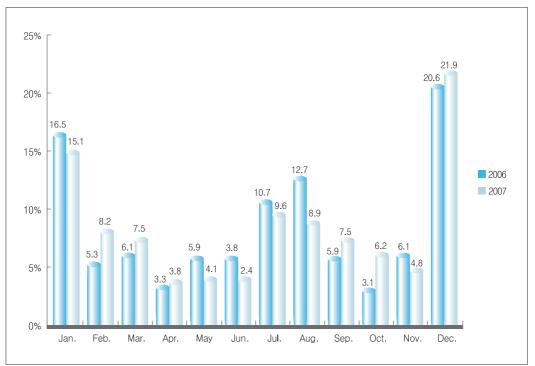


<Figure 2-8> Average Number of Developers by Platform (unit: persons)

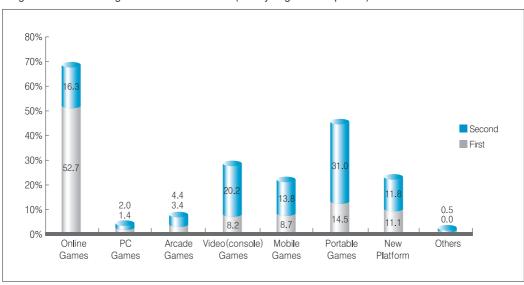


In terms of the average period of development by game platform, the development of online games takes the longest at 23.2 months. On the other hand, the average development period of video games, PC games, portable games, arcade games, and mobile games were 16.2 months, 12.4, 8.1, 7.3, and 6.7, respectively. With respect to the average number of developers, that of online game developers was the largest with 21.8. Developers of video games and PC games numbered 19.9 and 8.0, respectively, on the average.



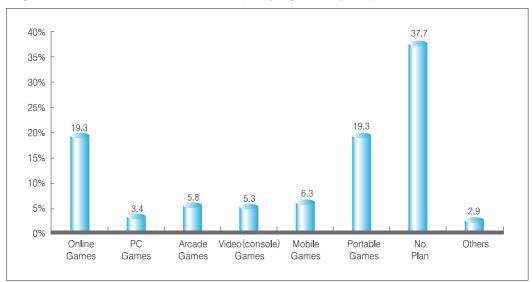


In terms of the monthly game sales in 2006 and 2007, game sales were highest in December and January. Producing and launching new games are helpful in revenues and sales when kids and young people start their winter vacation. Although game sales were relatively high even in July and August during the summer vacation, fewer games were found to have been sold unlike during the winter vacation when people prefer indoor activities.

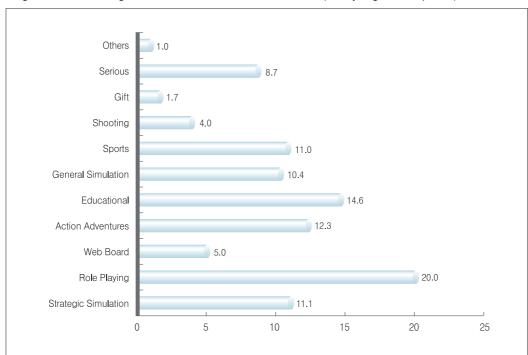


<Figure 2-10> Promising Platforms in the Future (survey of game companies)





As game platforms with high investment and growth potential, Korean game makers selected online games, followed by portable games and newplatform games. Also, online games and portable games were cited by 19.3 percent of the respondents as the fields they advanced into followed by mobile games, arcade games, and video games.

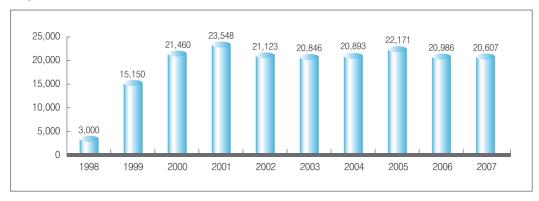


<Figure 2-12> Promising Genres Game Makers Intend to Invest in (survey of game companies)

In terms of the genres they wanted to invest in, role-playing games were selected by the most number of Korean game companies followed by educational games and action-adventure games.

### **Internet Cafes**

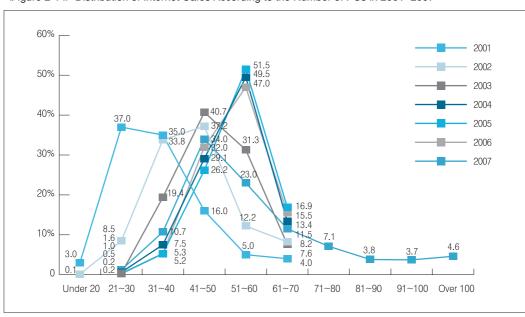
<Figure 2-13> Number of Internet Cafes in 1998~2007



<Table 2-4> Number of PCs in Internet Cafes in 2000~2007

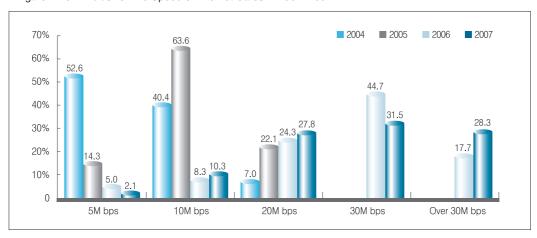
Year	Number of Internet Cafes	Average Number of PCs	Total Number of PCs
2000	21,460	32.0	686,720
2001	23,548	37.0	871,276
2002	21,123	43.8	925,187
2003	20,846	48.8	1,017,285
2004	20,893	49.9	1,042,561
2005	22,171	50.3	1,115,201
2006	20,986	49.2	1,032,511
2007	20,607	50.4	1,038,593

Peaking at more than 23,000 in 2001, the number of Internet cafes nationwide seem to have remained steady at the 21,000~22,000 range since 2002. Likewise, there has been no significant change in the average number of PCs in Internet cafes since 2004, reaching about 50 units. The total number of PC units in Internet cafes was found to remain at the 1~1.1 million units.



<Figure 2-14> Distribution of Internet Cafes According to the Number of PCs in 2001~2007





Since 2006, Internet cases have built systems at an average speed of more than 20M bps. Likewise, since 2004, the exclusive line service using telephone lines has disappeared; instead, the service was completely transferred to end-point devices in the form of LAN using fiber optic cable network nationwide. Thanks to the development of technology, the exclusive line speed of Internet cafes is expected to increase.

# 2008 White Paper on Korean Games Guide to Korean Game Industry and Culture

Chapter III

### **User Focus**

- 1. Trends Among Korean Gamers
- 2. Gamers by Platform

#### **Executive Summary**

This chapter discusses the results of the survey of 1,700 respondents aged 9~49 years on the tendency of Korean game players during the period of January~February 2008 through telephone and email.

The number of hours spent on leisure on a weekday is three and a half hours on the average, and that on a weekend, six hours and twenty minutes. For respondents aged 25~44 years, the older they were, the shorter their leisure time tended to be. In terms of cultural contents, 26.0% responded that they spent their leisure time on games followed by watching TV (24.4%) and watching a movie (23.4%). The average monthly cost of leisure was found to be around KRW 130,000. The place respondents visited the most to spend their leisure time was "restaurant/pub/cafe" (30.9%), followed by movie theater for women (22.6%) and Internet cafe for men (23.2%).

In terms of the main activities done when using the computer, most men preferred gaming (33.1%) whereas women selected information search (35.4%). As portion which women answered gaming was just 13.1%, women's preferrence to games are lower to men's. On the other hand, the survey on the use of Internet cafes revealed that 40.7% of male respondents used them compared to 18.3% of female respondents. This showed that the women used computer gaming and Internet cafes less than men.

Among the respondents, 74.1% said that they have experienced playing games (those who still play or who used to play). This figure was not much different from the 2007 survey result (74.9%). By gender, 84.3% of male respondents and 63.6% of female respondents have played games at least once.

69.2% of the respondents said that they used online games as a preferred game platform; thus showing the highest utility rate among 6 game platforms (top priority response). The survey on the preferred game genre revealed that 29.1% of male game players preferred role playing games, and that 14.9% selected strategic simulation. Among female game players, 24.1% preferred web board games; 15.6% cited casual games.

The average game play time per access was found to be 112.8 minutes; men played games for 110.4 minutes a day on the average, and women, for 116.3 minutes. The age of the respondents who played games the longest at 149.4 minutes was between 15 and 19.

At least 80.5% of the respondents enjoyed games at home; 11.4% cited Internet cases. By gender, 77.8% of males and 84.4% of females played games at home. This suggested that women tend to play games at home more than men.

Among online game users, 31.1% preferred the role playing genre and 37.2% of PC game users selected strategic simulations. Among mobile game users, 22.5% said they preferred the web board genre, whereas 27.1% cited the sports genre for video games. The genre preferred by arcade game users was casual games (31.3 %); 16.5 % of portable game users preferred the web board genre and the role playing genre, with 14.1 % selecting educational games.

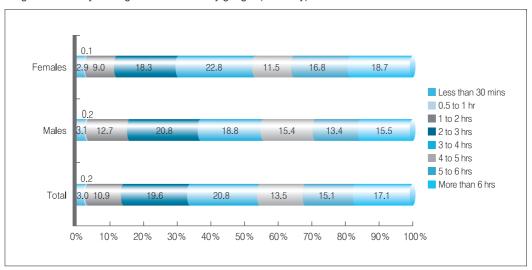
### Trends Among Korean Gamers

#### **Key Features of Respondents**

Classification		Composition				Composition	
		Number of Respondents	%	Classification		Number of Respondents	%
	Total		100.0		Less than KRW	87	5.1
	Male	865	50.9		1 million		
Gender	Female	835	49.1	Manadali	KRW 1~2 million	283	16.6
	9~14	210	12.4	Monthly	KRW 2~3 million	422	24.8
	15~19	163	9.6	Income	KRW 3~4 million	385	22.6
					KRW 4~5 million	244	14.4
	20~24	208	12.2		More than KRW	279	16.4
Age	25~29	227	13.4		5 million		
7190	30~34	233	13.7		Seoul	907	53.4
	35~39	221	13.0	Б.	Busan	316	18.6
	40~44	220	12.9	Region	Daegu	222	13.1
	45~49	218	12.8		Gwangju	123	7.2
		210	12.0		Daejon	132	7.8
	Elementary School	99	5.8		Professional	128 377	7.5
	(student/graduate)				/Research		
	Middle School	209	12.3		Clerical		
	(student/graduate)	209			/Administrative	7.4	4.4
	High School		21.3		Sales/Services Production/Technical	74 67	4.4
Educational	(student/graduate)	362			Production/Technical Public	6/	3.9
	, ,		11.1	Occupation	Officer/Teacher	46	2.7
Attainment	University/College	188			/Police	40	
	(student)					104	6.1
	University/College	742	43.6		Self-employed Student	579	34.1
	(graduate)	742			Homemaker	239	14.1
	Graduate School					239	14.1
	or Higher	100	5.9		Unemployed /Others	86	5.1

#### **Gaming Environment**

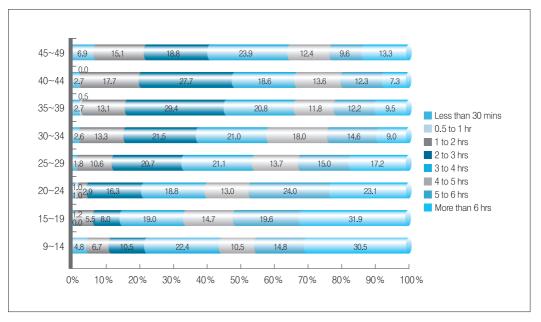
<Figure 3-1> Daily Average Leisure Hours by genger (weekday)



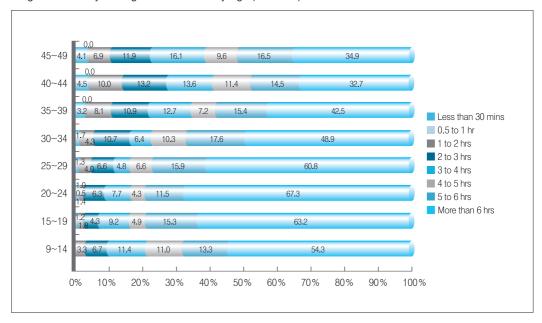
<Figure 3-2> Daily Average Leisure Hours by gender (weekend)



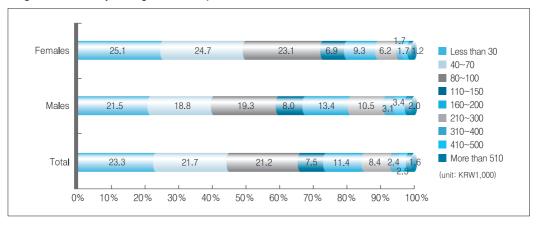




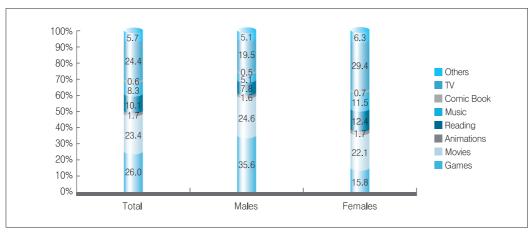
<Figure 3-4> Daily Average Leisure Hours by Age (weekend)



<Figure 3-5> Monthly Average Leisure Expenses



<Figure 3-6> Preferred Activities During Leisure Time

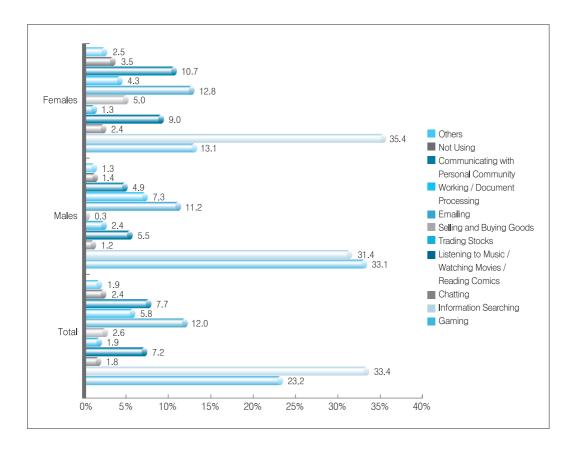


As a result of the survey, particularly by classifying the daily average leisure time into weekdays and weekends, the daily average leisure hours was found to reach three and a half hours; there was no significant difference in the leisure hours between males and females, although females spent slightly more time on leisure than males. Among the respondents, 0.2% spent more than thirty minutes to less than one hour on weekdays on leisure. On the other hand, 20.8 percent (18.8% for males and 22.8% for females) said their leisure time reached 3~4 hours. Although this survey result was not much different from that in 2007, the rates of responses, i.e., spending less than five hours and more than six hours (14.3 % in 2007 and 15.1 % in 2008) or more than six hours (15.5 % in 2007 and 17.1 % in 2008) on leisure, increased. The average leisure hours was 6.3 hours on weekends, which was slightly lower compared to 2007. In particular, the leisure hours

during weekends for males was 6.5 hours, and that for females, 6.2 hours. In the case of males, the leisure hours dropped considerably from 7.5 hours in 2007. For females, however, the leisure hours remained the same at 6.2 hours. By age, the daily average leisure hours on weekends for those in their 30s was longer compared to those in their 20s. On the other hand, the daily average number of leisure hours for children aged 13 or less on weekends was similar to that for adults in their 30s. Compared to the survey results in 2007, the daily average leisure time on weekdays and weekends decreased by 0.4 hour and 0.6 hour, respectively. The average leisure expenses of all respondents reached approximately KRW 130,000. This figure was lower compared to KRW 150,000 in 2007. Males spent approximately KRW 150,000 on leisure, and females, KRW 110,000.

Most of the respondents (26.0%) said that their most preferred leisure activity was playing games. While watching TV (27.2%) was the most preferred leisure activity in 2007, it dropped to second place in 2008 as the preference of 24.4% of the respondents followed by watching movies (23.4%). Males cited games more than females (males: 35.6%; females: 15.8%), whereas females preferred watching TV more than males (females: 29.4%; males: 19.5%). These proved that there were differences between males and females in terms of leisure activities.

<Figure 3-7> Purposes of Using PCs

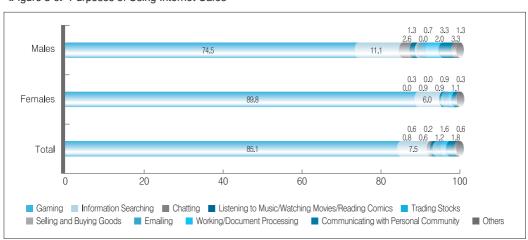


Females 79.4 1.3 14.9 3.8 0.6 Home Internet Cafes Males 70.9 1.5 0.2 School/Office Not Using Others Total 75.1 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

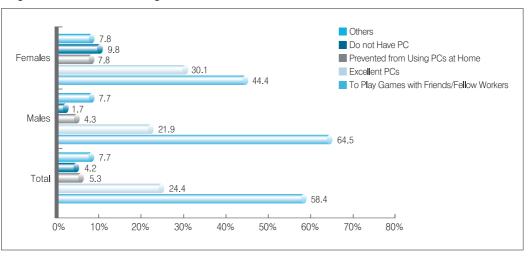
<Figure 3-8> Common Places Used for Internet Access

Respondents (33.4%) mostly used PCs for information search, followed by gaming (23.2%), emailing (12%), communicating with personal community (7.7%), listening to music, watching movies and reading comics (7.2%), and work/document processing (5.8%). Among the respondents, 75.1% said they most frequently accessed the Internet at home. School or office (19.6%) were used more than Internet cafes (2.3%). More females seemed to use the Internet at home (females: 79.4%; males: 70.9%).

#### **Users in Internet Cafes (PC Bang)**



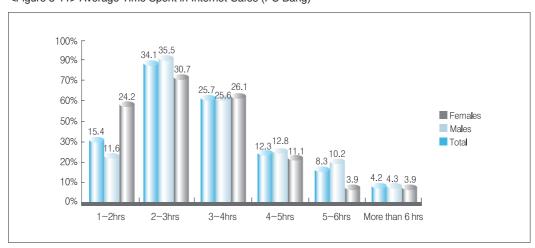
<Figure 3-9> Purposes of Using Internet Cafes



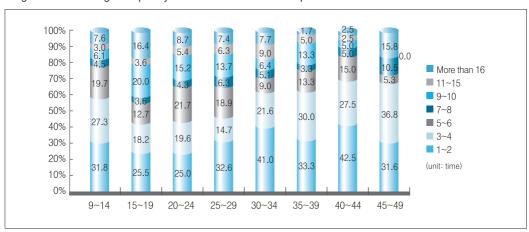
<Figure 3-10> Reasons for Using Internet Cafes

By looking at the purposes of using Internet cafes, we can see that most of the respondents used them for playing games (85.1%); men (89.8%) also showed stronger tendency than women (74.5%). Compared to 61.1% in 2007, more women played games in Internet cafes. Except information search (11.1%), fewer activities were carried out by women.

Majority of the respondents (58.4%) used Internet cafes to play games with friends or fellow workers, with 24.4% claiming that they liked the excellent PCs in the places. By gender, 64.5% of male respondents said they used Internet cafes to play games with friends and fellow workers compared to 44.4% of female respondents. This shows that Internet cafes have become important playing venues.



<Figure 3-11> Average Time Spent in Internet Cafes (PC Bang)



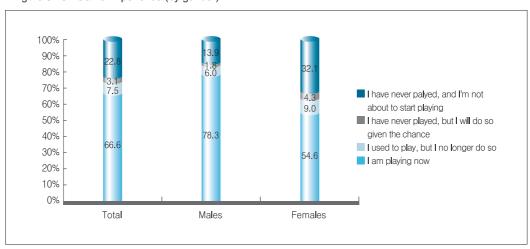
< Figure 3-12> Average Frequency of Use of the Internet Cafe per Month

The average number of hours spent per visit to the Internet cafe was found to be 2.6 hours. Judging from the response frequency, most of the respondents (34.1%) said they stayed at Internet cafes for two to three hours. By gender, both males (35.5%) and females (30.7%) cited "more than 2 hours and less than 3 hours" the most. There was little difference between men and women in terms of the average time of using Internet cafes.

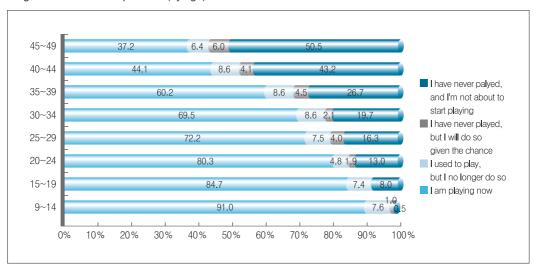
In terms of the frequency of using Internet cafes by age, "once to twice a month" was cited the most by all age groups. This implied that Internet cafes were not that frequently used. Among those aged 9~14, 31.8% said they used Internet cafes once or twice; 27.3% answered "three to four times," and 19.7%, "five to six times." Among those aged 15~19, 25.5% answered "once to twice," and 20%, "nine to ten times." At least 25% of those aged 20~24 said they used Internet cafes once to twice a month, with 21.7% answering "five to six times" as the second most cited choice. Few adults aged over 30 used Internet cafes more than five times a month.

#### **Gaming Experience**

<Figure 3-13> Game Experience (by gender)



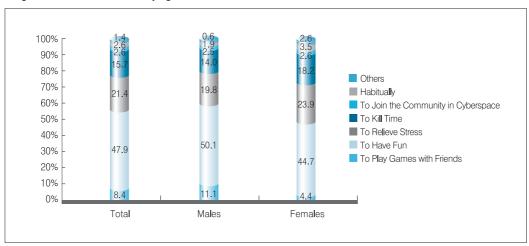
<Figure 3-14> Game Experience (by age)



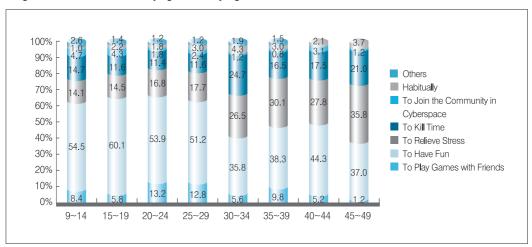
As a result of the survey on game experience, 66.6% of respondents are playing game now; 7.5% said they used to play games but no longer do so. Among the survey respondents, 74.1% said they have experienced playing games. Compared to 54.6% of women, 78.3% of men responded that they were playing games. On the other hand, 13.9% of male respondents and 32.1% of female

respondents claimed that they have never played games, and that they were not about to start playing even in the future. This suggested that women show more opposition to playing games than men. At least 84.3% of the men have experienced playing games, and they have more experience than women. Compared to 2007, there was no significant difference in the overall game experience. The number of those answering that they used to play but no longer do so sharply decreased for both men and women. In contrast, those claiming that they are playing now increased particularly among women.

<Figure 3-15> Reasons for Playing Games



<Figure 3-16> Reasons for Playing Games by Age

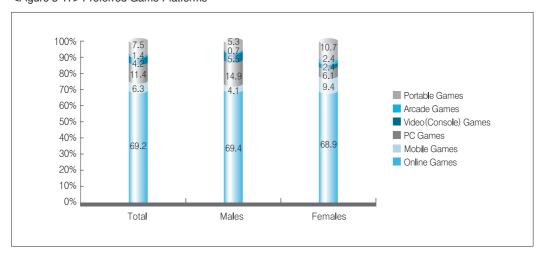


Among the reasons for using games, "to have fun" was cited the most with 47.9% followed by "to relieve stress" with 21.4%. At least 15.7% of the respondents said they played games to kill time. Compared to 4.4% of women, 11.1% of men said they played games to play games with friends.

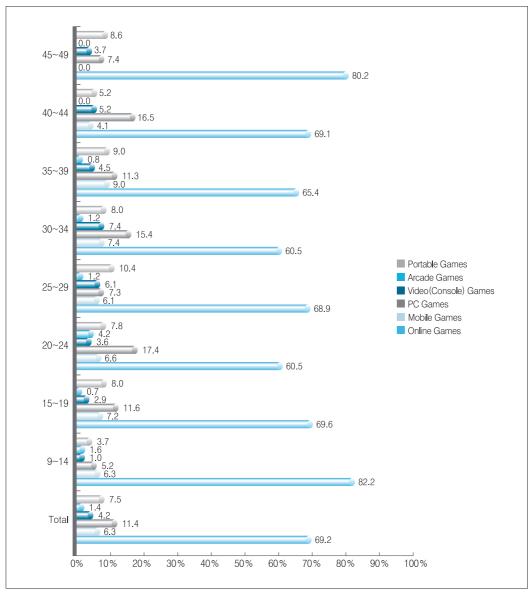
By age, 54.5% of those aged 9~14 said they played games because they were exciting and interesting; 14.7% and 14.1% claimed that they do so to relieve stress. For respondents aged 15~19, 60.1% claimed to play games because they were interesting; 14.5% and 11.6% answered "to relieve stress" and "to kill time," respectively. Among those aged 20~24, 53.9% said playing games was interesting; 16.8% and 13.2% cited "to relieve stress" and "to mingle with friends," respectively as their reasons for playing games. At least 51.2% of those aged 25~29 said playing games was interesting, with 17.7% saying they do so to relieve stress; 12.8% and 11.6% answered "to play games with friends" and "to kill time," respectively. Among those aged 30~34, "interesting" (35.8%), "to relieve stress" (26.5%), and "to while away leisure time" (24.7%) were cited as reasons for playing games. For those aged 35~39, 38.3% said they played games for fun; 30.1% and 16.5% answered "to relieve stress" and "to while away leisure time," respectively. Even those aged 40 and 44 cited "to have fun" (44.3% and 37.0%, respectively), "to relieve stress" (27.8% and 35.8%, respectively), and "to kill time" (17.5% and 21.0%%, respectively) as their reasons for playing games. For respondents aged 30 and above, they tended to play games to have fun and relieve their stress.

#### **Preferred Game Platform**

<Figure 3-17> Preferred Game Platforms



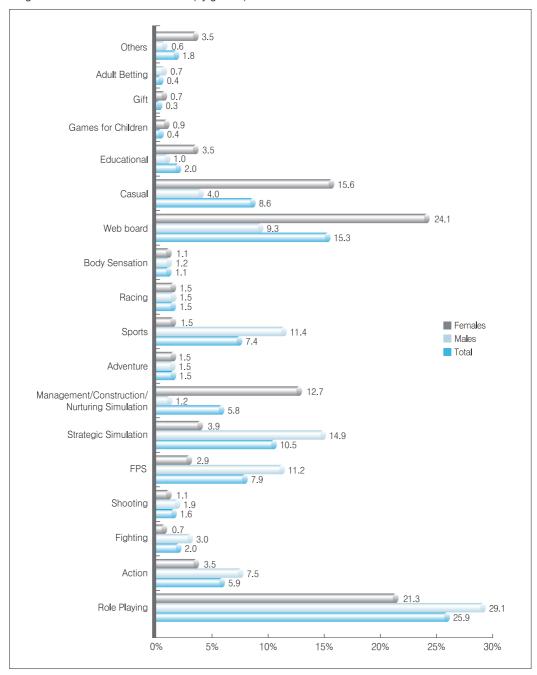
<Figure 3-18> Preferred Game Platforms by Age



As a result of the survey on the commonly used game platforms, the most preferred platform was found to be online games (69.2%) followed by PC games (11.4%) and portable games with 7.5%. Compared to last year survey result, preference for online games (70.1%) dropped, and portable games were cited more. Most respondents were found to use online games regardless of gender and age.

#### **Preferred Game Genres**

<Figure 3-19> Preferred Game Genre (by gender)



< Table 3-1> Preferred Game Genre (by age)

Age	Role Playing	Action	Fighting	Shooting	FPS	Strategic Simulation	Management / Construction / Nurturing Simulation	Adventure	Sports
Total	25.9	5.9	2.0	1.6	7.9	10.5	5.8	1.5	7.4
9~14	21.5	12.0	3.7	2.1	8.4	7.3	6.8	1.0	7.3
15~19	26.1	10.1	4.3	0.7	12.3	9.4	13.8	2.2	2.2
20~24	31.1	4.8	0.6	0.0	13.2	7.8	12.0	0.6	11.4
25~29	34.8	2.4	1.2	2.4	9.8	11.6	4.9	1.2	6.7
30~34	32.7	3.1	1.2	0.6	4.3	14.2	2.5	2.5	6.8
35~39	23.3	3.8	0.8	3.8	3.8	12.8	1.5	2.3	6.0
40~44	18.6	6.2	4.1	3.1	4.1	10.3	0.0	1.0	10.3
45~49	7.4	2.5	0.0	0.0	2.5	12.3	0.0	1.2	9.9

Age	Racing	Body Sensation	Web Board	Casual	Educational	Games for Children	Gift	Adult Betting	Others
Total	1.5	1.1	15.3	8.6	2.0	0.4	0.3	0.4	1.8
9~14	2.1	1.6	1.0	20.4	0.5	1.0	0.0	0.0	3.1
15~19	0.7	1.4	1.4	11.6	0.7	0.0	0.0	0.0	2.9
20~24	0.6	1.8	5.4	9.6	0.0	0.6	0.0	0.0	0.6
25~29	1.8	1.2	15.9	4.3	0.6	0.0	0.6	0.0	0.6
30~34	1.2	1.9	14.8	6.2	4.3	0.6	0.0	1.2	1.9
35~39	2.3	0.0	24.8	5.3	5.3	0.0	1.5	0.0	3.0
40~44	2.1	0.0	28.9	2.1	5.2	0.0	0.0	3.1	1.0
45~49	1.2	0.0	60.5	1.2	1.2	0.0	0.0	0.0	0.0

The most preferred game genre was the role playing game with 25.9%, followed by web board with 15.3%. Among men, 29.1%, 14.9%, 11.4%, and 11.2% cited role playing games, strategic simulation, sports games, and FPS, respectively. On the other hand, 24.1%, 21.3%, and 15.6% of women preferred web board games, role playing games, and casual games, respectively. There were differences in terms of the preferred game genre between males and females, showing the same tendency as in 2007.

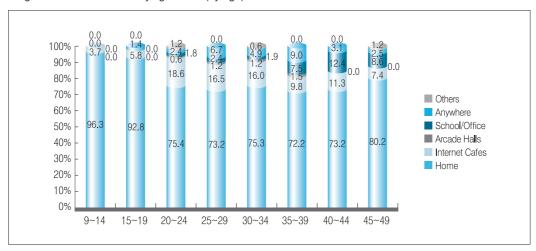
By age, role playing games were the most preferred by all age groups. Action games were popular among teenagers and older age groups, whereas respondents in their mid-thirties preferred web board games.

#### **Game Venues**

<Figure 3-20> Places for Playing Games (by gender)



<Figure 3-21> Places for Playing Games (by age)

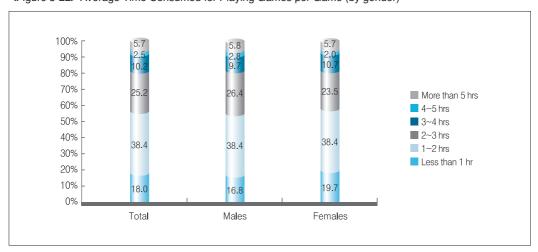


Most respondents (80.5%) said they played games at home. Such tendency has persisted since 2003. Internet cafes were cited by 11.4%. In particular, 13.6% of men said they played games in Internet cafes compared to only 8.1% of women. This suggested a difference between men and women in terms of the use of Internet cafes. By looking at the result by age, we can see that most respondents played games at home. Such tendency was evident among those aged 9~19. Most

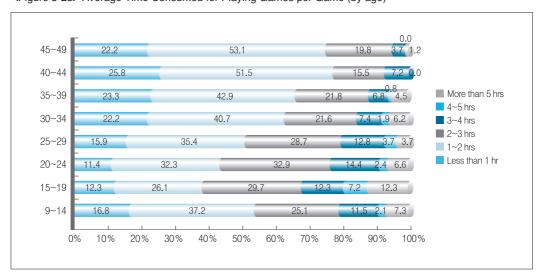
respondents aged 20~34 answered "home" and used the Internet cafe slightly more than any other age group. Those aged 35 and above claimed to play games at school and office more than any other age group.

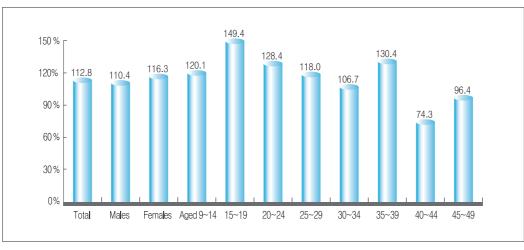
#### **Gaming Time**

< Figure 3-22> Average Time Consumed for Playing Games per Game (by gender)



< Figure 3-23> Average Time Consumed for Playing Games per Game (by age)



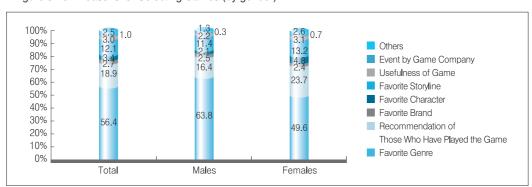


<Figure 3-24> Average Time Spent by Game Players per Game (unit: minutes)

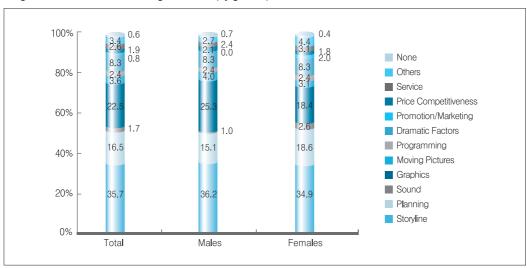
In terms of playing time per game, the average hours spent by game users reached 112.8 minutes. Men (110.4 minutes) played a game longer than women (116.3 minutes). By age, game users aged 15~9 played a game the longest at 149.4 minutes followed by those aged 35~39 at 130.4 minutes, those aged 9~49 at 120.1 minutes, those aged 25~29 at 118.0 min., and those aged 30~34 at 106.7 minutes.

Among all respondents aged 9~49 including non-game players, the average time spent per game was 73.3 minutes. Males spent 86.6 minutes, and females, 59.7 minutes. In general, males were found to play a game longer than females.

#### Factors in Selecting Games and What is Interesting in Games



<Figure 3-25> Reasons for Selecting Games (by gender)



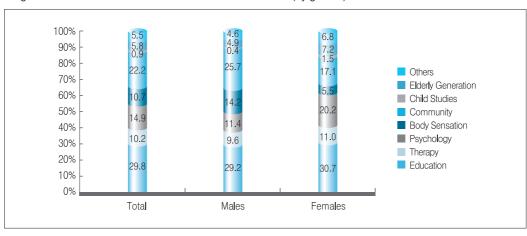
<Figure 3-26> What is Interesting in Games (by gender)

Among the respondents who were asked what was a major consideration in selecting a game, "favorite genre" was cited by 56.4% followed by "recommendation of those who have played the game" (18.9%) and "favorite storyline" (12.1%). By gender, 63.8% of male respondents said they selected games based on their favorite genre; 16.4% and 11.4% cited recommendation and favorite storyline, respectively. Among female respondents, 49.6% cited favorite genre; 23.7% and 13.2% chose recommendation and favorite storyline, respectively. This shows that females tend to select games based on the influence of others compared to males.

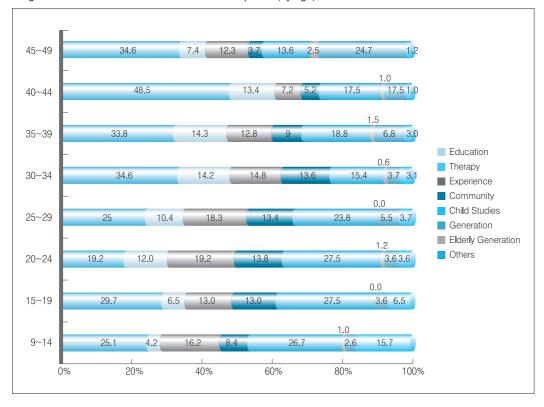
When asked what was interesting in games, 35.7% cited the storyline; graphics was chosen by 22.5%, followed by planning (16.5%) and dramatic factors (8.3%). Compared to 2007, interest in the storyline decreased from 39.0% to 35.7%, and that in graphics, from 22.8% to 22.5%. In terms of the dramatic factors, however, interest increased from 7.0% to 8.3%. By looking at the difference between men and women, we can see that women seem to have more interest in the service, sound, and planning compared to men.

#### **Preferred Game Genre for Development**

<Figure 3-27> Preferred Fields to be Combined with Games (by gender)



<Figure 3-28> Preferred Game Genre for Development (by age)





<Figure 3-29> Leading Game Genres in the Future (by gender)

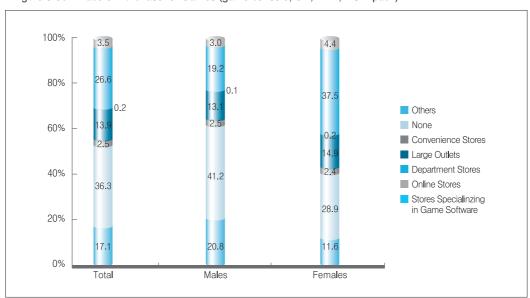
The field that most respondents wanted to combine with games was education (29.8%), followed by community (22.2%), psychology (14.9%), body sensation (10.7%), and therapy (10.2%). By gender, men showed higher expectation in communities than women (males: 25.7%; females: 17.1%). In contrast, women had higher preference for psychology than men (females: 20.2%; males: 11.4%). Most men and women were found to prefer the combination of education and games.

The field that most respondents in all age groups wanted to combine with games was education. The younger the respondents were, the stronger their preference for combining communities with games.

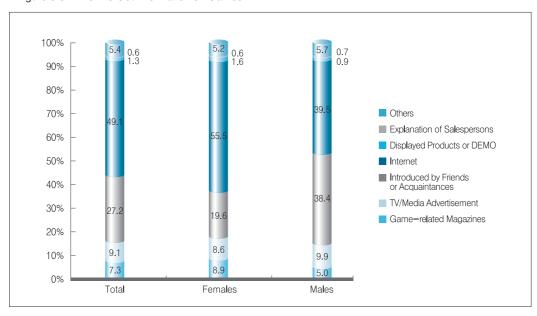
In terms of game genres that are expected to lead the domestic gaming market, the most preferred genre was "role playing" with 20.1%. Apparently, majority of the respondents thought the game had potential in the future; strategic simulation was cited in the same breath by 13.8% of the respondents, followed by FPS (11.8%) and action games (8.0%).

#### Where Games are Purchased and How Information on Games are Acquired

<Figure 3-30> Place of Purchase for Games (game console, CD, DVD, ROM pack)



<Figure 3-31> How to Get Information on Games

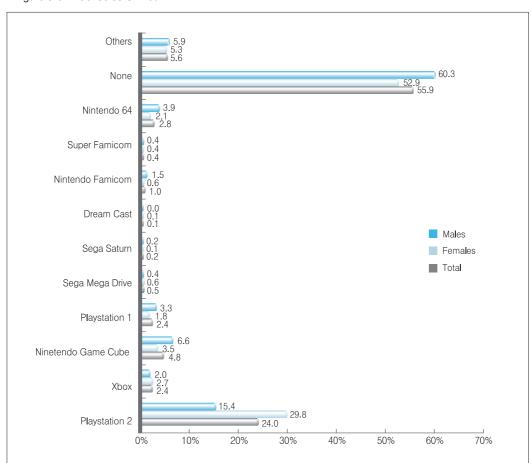


As a result of the survey on the places where respondents purchased games (game console, CD, DVD, and ROM pack), 36.3% cited online retail sales; 26.6% said they had never purchased games. On the other hand, 17.1% and 13.9% cited stores specializing in game software and large outlets, respectively. The number of respondents who chose online retail sales slightly increased compared to 2007, but fewer respondents cited stores specializing in game software. Regardless of gender, purchases from online stores increased; thus reflecting the prevailing tendency to purchase games through online retail stores.

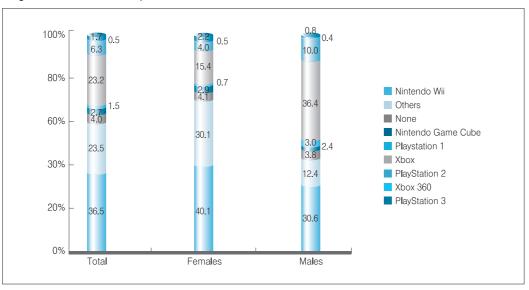
On the other hand, the places where respondents obtained information included the Internet (49.1%), introduction by friends (27.2%), TV (9.1%), and game-related magazines (7.3%).

#### Percentage of Users Who Own Consoles and Handhelds

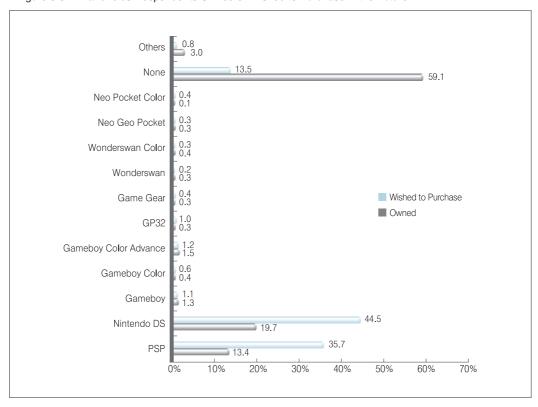
<Figure 3-32> Consoles Owned







< Figure 3-34> Handhelds Respondents Owned or Wished to Purchase in the Future



As a result of the survey of videogame consoles owned, PlayStation 2 was found to be owned by the most number of respondents(24.0%). By gender, 29.8% of males owned PlayStation 2 compared to 15.4% of females. The consoles owned by females were more varied compared to males, with 5.9% owning other types, 6.6%, Nintendo GameCube, 3.3%, PlayStation 1, 3.9%, Nintendo 64, and 2.0%, Xbox.

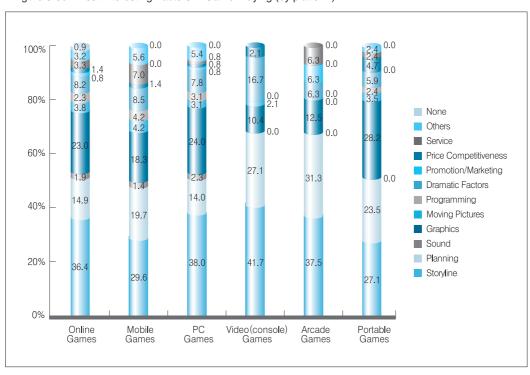
The consoles respondents wanted to purchase the most in the future were PlayStation 3 (36.5%) and Xbox360 (23.5%). Among males, 40.1% and 30.1% wanted to purchase PlayStation 3 and X box360, respectively 15.4% wanted to get Nintendo GameCube. Among females, however, 36.4% and 30.6% preferred Nintendo GameCube and PlayStation 3, respectively. In particular, 10 % of females said they did not want to purchase anything.

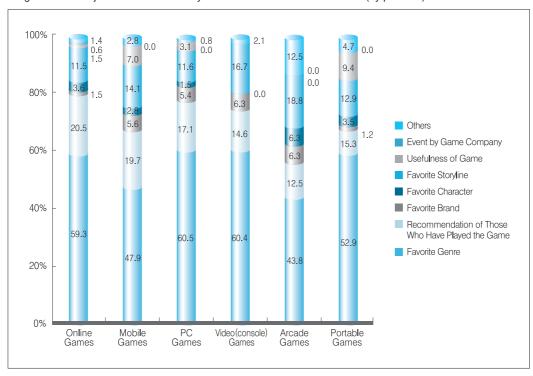
In terms of buying experience for handheld console game players, Nintendo DS was chosen by 19.7% followed by PSP (13.4%). In the 2007 survey, PSP and Nintendo DS were chosen by 11.5% and 4.3%, respectively. After only one year, however, the results for handheld console game players respondents wanted to own were completely reversed: Nintendo DS was chosen by 44.5%, followed by PSP (35.7%).

## 2 Gamers by Platform

#### Most Interesting Factors in Game Playing and Factors Influencing Game Choice

<Figure 3-35> Most Interesting Factors in Game Playing (by platform)





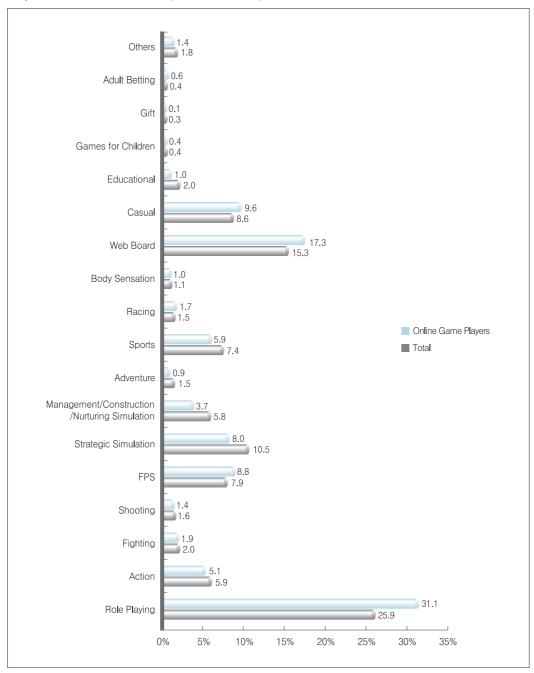
<Figure 3-36> Major Factors That Mainly Influence the Selection of Games (by platform)

The most interesting factor in playing games was the storyline; this was deemed to be related to favorite content, which was the critical factor in selecting a game. Planning and graphics were also cited. In case of video games platform, quite a number of respondents said they were very interested in the dramatic factor; in fact, it was chosen by 16.7% while 10.4% cited graphics. Also, video game players expressed considerable interest in storyline.

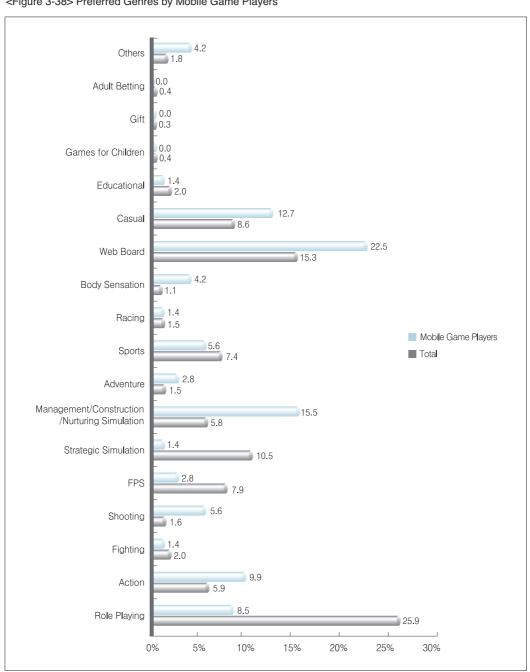
As a result of the survey on the critical factors in selecting games, favorite genre was cited by most game players followed by the recommendation of people who had played a certain game. This result was not that different from the 2007 survey result, suggesting that Korean game players consider genre a factor serving as the standard for selecting a game.

#### **Preferred Game Genres for Each Game Platform**

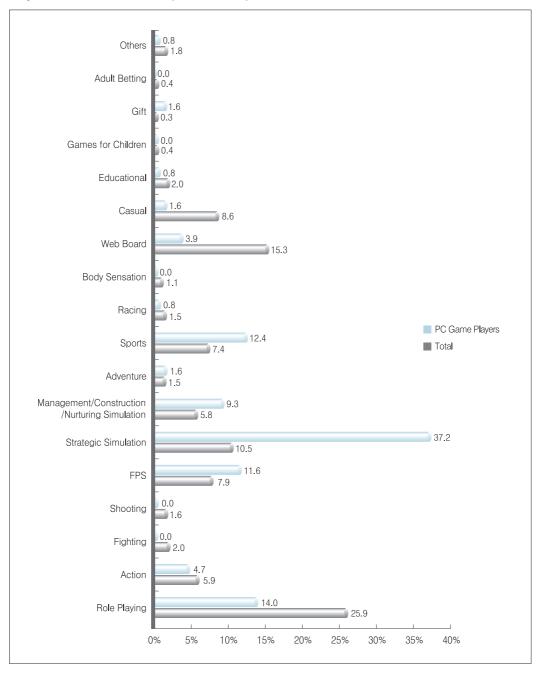
<Figure 3-37> Preferred Genres by Online Game Players



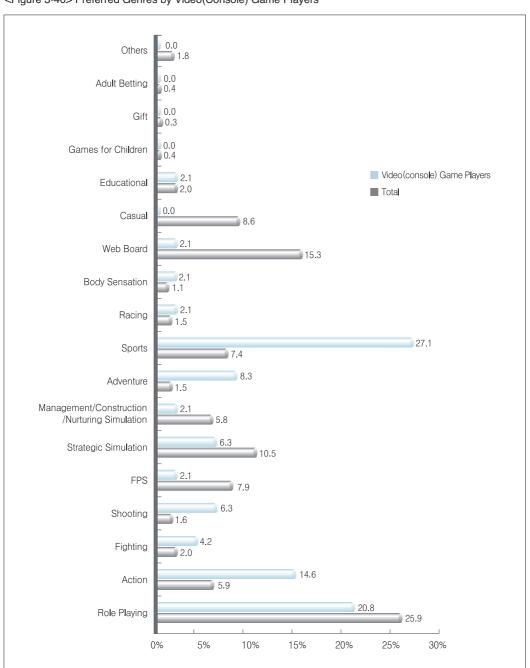
<Figure 3-38> Preferred Genres by Mobile Game Players



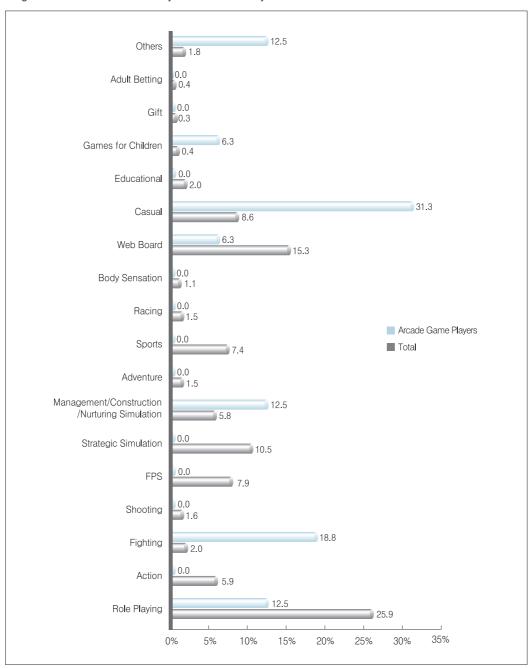
<Figure 3-39> Preferred Genres by PC Game Players



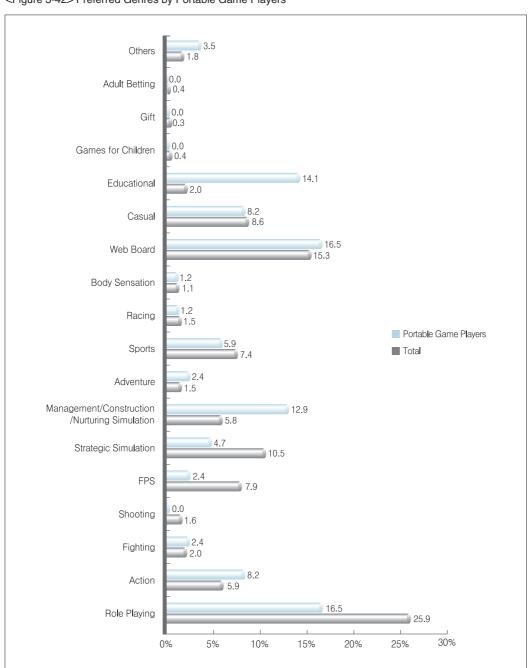
<Figure 3-40> Preferred Genres by Video(Console) Game Players







<Figure 3-42> Preferred Genres by Portable Game Players



In terms of the preferred game genre by game players, those who preferred online games also enjoyed role playing games, web board games, and casual games although they liked role playing games the most (31.1%). Among mobile game players, web board games, management/construction/nurturing simulation, and casual games were preferred by 22.5%, 15.5%, and 12.7%, respectively. Compared to 2007, the preference for web board games and casual games decreased in 2008. PC game players cited strategic simulation (37.2%), role playing games (14.0%), sports games (12.4%), and FPS (11.6%) as their favorite genres. On the other hand, video console players preferred active genres such as sports games (27.1%), role playing games (20.8%), and action games (14.6%). Among arcade game players, casual games, fighting games, and management/construction/nurturing simulation and role playing games were preferred by 31.3%, 18.8%, and 12.5%, respectively. Those who preferred portable games said they liked role playing games and web board games (16.5% each), with 14.1% choosing education games; 12.9% preferred management/construction/nurturing simulation games. Compared to 2007, this year's survey showed changes in the game genres preferred by those who liked arcade games and portable games, i.e., preference shifting from arcade games to more various genres.

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