

# **Business Models and Strategies in the Video Game industry: an analysis of Activision-Blizzard and Electronic Arts**

By

**Ruri Lee**

B.A. Art Studies, Hong Ik University, 2010  
M.B.A. Sungkyunkwan University, 2013

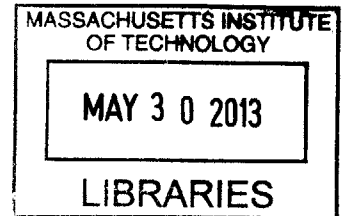
SUBMITTED TO THE MIT SLOAN SCHOOL OF MANAGEMENT IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN MANAGEMENT STUDIES  
AT THE  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

JUNE 2013

©2013 Ruri Lee. All rights reserved.

**ARCHIVES**



The author hereby grants to MIT permission to reproduce  
and to distribute publicly paper and electronic  
copies of this thesis document in whole or in part  
in any medium now known or hereafter created.

Signature of Author: \_\_\_\_\_

MIT Sloan School of Management  
May 13, 2013

Certified by: \_\_\_\_\_

Michael A. Cusumano  
SMR Distinguished Professor of Management  
Thesis Supervisor

Accepted by: \_\_\_\_\_

Michael A. Cusumano  
SMR Distinguished Professor of Management  
Program Director, M.S. in Management Studies Program  
MIT Sloan School of Management

**“page intentionally left blank”**

# **Business Models and Strategies in the Video Game industry: an analysis of Activision-Blizzard and Electronic Arts**

By

**Ruri Lee**

Submitted to MIT Sloan School of Management  
on May 13, 2013 in Partial Fulfillment of the  
requirements for the Degree of Master of Science in  
Management Studies.

## **ABSTRACT**

In recent years the video game industry has been of great importance in the business world beyond the role of a cultural medium. With its huge size and potential for more growth, the industry has attracted many newcomers. The target customers are expanding to females and elders who have not been known to be game players. Moreover, the introduction of new platforms, personal computers and mobile devices, broadens the application of the video games. Because of its diversified mechanisms and platforms, the business models of the gaming industry have evolved. In this thesis, the traditional and newly invented business models are introduced with an analysis of pros and cons through real cases of gaming companies.

The analysis of Activision-Blizzard and Electronic Arts shows the current business strategies of two giants in the industry, “diversification” and “casual games”. Moreover, the huge difference of financial performances of two companies indicates the risk of an overbroad portfolio and investment in an unfamiliar genre.

**Thesis Supervisor:** Michael A. Cusumano

**Title:** SMR Distinguished Professor of Management

**“page intentionally left blank”**



## **ACKNOWLEDGEMENT**

First of all, I would like to thank my thesis advisor, Michael A Cusumano. His deep insight of the industry has helped me to organize the thesis and understand the industry. His class, "Advanced Strategy" inspired me to write the topic of the thesis and framed the contents. His advice for the thesis has been great help for me to solve the challenges which I often encountered during the process of the thesis. Moreover, his book, "Staying Power" gives me a clear direction to the conclusion of the thesis.

In addition, I would appreciate people in the gaming industry. Due to the experience in the Blizzard Entertainment as a member of the External Affair Team, I was fortune to meet many various people in different positions and learned the practical knowledge about the market. Moreover, through the indirect experience from the diverse people in the MIT, I could acquire precious information regarding the industry.

Julia and Chanh have also helped me finalize the thesis with the countless support. Their kindness and caring let me safely finish my thesis. Moreover, the MSMS students always motivate me with their enormous enthusiasm. I was so lucky to be surrounded by the most competent and enthusiastic people.

Lastly, I always appreciate my family to endlessly support my education and my future. Without them, I could not be given any chances to study the field I love. Their belief in me has been the most powerful driving force to successfully finish my education.



# Contents

Chapter 1 Introduction .....	1
2.1. Historical changes in the gaming industry: from console games to mobile apps .....	3
2.2. The size, players and future of the gaming industry .....	6
2.3. Attributes of Video Game Sales.....	9
Chapter 3 Major Business Models of Video Games.....	13
3.1. Packaged Game Software Sales .....	13
3.2. Subscription .....	15
3.3. Free-To-Play Model.....	16
3.3.1 Virtual Goods.....	18
3.3.2 Freemium Services.....	26
3.3.3 Advertisement .....	29
3.4 Other Business Models .....	31
3.4.1 Real Money Trading Auction House.....	32
3.4.2 Electronic Sports.....	34
Chapter 4. Business Strategies in the Video Game Industry: an Analysis of Two Players, Activision-Blizzard and Electronic Arts .....	37
4.1. Activision-Blizzard .....	38
4.2. Electronic Arts.....	40
4.3. The Trend of Business Strategy in Game Software Developers.....	43
4.3.1 Aggressively expand to the global markets.....	43
4.3.2 Diversifying service platforms beyond console games.....	44
4.3.3 Extend the services to casual games including social games .....	45
4.3.4 Accept free-to-play models.....	47
4.4. Why Casual Games?.....	48
4.5. Takeaways from the financial analysis of two companies' performances .....	50
Chapter 5 Conclusion.....	53
Appendices (S&P Capital IP, 2013a; S&P Capital IP, 2013b) .....	56
Bibliography.....	61

## Chapter 1 Introduction

Unlike the common perception of video games—that they are played by young, white who boys get together and build “nerdy” cultures through video games—the video game industry has been the major and most-profitable market in entertainment, aggressively expanding its customer pools regardless of age, sex, and culture. Many people are even taking video games seriously in their careers, in academic research, and in their personal lives. Critiques of video games as a negative influence on children come up consistently whenever a violent incident occurs among teenagers. Counter arguments are heard as well, insisting that video games do not affect teenagers’ perceptions of life nor their behavior. Regardless of the endless discussion of its impact, the video games market is obviously treated as the hugest industry with the most potential, attracting enormous capital investment and research. Through massive vertical integration from the small game development studio to the professional management team, the video game industry is significantly impacting global economies.

In this thesis, I would like to discuss the historical and current business models for video game with a focus on software rather than hardware devices, and study the current trend of business strategies through the analysis of the two biggest players in gaming software, Activision-Blizzard and Electronic Arts. The major methodology is to acquire information mostly from current business articles and analyze business cases from diverse game companies. My personal previous experience in the video gaming industry contributes significantly to my understanding of the industry and significant events in the industry. The industry report by Entertainment Software Association (ESA) also contributes to my view of the broad picture of the market and history.

Although the video game industry never stops evolving, even by the minute, I hope that this research contributes to the understanding of the industry in a diverse perspective of the business model.

*"It is critical that we support economic sectors that create jobs, develop innovative technologies and keep America competitive in the global marketplace. The video game industry is one of those important, high-tech economic drivers. Our industry generates over \$25 billion in annual revenue, and directly and indirectly employs more than 120,000 people with an average salary for direct employees of \$90,000 (in 2001)." (Entertainment Software Association, 2012)*

***–Michael D. Gallagher, president and CEO of Entertainment Software Association***

## Chapter 2 Introduction of the Gaming Industry

### 2.1. Historical changes in the gaming industry: from console games to mobile apps

Throughout history, humankind has played games. Sometimes they play Chess, imagining warfare in their territory; girls have played with dolls, dreaming about princesses and princes. Among all of the types of games, the video game, defined as an interactive electronic game, was introduced very recently. The first video game is known to be "Naught and Crosses" in 1951, developed by the scientist named A.S. Douglas working at Cambridge University (William H. Dutton, 2013).

After the first video game was developed, many electronic games were released. However, video games didn't become truly popular with a mass audience from "Pong" (Chris Stokel-Walker, 2012), created by Atari Inc., which developed an arcade version in 1972 and a home version in 1975.

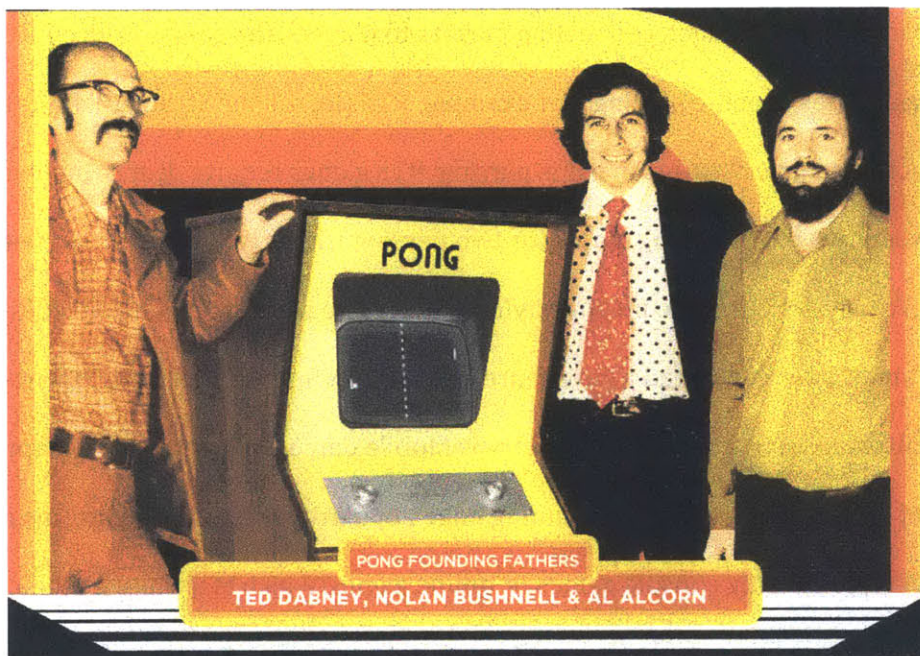
*(History of games - interactive timeline of game history. 2007)* This table tennis-based game sold with over 19,000 *video game cabinets* all around the world.

After the success of "Pong", the arcade game industry reached its peak in the late 1970s and early 1980s. "Spade Invaders" by Taito in 1978 led the industry further into the mainstream market, and it sold in shopping malls, restaurants and convenience stores. In 1979, "Galaxian", developed by Namco, sold over 40,000 units, and "Asteroids", released by Atari Inc., sold with 70,000 cabinets. In 1982, the arcade video game industry generated \$8 billion in a quarter, surpassing the annual gross revenue of both pop music (\$4 billion) and Hollywood films (\$3 billion) combined.

The era of video games has expanded exponentially from the time the 8-bit console game, "Famicom", was released by Nintendo, bundled with "Super Mario Brothers" in 1985 (Alan Maccormack, 2005). The next year, the release of the "Legend of Zelda" series and the "Dragon Quest" series sparked huge public interest from around the world, creating an enormous number of

fandoms of Japanese culture that continues to thrive today. Also, the success of hand-held games, such as Game Boy by Nintendo in 1989, contributed to the growth of the video game industry. Beside console games, another major part of the video game industry is personal computer games. The early stages of the gaming industry were fully occupied with arcade games and video games. Computer games started getting attention with the penetration of personal computers. For example, the sales of Commodore 64, released in 1982 and breaking the price of \$300, were a huge success with 22 million units sold, and this led to the development of computer games. At the same time, the leading arcade game company, Atari Inc., suffered from its underperformance with a \$54 stock price plummeting to \$35, after 8 years of continuous growth (*Player 3 stage 6: The great videogame*

**Figure 1 Pong with Atari Developers**



*crash*.1999). In addition, the adaptation of the computer mouse increased the convenience of computer games, and the high-resolution bitmap enabled a high quality graphic-interface in the new release, boosting the popularity of the device (*Commodore amiga 1000 computer*.2006). With this new technology, the computer took up a significant portion of the industry. And with the introduction of the internet into households, computer games came into a new era: online games.

In 1989 and early 1990, MUD (Multiple User Dungeon) games gained in popularity among a small number of internet users. In the game, users proceed to play the game with letter commands in the invisible set-dungeon. The popularity of MUD games led to the proliferation of graphic MUD and the first MMORPG (Massive Multiple Online Role Playing Games), *Ultima Online* and *Everquest*. Released in 1997 and 1999 respectively, the popularity of these two games opened the door for the creation of even more MMORPG games. In MMORPG, players connected to a persistent world, interacting with other massive players. Because of this characteristic, MMORPG players have different playing experiences than traditional console games, with either positive or negative interactions among the players. In the game, players typically join a Guild and combat other players, in a dynamic referred to as PVP (Player verses Player).

With the appearance of the internet, connecting players to players, the game service further expanded its possibilities in game playing. For example, RTS (Real Time Strategy), first designed in *Dune II* in 1992, created new cultures in game playing. RTS games require deeply involved interaction between two participating teams (or two persons), as a two sided battled with limited resources and territory. Its intensive playing style between two sides is similar to traditional physical sports, and it later generated a new genre, E-sports, defined as Electronic Sports.

Currently, the hottest topic in the gaming industry is Mobile Games. With the huge adaptation of smartphones and tablets, mobile games is gaining huge popularity even with electronic device users who do not typically play console games or online games, which is usually a time-consuming hobby. The best example of this phenomenon is *Angry Birds*, which was released in December 2009 and was the largest mobile app success in the world. This series of games has been downloaded 75 million times as of February 2011 (erikheriksen, 2011) and had more than 1 billion download in 2012, generating profits higher than those of the average console and computer games (Rovio.com, 2013). The genre of mobile games was mostly limited to casual games such as tile-matching puzzles (e.g. *Tetris*) or Platform games (e.g. *Super Mario Series*). However, with the development of

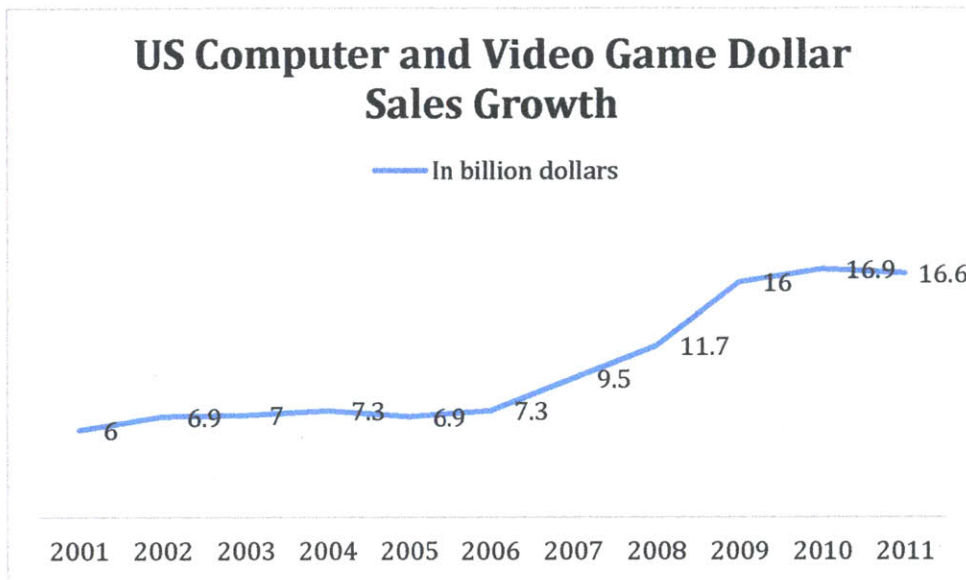


smartphones and tablets, the genre of mobile games has been expanding exponentially. Mobile game users now enjoy MMORPG or RTS in mobile, which require high specifications of a device. Moreover, games which are released in computers and consoles were previously implemented in mobile. Because of its limitless possibilities and low development costs, an innovative future of mobile games is highly anticipated.

## **2.2. The size, players and future of the gaming industry**

The gaming industry has not stopped growing since its inception, and now it is one of the biggest entertainment markets in history. In 2011, total consumer spending on the gaming industry reached \$24.75 billion (Entertainment Software Association, 2013) while the gross revenue in Hollywood studios added up \$10.2 billion in the same year (*2011 market share and box office result by movie studio.2012*). In consumer spending, computer and video game software sales in the USA accounted for \$16.6 billion, the hugest portion of industry sales with 176.7% of growth for one decade from \$6 billion in 2001 (Entertainment Software Association, 2013).

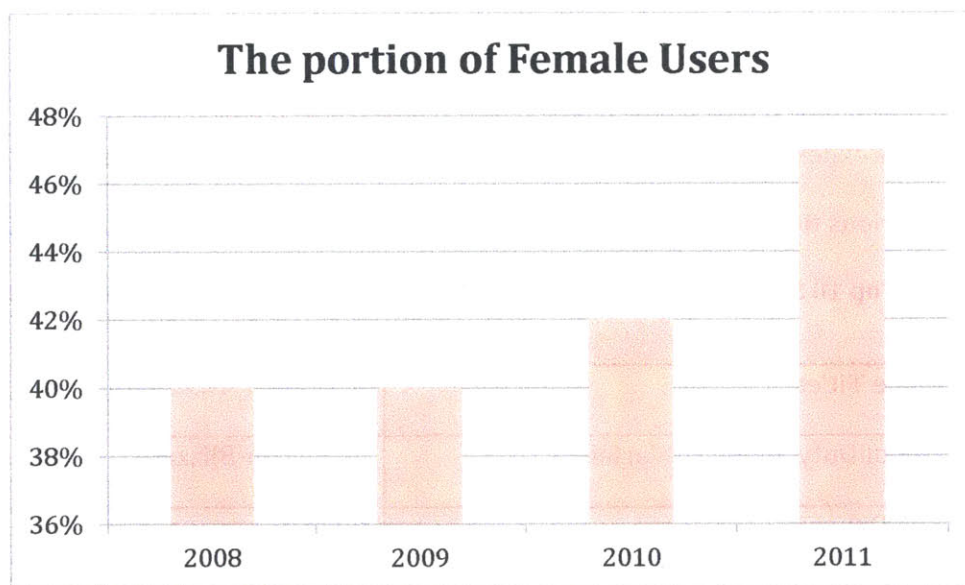
**Figure 2 US Computer and Video Game Dollar Sales Growth (Entertainment Software Association, 2013)**



The interesting fact about video game industry sales is that \$7.3 billion of sales were from “other delivery format”, defined as subscriptions, digital full games, digital add-on contents, mobile game apps, social network games and others differentiated from the traditional packaged game software sales. These have increased from \$5.4 billion in 2009. At the same time, the sales from computer games and console games decreased to \$9.25 billion from \$10.58 billion in 2009 (Entertainment Software Association, 2013). This statistic illustrates changes in the gaming industry; the major portion of game players are moving to new formats of games, away from traditional package games for the computer or console. Another statistic regarding types of gaming devices also supported this new phenomenon; 58% of on-the-go players played the game with either smartphones or dedicated handheld systems in 2011 (Entertainment Software Association, 2013). The portion of users with wireless gaming devices has significantly increased from 37% in 2008 (Entertainment Software Association, 2010), and packaged game software sales in 2011 dropped 22% from the sales in 2008, when the revenues of sales reached its peak with \$11.7 billion (Bloomsberg, 2012).

The growth of new game formats, however, does not mean that the gamers of console devices or of computer games have moved to new methods of games, causing package games to lose its popularity. Sales of PlayStation 3 and Xbox 360 have fallen less than 10% showing that *core gamers* did not replace the way they play games with new devices (Bloomsberg, 2012). Although the gamers of dedicated handhelds, where Nintendo dominates, are expected to replace their devices with smartphones, the gamers of other devices, including computers and console games, are still playing with their traditional game devices. In addition, the popularity of new games is related to the inflow of new users, especially female gamers. Unlike the stereotype that most gamers are young boys in a “geek” culture, a major portion of gamers are women over the age of 18, who represent 30% of gamers. Boys ages 17 or younger make up 18% of gamers (Entertainment Software Association, 2013). Moreover, the overall portion of female users has increased from 40% of all games in 2008 to 47% of all games in 2011.

**Figure 3 the Portion of Female Users(Entertainment Software Association, 2013)**



Considering that female gamers are likely to play casual games on mobile devices, the growing popularity of “Other device format”<sup>1</sup> can be partly attributed to the new gamers who were previously less attracted to game playing but then gained interest because of the new design of games in new devices. To sum up, the future of “Other device format” of games, especially mobile apps, are expected to be expanded.

### 2.3. Attributes of Video Game Sales

The traditional video game industry has many similarities with the movie industry; the sales of video game software vary considerably across titles with few blockbusters. In 1998, just 10% of all games released made a profit, while half of them sold less than 10,000 copies (Peter Coughlan, 2000). The bestselling titles generate more than one-third of all sales in the industry, returning up to 30 times its development cost (Alan Maccormack, 2005). Megahit titles usually lead to highly profitable sequels. In 2011, among the 10 top selling video games, all of the best sellers were sequels from previous megahits except one title, “Batman: Arkham City” (ranked seventh). Computer games experienced the same phenomena; all of 10 top selling games of 2011 were in a series from previous titles except “Star Wars: The Old Republic”, which ranked in first.

**Figure 4 Top 10 Selling Video Games of 2011 (Entertainment Software Association, 2012)**

Game Titles	Developer/Distributor
Call of Duty: Modern Warfare 3	Activision-Blizzard
Just Dance 3	Ubisoft
Madden NFL 12	Electronic Arts
Elder Scrolls V: Skyrim	Bethesda Softworks

<sup>1</sup> Term used in “Essential Facts about Computer and Video Industry”, 2012, p12: Other delivery format include subscription, digital full games, digital add-on content, mobile apps, social network gaming and other physical delivery

Battlefield 3	Electronic Arts
Call of Duty: Black Ops	Activision-Blizzard
Batman: Arkham City	Warner Bros. interactive
Gear of War 3	Epic Games/Microsoft Game Studio
Just Dance 2	Ubisoft

**Figure 5 Top 10 Selling Video Games of 2011**

Game Titles	Developer/Distributor
Star Wars: The Old Republic	Electronic Arts
Elder Scrolls B: Skyrim	Bethesda Softworks
StarCraft II: Wing of Liberty	Activision-Blizzard
The Sims 3	Electronic Arts
World of Warcraft: Cataclysm	Activision-Blizzard
Battlefield 3	Electronic Arts
The Sims 3: Generations	Electronic Arts
The Sims: Medieval	Electronic Arts
The Sims 3: Pets	Electronic Arts

Considering that new titles “Batman” and “Star Wars” originated from blockbuster movie hits with huge licensing costs, it is obvious that the new titles from small companies with limited funds would have a very difficult time competing with a “megahit” series. “Batman” and “Star Wars” were published by the biggest game companies, Warner Bros., Interactive Entertainment and Electronic Arts, respectively. Additionally, the nature of the gaming industry requires the escalating cost of development and marketing so that large and well-capitalized companies with a long record of experience are likely to make another success with hugely popular series. A game publisher

commented, "With 5,000 titles being published every year, to play in the top 10 requires \$5 million in marketing. It's hard to take that kind of risk with new games, and few companies will be able to."(Entertainment Software Association, 2013).

For console games, the introduction of new console devices governs the sales of software. The sale of consoles reaches its peak when the device is first introduced and then declines when market penetration meets its peak and a new generation expected. The pricing of game software is also related to the sales of console devices. With the new generation of console, software can maximize the price of games and it lasts several years, usually three to five years. However, when the release of a new generation of console is anticipated, the sale of software with the current device weakens with a lower price.

Computer games software is influenced by the penetration of broadband internet and the personal computer. In South Korea, the portion of online games sales accounted for around 70% in 2011 while console games sold made up just 3% of sales in the game industry (Korea Creative Contents Agency, 2012). Many experts believe that this resulted from the synergy between the popularity of gaming and the high-speed access, as Korea ranked high in its internet penetration rate in the world, 82.7% (*Internet worlds stats*.2013). In a similar way, the countries with higher broadband penetration, including northern European countries and western European countries, are likely to play online games rather than console games. However, Japan and the US, with high internet penetration, were known as the hub of console games, showing that high correlations between the internet and online games are highly positive but not dominating.

On the other hand, the App games market shows a different aspect of the industry than the traditional game market. App games require relatively short production and marketing costs since most app games are casual games. According to the report "How much does it cost to develop an app" by BlueCloudSolutions (Carter Thomas, 2012), Angry Birds, the biggest megahit, generated more than \$50million, and cost \$125,000 to \$180,000 to develop, an incredible ROI. The

development costs for a game app varies based on the mechanism of games and the graphic design; casual games cost less than 3D graphic based Role-Playing Games. However, the opportunity of app games for small companies is significantly wider than that of console and computer games. Among the top 10 games in the USA App Store, in the third week of February 2013 (Lee Eun Byul, 2013), most games were developed by unknown small companies, although some of them were published by big companies such as Electronic Arts, Mojang, and Rovio Entertainment. The sales of app games depends on user experience and word-of-mouth, so that the development companies can find more opportunities for success with fewer risk and costs. However, because of an easy entrance into the market, the competition in app games is very intense with more than 100 games released daily.

**Figure 6 Top 10 games in the USA App Store in February 2013**

<b>Charged</b>	<b>Free</b>
Minecraft	4 Pics 1 Word
Clear Vision 2	Lazors
Angry Birds Star Wars	Temple Run 2
Need for Speed	Infinity Blade
Fruit Ninja	What's the Word?- New.
Fionna Fights-Adventure...	Retro Pinball
Crafted Battle	Ruzzle
The Amazing Spider Man	Candy Crush Saga
Bad Piggies	Subway Surfers

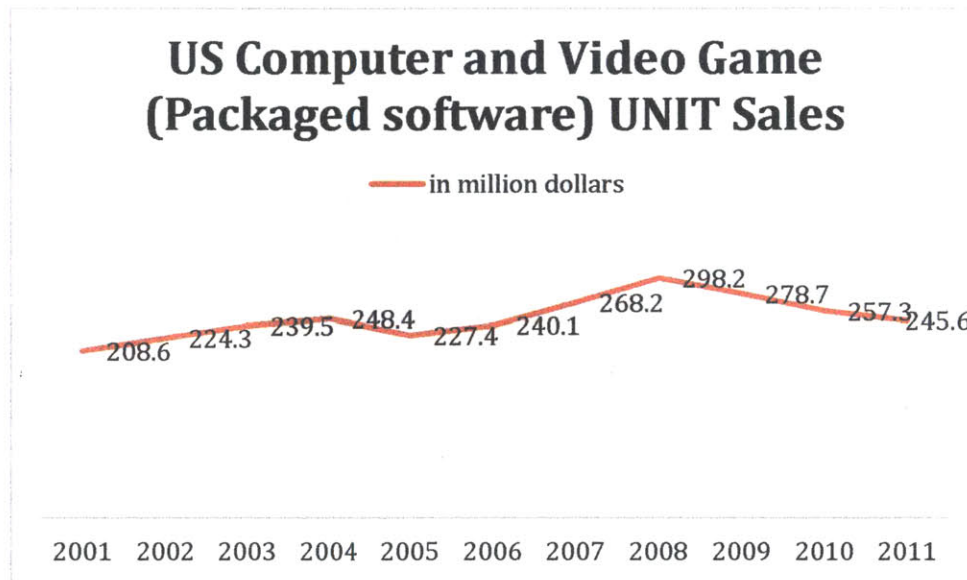
## **Chapter 3 Major Business Models of Video Games**

### **3.1. Packaged Game Software Sales**

From the cartridge to Game Boys in the 1980s, to the CD format to the most advanced PlayStation and Xbox 360s, “packaged game software sales” is the oldest and the most used business strategy for video game companies. Packaged game software is the medium containing game contents. Usually the content consists of one game plot and design that customers play anywhere from 10 to 30 hours. The players purchase the titles within a diverse medium matched with game play devices including early Game Boys, game consoles, personal computers and, nowadays, smartphones. For example, a user who owns a PlayStation 3 buys a newly released title, “Assassin Creed”, in the format of an exclusive PlayStation CD. The logic for this business model is very simple; the users pay the initial license fee upfront and own the right to obtain the service in perpetuity. This simple business model has been loved by most of game companies due to its simplicity and efficiency. This business model is also easily combined with other models, in particular Micro Transaction. For example, in “Guild War 2” developed by NCSoft in 2012, players buy a standard \$60 title. However, for supplementary services, such as transferring to another server or changing the characters’ appearance, players must pay additional fees. According to research conducted by ESA, the sales of physical game software have decreased in recent years. The decline in sales may be due to diverse channels to buy the software and little diffusion of packaged game fans to free-to-play games.

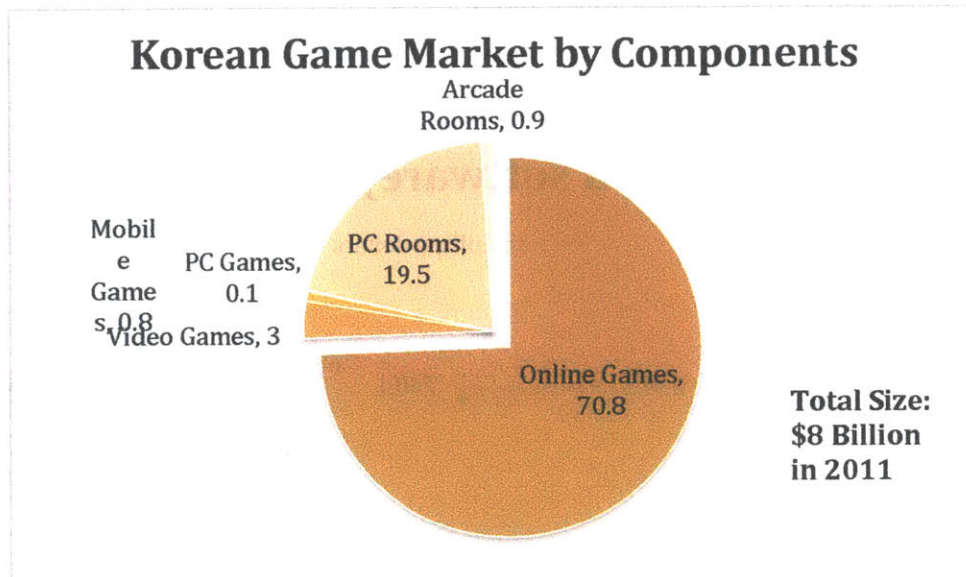


**Figure 7 US Computer and Video Game (Packaged Software) UNIT Sales (Entertainment Software Association, 2013)**



Although the most intuitive business model, “packaged game software sales” still prevails in the gaming industry, it failed to succeed in specific markets because of illegal replicas. South Korea, one of the most developed video game markets with a 18.9% growth rate in 2011 (Korea Creative Contents Agency, 2012), is the leader in the gaming industry with extraordinary characteristics, such as the prevalence of the PC Café culture and the national-wide popularity of E-sports. In early 1990, most Korean gamers enjoyed packaged game software. However, because illegal replicas of games soared among gamers, most Korean game developers went bankrupt or changed their type of business to online services. Currently, the sales of packaged video games account for just 3% of the approximately \$9 billion Korean gaming market (Korea Creative Contents Agency, 2012). Now, most Korean game companies provide online games applying a subscription model or PC café sales as business models, which occupied 70.8% and 19.5% of sales in total market size respectively [See Figure 7].

Figure 8 Korean Game Market by Component in 2011 (Korea Creative Contents Agency, 2012)



### 3.2. Subscription

For certain genres of game, such as MMORPGs, the investment into game development is substantial, averaging hundreds of million dollars. For big titles, the developers invested as much as a Hollywood movie shooting. For instance, Electronic Arts spent \$200 million developing “Star Wars: Old Republic” released in December 2011 (Eddie Makuch, 2012). In addition, investment for service management is added up for servers, customer services in call-center, and contents updated. At the same time, the lifecycle of game playing is expected to be longer than package game software. For the early and middle stages of content, the gamers’ experiences are almost the same as traditional package role-playing games. However, when gamers reach a certain level in the game, they are involved in endless end-game content, such as the production of game items or battles with players, called PVP. Continuous interaction with other players in coordination with or in battle with increases the player’s willingness to pay for the game. Because of these reasons, MMORPG

developers have opted for subscriptions to generate profits instead of upfront license payment for the game. The subscription business model in the gaming industry is nothing new; players pay a recurring monthly game service fee. The payment amount varies between game titles. Currently, "World of Warcraft", which recorded the largest active subscribers in gaming history (12 million worldwide in 201), charges \$14 per a month.

The subscription business model earned popularity among developers because of continuous revenue generation and players' high willingness to pay. However, as the competition in the MMORPG market is getting so intense, many game services switch to a free mode with a micro-transaction revenue model. For example, "Aion", which ranked second in xfire.com(xfire, 2013) in October 2009, changed its business model from a subscription based model to a free-to-play with virtual goods model in February 2012 (Aion, 2012). Before "Aion", "The Lord of Rings" and "Dungeons and Dragons" also changed their business models to free-to-play with virtual goods shops in 2009 and 2010 respectively. On the other hand, traditionally successful games also implemented a partial free model; "World of Warcraft" provides free service to beginners until they achieve level 20 to attract new players, and "Star Wars: Old Republic" also offers free story content but charges for additional end-game content.

### **3.3. Free-To-Play Model**

Thanks to intense competition in the gaming industry, many game services have adopted or switched to a free-to-pay model to attract more players from competitors. Moreover, the increasing social-media games based on existing social network systems actively offer their services for free to expand their user pools and charge additional services for easier game play. The fact that casual

gamers from social network games and mobile app games are less willing to pay for subscription or fees upfront also supports the popularity of the business model.

At the same time, *core* game developers, especially in MMORPGs, found that many players are likely to pay more for the game to outfit their avatar with better weapons than other players in the virtual world. Therefore, many of them contacted other players or “Game Gold Farmers” to buy strong equipment for characters or in-game gold. According to BBC News, research by Manchester University shows that more than 400,000 people, 80% based in China and the rest in developing countries, earn an average of \$145 per a month from gold farming and the total global market for in-game gold farming was \$500million, with the fact that the market is hard to estimate – “it could easily be twice as big” (Poor earning virtual gaming gold.2008). Considering basic demand-supply relationships, the players’ willingness to buy in-game items with real money was significantly high. Consequently, developers are required to choose “losing revenue” in game services.

The final reason to adopt a “free-to-play” model is caused by game design. For most online-connected games, the game design is highly dependent on the existence of other players. For social games, without friends who play together, game users easily lose their interests. As “First-Shoot Person” or “Real-time Strategy” games require having opponents all the time, no players are willing to wait to find opponents in the waiting screen. For MMORPGs, the large player pool is significantly important. In the early and middle stages of content, players can enjoy “solo” playing, focusing on leveling-up. At that time, the content is similar to console games. However, end-content mostly consists of group content requiring 5 to 100 players for activities such as warfare between players (Thomas Debeauvais, 2012). Therefore, a certain number of players should be kept in the game services. This is the reason why game developers offer free game services to attract more players. In free-to-play games, the revenue is mostly generated by *real-money transactions*, defined as players buying in-game services with real money. In this model, players buy virtual goods to enhance the quality of the game experiences, or they are provided with the initial stage of games for

free and then required to purchase advanced functions or game services. Many casual games, especially in portal sites, are provided for free and generate revenue by advertisement, like traditional internet services. Below, the details of each subcategory are discussed.

### **3.3.1 Virtual Goods**

The business model of virtual goods emerged in the very early internet era. However, the popularity exploded during the last couple of years with the emergence of social games and mobile apps games. Generally, *virtual goods* is defined as the properties in virtual and electronic worlds. For instance, objects in the game such as characters, items, currencies or tokens are examples of virtual goods which are traded (Vii Lenhdonvirta, 2009). There are differences between *information goods* and virtual goods since virtual goods are exclusively used by a person when information goods are not (Vii Lenhdonvirta, 2009). To be specific, a game item belongs to a player excluding others' same item usage. However, a user is able to send an MP3 file to other friends if he decides to ignore the legal rights approval. The meaning of virtual goods often includes the transactions between players and players, or players and gold farmers who specialize in earning in-game gold and selling it to other players. Most game companies regulate the transactions between players and gold-farmers, as the black market for gold usually ruins the economy of a virtual world. However, the market for gold farming has dramatically increased over the past several years. This has been the main reason why game developers provide game services for free and sell game items in online shops instead of applying a subscription fee. In this type of session, *virtual goods* is defined as the transaction between the game company and the players; the one-way transaction of goods from the company to the players.

Among the free-to-play business model, "Virtual Goods" is the most widely accepted method in a variety games. Most social games and mobile app games adopt "Virtual Goods", and many

MMORPGs have also switched to the system. This model is sometimes used as a complement to a traditional model, an upfront purchase model or a subscription model. In “World of Warcraft” which has kept its subscription model, the micro-transactions for Virtual Goods was recently introduced; the players who are already enrolled via subscription can buy “pets” for pure pleasure (the pet does not affect any game play experiences but look adorable). Or they can purchase additional game services, such as transferring a server or changing an avatar’s appearance. In 2012, the Virtual Goods market amounted to \$2.2 billion (Justin Smith, 2011). The business model has been widely implemented from social network applications, mobile game apps, casual and hardcore MMOs, and even some console games. Social network applications, mostly on Facebook, counted for more than half of the revenue generated, \$1.2 billion, with approximately 20% growth rate from \$835 million in the previous year of 2010 (Eric Eldon, 2011). According to emarketer.com, Virtual Goods are the main revenue source for social games with a 60% share, followed by 26% from lead generations and 14% from advertisements (Samuel Greengard, 2011). Sales of Virtual Goods in mobile apps are also continuing their growth with \$350 million in sales in 2011 (Eric Eldon, 2011). MMORPGs traditionally adopted subscription models have rapidly changed their revenue sources to Virtual Goods. According to the developer of “Puzzle Pirate”, the game has earned \$50 per month from each playing user (Paul Hyman, 2009). Although he revealed that just 10% of players are paying for game playing, the earning is even significantly higher than the traditional subscription fee for “World of Warcraft”, which has been \$14.55. The range of Virtual Goods has expanded to cover all parts of game services. Below are the major types of Virtual Goods.

### **Time Reduction**

For some game services, especially in social games, the players must wait for a certain amount of time to achieve quests. For example, in Zynga’s “FarmVille”, players have to wait from several



minutes to days to complete the building constructions and to get action point to practice a behavior such as farming or hunting. Players are able to acquire additional action points or reduce their waiting time when they refer the game to their friends or, mostly, when they purchase points. Another case is “Anipang” in KakaoTalk, the most used mobile messaging application in South Korea. The game bought was hugely popular in South Korea with the function of a ladder linked that to KakaoTalk friends’ contacts. In the game, players are given a certain amount of ‘Hearts’ which are reduced per a game and the “Heart” is refilled every 8 minutes. To get a “Heart”, players can purchase it, refer a friend, or ask to their friends to send it.

**Figure 9 Anipang Screens (SundayToz inc, 2013)**



Because of the linked ladder and the “Heart” system, the players are addicted to the game and purchase “Hearts” to play more. Although the mechanics of the game itself are very simple, a traditional Hexa design matching the same three or four tiles, the game has recorded 10 million plays per a day, and averaging 54 minutes of play time per a player every day (Evan Ramstad, 2012). It is true that the *time reduction model* for virtual goods works very well for social games with a simple design. In addition, for games with more sophisticated designs, time reduction is also applied to reduce players’ efforts and time. In the “League of Legends” (called LOL), Real-Time

Strategy games with “Aeon of Strife” styles, players can buy boosts to secure their level-up. When they achieve every level-up, they can passively enhance their game avatars with “Lune” and “Materials”, making faster level-up very crucial to the game playing. LOL Players are not required to purchase any Virtual Goods to level up at all, but with boosts, they can attain it with very faster pace and enjoy better game experiences. LOL also implements interesting virtual goods items – champions purchase. In the game, *champions* refers to a variety of avatars having different skills and battle styles. Champions rotate weekly for free so that users can choose weekly champions to play the game without any inconveniences. However, some players might hope to possess a champion to play it whenever he would like to. In that case, the player can purchase a champion either with real money or by points earned in game play. In short, virtual goods for champions can reduce the waiting time for certain champions and give the freedom to enjoy a champion whenever they want to.

### **Functional Enhancement**

In video games, most players spend their money to be better or stronger than other players. For MMORPGs, to have stronger avatars very directly influences the game experience; one can easily defeat his opponent, usually other player, receiving high levels of satisfaction and feeling proud of himself. Therefore, the history of a transaction of game items among players has been simultaneous with the history of MMORPGs. As mentioned above, the gold farming market is assumed to be \$500 million, according to research by Manchester University (Poor earning virtual gaming gold.2008). In order to keep up with strong demand from players, game companies provide virtual goods to enhance the characters’ performance in terms of attire, weapons, or potions. In “Maple Story”, a casual MMORPG game mostly targeting youth, players are given an online cash shop to buy weapons, potions and even strong avatars. Although the virtual goods for enhancement is present mostly in MMORPGs, other genres of games also adopted the same principles. Kart Rider, a racing



game developed by a Korean game company, Nexon, provides users the online cash items, including faster vehicles or items, to hinder others' racing. The game employs a two-currency system; less stronger and basic items can be purchased with real money, and the strongest items are only bought with the points earned from game play (Vii Lenhdonvirta, 2009).

Despite the popularity of functional virtual goods, some games failed to lead to success. In 2004, when Electronic Arts introduced a new system to the historic game *Ultima Online*, the "Advanced Character Token" system that switched the low-level avatars to high-level ones, the response from players were very negative. The system actually sold mediocre avatars and not the strongest ones, failing to provide full satisfaction to the users (Vii Lenhdonvirta, 2009). At the same time, some people criticize the fact that a virtual goods system is able to destroy the ecosystem and the balance in the virtual world. Players with money can easily achieve a higher level of game experiences without substantial and time consuming efforts. Regarding "Maple Story", it has been criticized that a player without virtual goods is almost unable to defeat virtual goods avatars and the game induces conflict between major players, youth, and parents. Since some players cannot afford desired items, they appeal for money to parents or even steal money from parents to buy those virtual goods.

### **Aesthetic Goods**

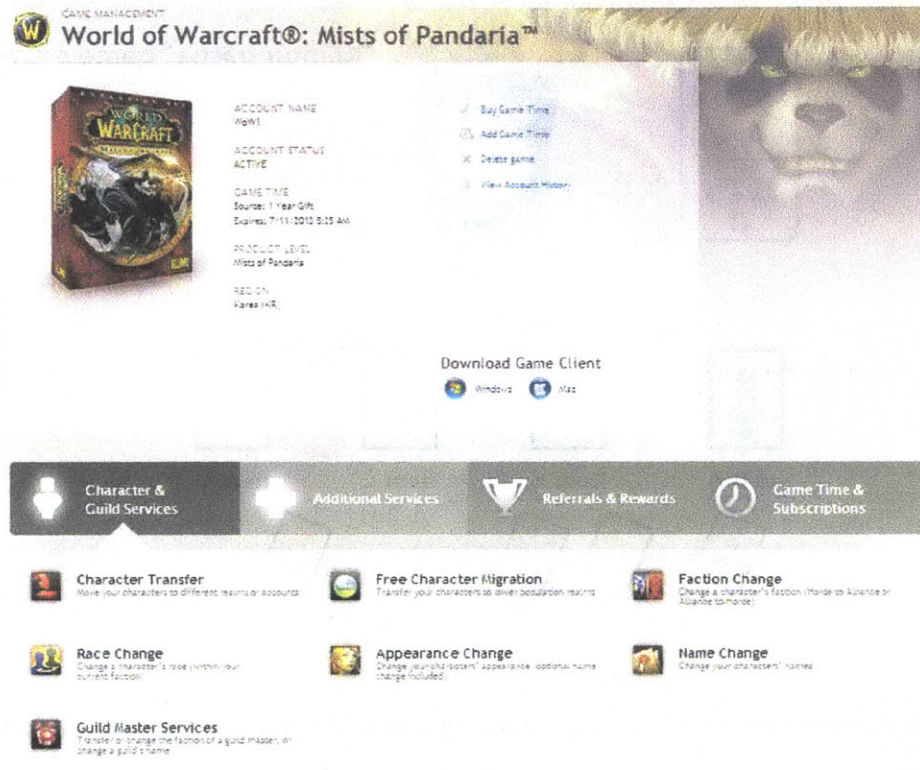
Some virtual goods do not offer any functional impact, but merely satisfy players; these items please players' aesthetic tastes. Most game players in the internet world share a similar characteristic; they want to differentiate themselves from other players. Consequently, from the early internet era, mainstream online sites have implemented aesthetic aspects into the system providing avatars or room decoration systems for users' own accounts. The video game companies also utilize the same principle in the game systems. Many casual games provide avatar systems so that players can beautify their avatars with the points earned by game play or real money. For

MMORPGs, players are given chances to buy avatars attire inspired by famous celebrities or seasonal events (e.g. Chinese Lunar New Year, Halloween). "Aion" seasonally introduces outfits relevant to certain celebrities who are usually the promotional models for "Aion" and players can attain additional behaviors within the dresses, such as dancing or singing. On the other hand, "League of Legends" has succeeded its sales of *skins* that do not affect any game experiences but change the attires of characters in game play. Most social games, including "Second Life" or "Sims Series", also utilize aesthetic items to provide diverse outfits to the users.

### **Additional Features**

For many MMORPGs, the virtual goods system is the complementary revenue resource next to original business models, an upfront fee model or a subscription model. Many of them utilize the kinds of virtual goods mentioned above, but most charge for additional features instead of core items. "World of Warcraft" adheres to the subscription model for its revenue source. However, when the player chooses to take services that are not essential services of the game, the player must pay for them. Examples include a server transition, a name change, an avatar appearance modification. Most game companies apply the same charge for supplementary services in a similar way.

Figure 10 Additional Services in WOW (Blizzard Entertainment, 2013)



## Kompu Gacha Items

On May 9, 2012, major Japanese social or mobile app-game companies, including GREE, DeNA, Miki and CyberAgent, announced that they would get rid of all Kompu Gacha items in their game services according to the industry watcher Dr. Serkan Toto. After the announcement, GREE and DeNA, the biggest mobile app game companies, experienced more than a 20% decrease of their market value (Kathleen De Vere, 2012). Kompu Gacha, which has had a large impact on the gaming industry with its lenient regulations, is explained with the game mechanism that an item brings out a random item including any game items, in-game currencies, and, very seldom, extremely valuable items. The mechanism of the item-outcomes is similar to a gambling vending machine with the “gacha” mechanism.

Figure 11 Kompu Gacha Item Mechanism (Kathleen De Vere, 2012)



The positive aspect of the item is that it can bring a new dynamic to the game play, and, of course, generate more revenue since many players are likely to be addicted to the randomized outcomes. However, because of its speculative traits, Kompu Gacha has always been controversial. According to the Japanese Consumer Affairs Agency, parents submitted 688 complaints to the agency about Gacha between April 2011 and March 2012. One case, for example, saw a boy in middle school spend more than \$5,000 for Gacha items in a month (Kathleen De Vere, 2012). This was the reason the Japanese government decided that Kompu Gacha items had the feature of lucrative speculation, leading companies to ban the implementation of the system.

In South Korea, one of the most developed game-playing countries, the random “Mysterious Box” implementing the same mechanisms of Kompu Gacha has been a hotly debated issue. Especially after the Gacha regulation in Japan, the relevant agencies in South Korea have focused on the issue of random items. However, a regulation is not expected to be employed in the near future because

of the implementation of other regulations such as the “Shut-down” policy.<sup>2</sup> It is obvious that this new form of virtual goods has earned a huge amount of money for these companies, but developers should keep in mind the boundary between “games” and “gambling”.

### **3.3.2 Freemium Services**

The Freemium Service is a widely used business model in internet software and applications. The basic idea is that the developers provide a free service in the initial stage of the software (limited to the function or the usage time) and the users can decide whether they would like to purchase it for further usages. Most software companies utilize this model; Adobe provides a 30 day free trial version and users can buy it after fully enjoying the free version. When the computer software mostly applies a time-limited freemium version, many mobile applications and internet sites employ the function-limited freemium. “Period Tracker”, which helps women simply track their period circulations and has earned 24,996 ratings so far (in Google play as of April 18, 2013) (GP International, 2013), has a light version for free and charges for a “Deluxe” version with more decorative functions for \$1.99. Among the internet sites, LinkedIn.com most actively employs the freemium version. The world’s biggest “professional network” with more than 200 million members (LinkedIn.com, 2013), LinkedIn offers a free service to people to upload professional information to their walls. However, the more users pay, the more detailed information of others they can search. In addition, the users are able to upgrade the number of In-mail messages to get introduced to inside sources at companies through LinkedIn connections. More services are provided to charged users.

In the gaming industry, vendors usually apply the function-limited freemium like LinkedIn.com, rather than the time-limited freemium used by Adobe. In addition to the virtual goods sales, free

---

<sup>2</sup> “Shut-down” policy means the regulation requires game companies to “Shut-down” their game services to those who are under 15 years, implemented from Nov. 20, 2011.

MMORPGs, especially those that have switched from subscription to free-to-play, provide advanced services for a charge. The “Star Wars: Old Republic” switched to a free pricing model to attract more players. However, the developers differentiate users by those who subscribe, those who have spent more than \$4.99 so far, and those who play for free without any payments. According to the money spent, the users are provided different levels of game features – for free users, they can just experience the story content while subscribers can enjoy all game features (Erik Kain, 2012).

Figure 12 Service Differentiation up to the payment in Star Wars: Old Republic (Erik Kain, 2012)

GAME FEATURES	SUBSCRIPTION	PREFERRED STATUS	FREE-TO-PLAY
Story Content	△	△	△
Sprint	△	△	△
Crew Skills	△	△	△
Game Login	△	△	△
Bank / Cargo Hold	△	△	△
Credit Cap	△	△	△
Chat	△	△	△
Mail	△	△	△
Secure Trading	△	△	△
Galactic Trade Network	△	△	△
Respecialization	△	△	△
Character Creation	△	△	△
Operations	△	△	△
Wuzzines	△	△	△
Flashpoints	△	△	△
Space Missions	△	△	△
Inventory	△	△	△
Quick Travel	△	△	△
Emergency Fleet Pass	△	△	△
Mounts	△	△	△
Revive	△	△	△
Item Equipping	△	△	△
Commendations Cap	△	△	△
Guilds	△	△	△
Vendors	△	△	△
Experience Rate	△	△	△
Experience Rate, Rest XP	△	△	△
Valor Rate	△	△	△
GUI: Quickslots	△	△	△
Items: Event Rewards	△	△	△
Items: Mod Removal	△	△	△
Items: Augment Slots	△	△	△
Customer Service Support	△	△	△

“World of Warcraft” also recently implemented the Freemium version providing free services until level 20 (the maximum level is 90). The Freemium revenue model is attractive in terms of a new inflow of users, but how many people will remain after the free service is still questionable.

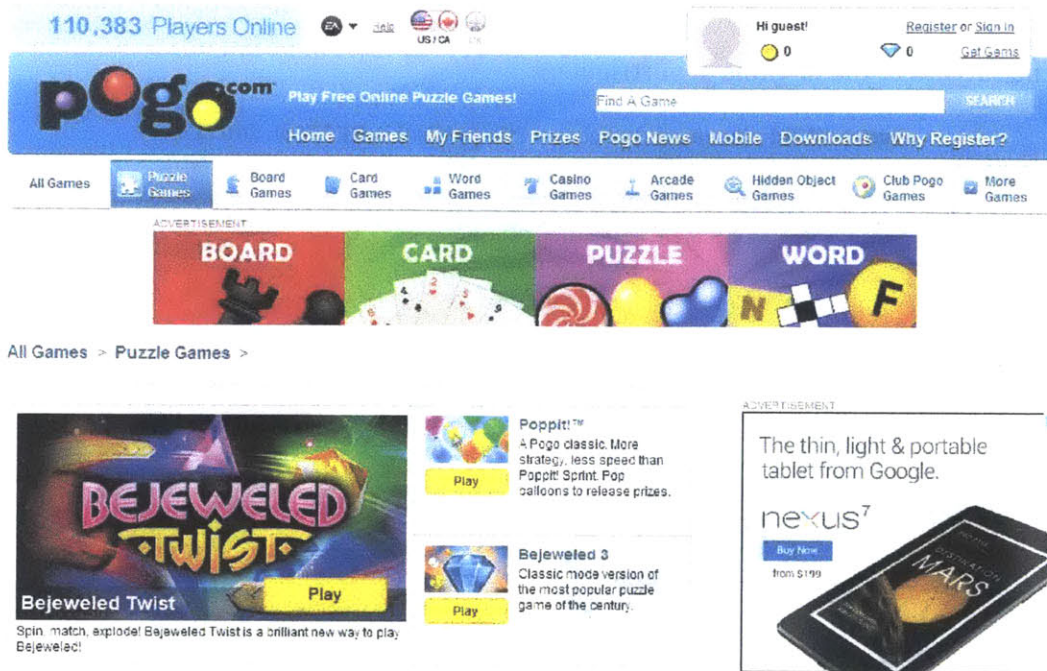
### **3.3.3 Advertisement**

Advertisements have been one of the most popularly used forms of revenue sources in all types of media. Most newspaper and TV broadcasting companies rely heavily on advertisements as a major revenue resource. Recently, the fragmentation of traditional media and the popularity of the internet have contributed to the focus of ad placement shifting to the online platform. In 2011, the revenue from the online advertisements totaled \$31.7 billion, 21.9% higher than the previous year (PWC, 2012). The revenue from advertisements in video games has also increased; it was anticipated to reach \$650 million in 2012, increased from \$295 million in 2007, according to report by Park Associates (Melissa Campanelli, 2012). However, the most effective mechanism of advertising placement in games is still in discussion because the impact on game revenue is not significant.

Advertisement in games is categorized into two types; the first is the banner advertisement (*banner ads*) and the second type is the in-game advertisement (*in-game ads*). The banner-ad refers to an advertisement placed in the page of a game's homepage. For instance, Pogo.com offers over 100 casual games for free with banner-ad sponsorship. When players enter the Pogo homepage, they are exposed to advertisements on screen in every step of the process to reach a game. The background of the main site is assigned to the advertisement, and, needless to say, the advertisement is also placed in the center of homepage.



Figure 13 Pogo.com Screenshot

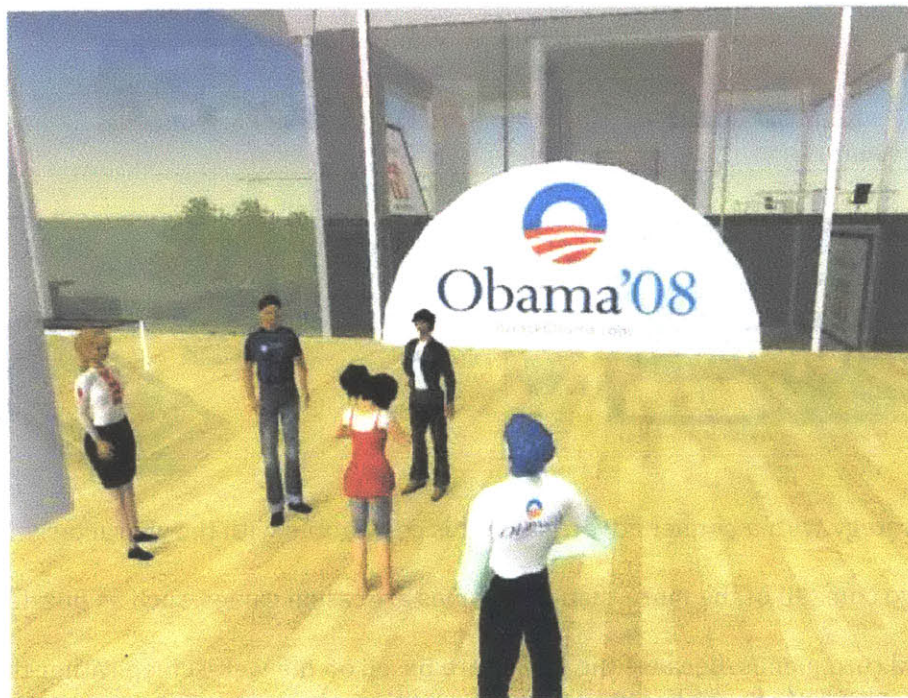


The business strategy with a banner advertisement is compatible with the characteristic of games provided by Pogo.com. All of the more than 100 games are casual games, such as puzzle games, board games and card games. Because the games are based on the web-screen rather than exclusive game client software, the banners are well matched to the web screens. Moreover, the willingness to pay for casual games is relatively lower than hardcore games. Therefore, although the users are exposed to advertisement during every moment of game plying, they do not consider it as deceptive or irritating since these are free games.

The second type of ad, the in-game advertisement, refers to the placement of a brand in a game. Developers manage efficient advertising placement with an auction system, like Facebook or Google, through the ad-placement devoted site, [www.secondads.com](http://www.secondads.com). In FIFA online, for example, players are exposed to a Nike advertisement placed along the in-game stadium fences, similar to a real soccer stadium. In Second Life, players experience products that are promoted in the game in the form of daily-used products in virtual worlds, such as clothes, stores, beverages, posters or a banner on the wall. For in-game advertisement placement, the players' attention matters for

efficiency and payment from advertisers. Players' attention is likely to go to the main game contents and advertising information gets secondary notice. Therefore, attracting attention from players is the key to the success of the in-game advertisement.

**Figure 14 Ad placement in Second Life (SARAH WHEATON, 2007)**



### **3.4 Other Business Models**

Besides the major business models, gaming companies have also created diverse business models and applied these to their game services. These business models are not universally applicable since these are developed for the unique characteristics of the game services. Below is an example of these unique revenue models.

### **3.4.1 Real Money Trading Auction House**

When Blizzard announced that the new Diablo 3 (Blizzard Entertainment, 2011a), a series of successful Diablo sequels, contained a Real Money Trading Auction House (called RMT Auction), the news shocked many gamers and the gaming industry. An auction house within the game service is not a new idea at all. Most action games or MMORPGs implement an auction house in order to enhance transactions between players. Auction houses in the game have a function similar to a real auction house in the offline world; players place items in the auction and buyers bid for the item, or they can buy an item immediately if they pay the price sellers want. The auction house regulates the inflation in the game and provides additional fun to the players by encouraging them to get involved in item generations and transactions. However, the huge difference between the traditional auction house of other games and of Diablo3 is that players can deal with real, offline money, such as dollars and euros. In Diablo3, players are required to choose a currency, whether in-game money currency or real money, when they access the auction house.

The Diablo series has been well known for its active item transactions compared to the early series. Because the game experience significantly varies up to the levels of weapon, and the items are randomly dropped from monsters, most players spend massive amounts of time hunting monsters while waiting for high level weapons. Therefore, many players who do not want to spend their time on the random possibility of weapons, and instead chose to buy items from other players with real money. The market for Diablo 2 items was too large to measure, and many players have complained that they became addicted to playing the game due to the game's item dropping and the potential of items as real money.

It can be interpreted that the purpose of Blizzard having RMT auction house is that the company is able to maintain the item transaction fee, which usually goes to the third parties. In the Diablo 3 auction house, the price is subject to a \$1 fee charge for an equipment item (weapon, armor, accessories, and other unique items), and 15% of the final sales price for commodities (gems,

materials, dyes, pages, recipes, and other non-unique items) (Blizzard Entertainment, 2011b) with a maximum price of \$250. Moreover, since the company can manage and record transactions, it can more accurately understand the economy of in-game placements and regulate cash flow. Players also can rely on transactions since the game host manages the transaction themselves. They do not need to use illegal third parties and risk being deceived by them. After the system had been successfully applied in most of countries, the South Korean government did not approve the auction house in the Korean-server, saying that the system contained the speculative traits, meaning that it could be played as a gambling game.

Blizzard Entertainment did not announce the financial impact of the RMT auction house. However, many people suspect that Blizzard earned significant revenue from the transaction fees of the RMT auction house, as the deals in the auction have been very active. Though the RMT auction is not applicable in the every game system, it is required to solve many issues such as regulations and taxations. However, if applicable, the business model is definitely attractive with minimum effort and huge impacts.



Figure 15 Diablo3 Auction House (Blizzard Entertainment, 2011b)



### 3.4.2 Electronic Sports

Electronic sports refers to professional gaming; game playing between two opponents (individuals or teams), having similar traits to traditional sports games, such as competitiveness, winners and losers, and multiple object tracking. In 1980, the first electronic sports game (called *e-Sports*) was played in the Space Invaders Tournament by Atari. It was first recorded in the e-sports event through electronic devices. Since the 1990s, the arcade gaming scene has mostly focused on fighting games, as well as bullet hell shooter games and rhythm music video games in more recent years. The mass popularity of e-sports began with Doom I & II, Quake. Electronic sports continued to succeed in the 20<sup>th</sup> century, the timing being aligned with the penetration of the internet and online games, with global tournaments, such as Major League Gaming (MLG), Global Starcraft League (GSL), World Cyber Games (WCG), Dreamhack, and Intel Extreme Master. Among many game genres, e-Sports are often held with genres of Real Time Strategy (RTS), Fighting, First Person Shop

(FPS), Massive Multiplayer Online (MMO) and Racing. In particular, RTSs, such as Starcraft and Warcraft III, are played professionally, while finals matches for Starcraft are spectated by tens of thousands of fans. FPSs, such as Halo, have a large professional base as well. In MLG (Major League Gaming) in America, the most popular game of e-sports is Halo. Currently Dota and LoL are both extremely popular for professional competition as well.

The way to generate revenue from popular e-Sports is not clear yet. Most shows and tournaments are provided for free to speculators and they are mostly used for marketing purposes rather than revenue generation. In South Korea, where e-Sports have enjoyed nationwide popularity with sponsorship from the government and an e-Sports specialized cable channel, the Korean e-Sports association (called *Kespa*), had conflict with Blizzard Entertainment regarding ownership of the game service property and whether it is common property like other sports or the property of a company.

As shown above, when the property of a game such as the e-Sports genre is not specified, the revenue generation from the e-Sports game itself is hard to predict for the game companies.

However, many people, including pro-gamers, show anchors, show broadcasters, and team management teams, are involved in e-Sports tournaments and shows, which has led to job creation, and individual internet showcases are active in giving revenues to show hosts. Slight revenue is also being generated with marketing effects. Barcraft, occasionally hosted by Blizzard, shows the best example of how a company can induce the effect of e-Sports. Combined with traditional sports bars, Barcraft offers an opportunity for e-Sports fans to get together and celebrate game events.

**Figure 16 Barcraft in Washington, D.C. (Barcraft, 2013)**



Although the clear business model to the companies is not suggested, the current popularity and future of e-Sports are indisputable and this trend forms the huge global industry with diverse stakeholders. Therefore, the potential for revenue generation is also expected after careful discussion of the current issues.

## **Chapter 4. Business Strategies in the Video Game Industry: an Analysis of Two Players, Activision-Blizzard and Electronic Arts**

In the mid-1980s, the game industry grew exponentially with the popularity of console game devices. The nineties was the time for console makers to experience not only further enormous growth in the video game industry, but also strong competition with new entrants into the market, Microsoft with Xbox and Nintendo's Wii, which opened a new era of a console game mechanism with movement-detective functionality applied in an innovative game experience.

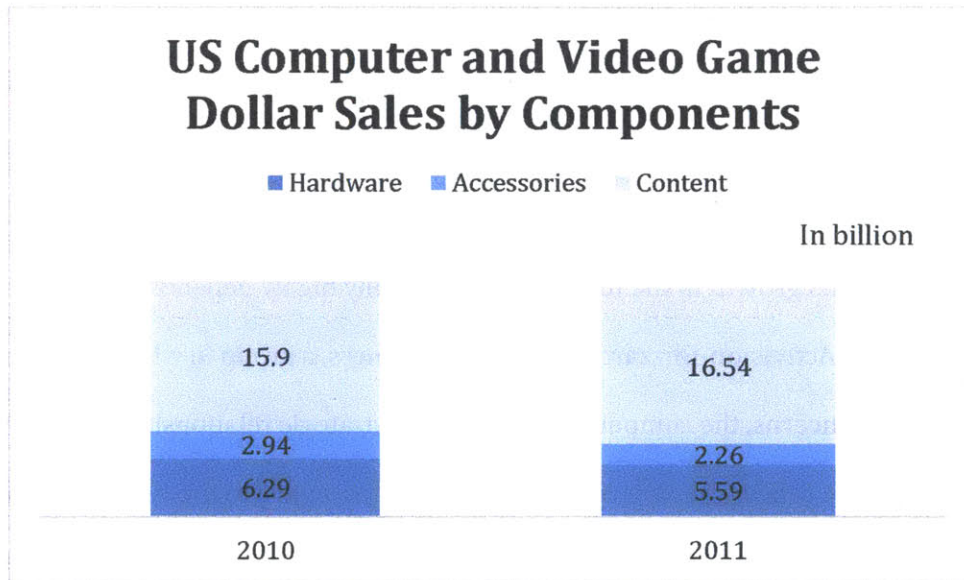
However, recently the emphasis on the game industry has been moving away from console makers and toward software developers due to diversified game platforms, including personal computers and mobiles. The total market size for the game industry is also strongly dependent on the sale of game software. In 2011, game software accounted for 66.8% of sales, \$16.54 billion out of a total \$24.75 billion total customers spending on the games industry, while hardware sales amounted to \$5.58 billion (Entertainment Software Association, 2013). The huge sale of content added to the significance of its sales size in the game market.

In this chapter, the movement toward game software business strategies and revenue models is discussed via the comparison of two major players, Activision-Blizzard and Electronic Arts.

Furthermore, the new trend of casual games is analyzed in terms of its advantages and its impact on the overall game industry.



**Figure 17 US Computer and Video Game Dollar Sales by Components (Entertainment Software Association, 2013)**



#### 4.1. Activision-Blizzard

Located in Santa Monica, California with 7,300 employees as of December 31, 2011 (MarketLine, 2012a), Activision-Blizzard is one of the biggest game developers in the world. Merged in 2008 by Vivendi Games, the French game developer and publisher, the company still exists as separate entities, Activision and Blizzard Entertainment, and each publishes games in their own names. The company has shown strong financial statements for the last several years. In 2011, revenue from digital channels recorded \$1.6 million with \$4,755 million net revenue and 30.3% of operating margin (Activision Blizzard, 2012). The company possesses \$3.5 billion in total cash and investment without long term debt. Moreover, it has shown very strong capital returns to shareholders, \$3.1 billion with a 96% payout ratio and \$3.3 billion in free-cash flow, from 2009 to 2011 (Activision Blizzard, 2012). A huge portion of the revenues comes from international sales. With a strong financial status and stable revenues from global markets, Activision-Blizzard is able to fully invest in its game development. The company has focused on globally successful titles, Call

of Duty, Skylander, World of Warcraft, Diablo Series, and the Starcraft series. Call of Duty: Modern Warfare 3 has the record as the best-selling video game ever in a single year (2011) and the online version of Call of Duty has been the fastest growing premium service ever created. World of Warcraft, services for nine years, as of 2012, still ranked as the number one subscription based MMORPG, although the number of subscribed users decreased from 12 million to 9 million in the season of 2010 (Activision Blizzard, 2012). However, the successful franchise history of the company may limit its growth in the future as the company highly depends on just a few titles. Major customers of Activision-Blizzard are hardcore gamers, a group in which growth is stagnated. To address these concerns, the company entered into a strategic relationship with games studios such as Marvel, MGM & EON, Hasbro, Mattel and Cabela to acquire to the right to publish their games, and it also built an exclusive 10-year alliance with Bungie, a developer of successful game franchises (MarketLine, 2012a).

Moreover, the dependence on console manufacturers is another obstacle for Activision-Blizzard. In many cases, the success of the company's game software product relies on the availability of a sufficient supply of game devices. As mentioned in the above chapter "Attributes of video game sales", the sales of game titles fluctuate in accordance with the expectations of manufacturers' support of a certain device, where the game title is available, and the release of new device generation. Considering the fact that 51% of sales were from the sale of products for console games in 2011, (MarketLine, 2012a) Activision-Blizzard adheres to the dependence of console manufacturers. In order to reduce the risk of the console device, the company has tried to transform its main business to an online entertainment company directly offering its service over the Internet. Through cloud computing technology, the company is able to connect all relevant data to enhance the game experience. For example, the players of Call of Duty with PlayStation can easily connect to Facebook to post their score or winning kills. Furthermore, the company plans to build its own online platform for a long-term strategy (Stephanie N. Mehta, 2010). In the interview with

Fortune, the CEO of Activision-Blizzard, Bobby Kotick, explained that the company's long-term strategy is to turn it into a media company with its own platform, and the short-term strategy to be less dependent on console manufacturers with an interest in the Internet-enabled television. The company has expanded its product platform to enable most products to be played on the personal computer and all of three major console devices so far, not limiting its availability to any particular platform. However, the company has not made any notable changes in its business strategy in terms of platform. The future steps of the company are expected to make a huge impact in the game industry.

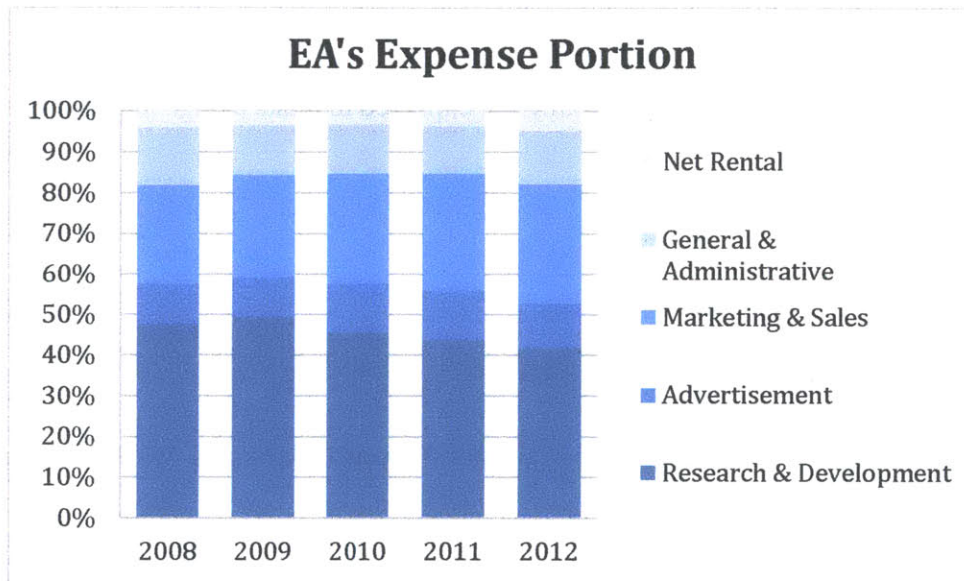
#### **4.2. Electronic Arts**

Considered the biggest competitor of the Activision-Blizzard, Electronic Arts has established a strong market position from the early video game industry. Founded in 1982, the company has grown to employ 9,200 people worldwide as of March 31, 2012, (Electronic Arts, 2011) with headquarters located in Redwood, California. EA's flagship brands include EA Games, EA Sports, Biowave, Maxis (Former EA Play), Popcap and Pogo. The company went through a tough time for the past several years; it recorded \$3,589 million net revenue in the fiscal year of 2011 while it lost \$276 million as a net loss. In 2010, the company also lost \$677 million as a net loss when it earned \$ 3,654 million net revenue.

The revenues have been relatively stable in the past years showing that the company has had a successful approach to its customers. However, operating loss in the past indicates major financial difficulties of the company. Analyzing EA's Income Statement in detail and comparing it to Activision-Blizzard's, it is obvious that the gap between huge net revenues and net profits was caused from the enormous investment in marketing and R&D, since Marketing & Sales Expense to Revenue ratio and Research & Development Expense to Revenue ratio are significantly higher. The

marketing expense has expanded from \$691 million in 2009 to \$747 million in 2011, showing the competitive promotional war in the gaming industry. The high expense in R&D, \$1,153 million in 2011, also contributed to the net loss. The average of the R&D in operating expense for last five years accounted for 31.61%, which is too high compared to Activision-Blizzard's 14.5%.

**Figure 18 EA's Expense Portion (Electronic Arts, 2011)**



Another contribution to the net loss is the restructuring charges. In order to move the majority of its business to mobile and new technology, Electronic Arts is re-constructing the entire organization, especially personnel. According to the recent announcement in April 2013, the company will lay off more workforces and layoffs have been occurring over the past several years (Tori McGrath, 2013). The specific reasons for the layoffs and reconstructing charge have not yet been revealed. Since the previous CEO John Riccitelto resigned in March 2013 and Larry Probst would serve as an executive chairman of the publisher before finding the new CEO (Eddie Makuch, 2013), it is hard to predict the company's business strategy under new management. Slightly positive net income in 2012 in combination with new management could show that EA's financials are improving. Likewise, R&D expense would pay out in the future. However it is not clear whether the company is in trouble or in the process of innovation.

Although the huge investment in game development resulted in a weak financial statement, it helped the company own a strong portfolio of game titles in almost every genre. Best seller titles, Sims, SimCity, Battlefield, Mass Effect, and Need for Speed, have earned stable popularity from every series released. FIFA12 was second in paid downloaded content, and Star Wars: The Old Republic is currently the second most played subscription MMO following World of Warcraft (MarketLine, 2012b). The company has also expanded its business to new platforms; through the acquisition of PopCap and Playfish, they combined to become the third largest social network gaming developer, and the company seems able to grasp the huge opportunity in newly rising platforms, specifically social network and mobile applications. In addition, the acquisition of Pogo.com in 2001, one of the biggest free-to-play platforms based on the revenues from advertisements, strengthened EA's position in every platform in the game industry.

However, a variety of the products in every genre have diluted the brand name of EA. While Activision-Blizzard has been established as the brand name with a huge fandom from hardcore players, EA could not build that strong brand image. Many players like to play EA games but do not have any strong loyalties to the company. Moreover, as mentioned in the section of Activision-Blizzard, the high dependence of game software developers on console manufacturers has also been the obstacle for the growth of the company. In that situation, Electronic Arts has been the pioneer to develop its own platform to directly make sales to the customers. EA's digital revenue has come from its internally developed and co-published game software, especially through the company's own sales platform, Origin.com. EA's digital revenues have increased \$424 million in FY2009 to \$1,227 million in 2012, with a compounded annual growth rate of 43% during the period (MarketLine, 2012b). The company has invested in its digital platform and sales channels. It offers a Facebook version of Madden and FIFA Soccer games, and its Sims Social has become the second-most popular game on Facebook (Konrad Alex, 2011). With these efforts, the company

enables its games to be playable everywhere and to reach every segment of game players, providing strong advantages over its competitors through diversified revenue bases.

#### **4.3. The Trend of Business Strategy in Game Software Developers**

Although the two companies showed different financial performances, the business strategies for both companies indicate certain directions and trends of the market. Needless to say, the pursuit of the global markets has been the main business strategy of the companies. Furthermore, the diversification of the platforms beyond console devices and the development of the casual game are clearly recognizable in their current business development strategy.

##### **4.3.1 Aggressively expand to the global markets**

For the two companies, the global market strategies are not a new concept. From the 1990s, companies have expanded their businesses to the global market, and they currently put emphasis on developing markets beyond the already established Europe and East Asia markets. For Activision-Blizzard, a huge portion of the revenues comes from international sales. The company operates in the US, Canada, the UK, France, Germany, Ireland, Italy, Sweden, Spain, the Netherlands, Australia, South Korea and China. North America makes up the majority of customers, as 50% of revenue is from the region, but the revenue from Asia Pacific has significantly increased, with 22% growth in 2010 to 2011 while North America showed a slight decrease in net revenue (Konrad Alex, 2011). The company has been pursuing an aggressive market expansion to the Chinese market through a partnership with a major player in China, Tencent, teaming up to bring Call of Duty Online to the Chinese market with a free-to-play revenue model (**Activision blizzard partnering with tencent.2012**).

With the diversified game titles mentioned above, Electronic Arts occupies a strong global market position. It is the number one publisher in the western market by segment share; the company accounted for 20% of market share of the EU market and 17% share of the North American market in the third quarter of FY2012 (MarketLine, 2012b). In conclusion, the company has a strong brand name with the powerful global market position and strong portfolio of game titles.

#### **4.3.2 Diversifying service platforms beyond console games**

The most distinguishable strategic efforts from the giant gaming companies are the diversification of their service platforms beyond console games. Traditionally, these companies have heavily relied on the console manufacturers and still have strong relationships with them. However, both companies do not contract any exclusive relationships with a sole manufacturer and enable game products in all major platforms; Xbox 360, PlayStation, Wii and personal computers. Furthermore, the companies expanded the services in their own distribution channels; Activision-Blizzard is being in the progress, and Electronic Arts already has the successful direct-to-customer platform, Origin.com. Both companies also expand these businesses to new platforms, social media and mobile applications. Activision-Blizzard builds a strategic relationship with smaller studios and aims to be the complete online entertainment media company with its own platform under the leadership of CEO Bobby Kotick.

In the industry, we can observe a negative result of the high level of dependence on a sole platform from the case of Zynga. In 2011, the active user of the most popular Zynga's game, CityVille' reached 84.2 million monthly, recording the fastest growing game apps in history (Chris Morrison, 2011). However, as time goes by, the strategy of a tight relationship with Facebook, the main platform for Zynga, seemed to become weaker. Facebook's dependence on revenue from Zynga decreased from 19% from the first six months of 2011 to 13% of 2012 while the Zynga's revenue sent to Facebook in the same period was flat. To be specific, Facebook's revenue sent from Zynga, including payment

processing fees from Zynga games, advertisements, third-party ads on Zynga's app, and Facebook ads and sponsored stories displayed on Zynga.com, was stable from \$308.9 million in the first six months of 2011 to \$313.9 million in 2012 while the portion of the total Facebook revenue was decreased due to the increased revenues of Facebook from diverse companies (Geron, 2012a). This means that Facebook has been diversifying its revenue model while Zynga has not enlarged its profit pool out of Facebook. Moreover, investors are likely to believe that Zynga cannot survive without the exclusive relationship with Facebook; when two companies revamped the deal of Facebook, to be an exclusive platform of Zynga games and to not develop games by itself (Zynga would be one of other game app developers), the stock price of Zynga plunged \$0.32 or 12.6% to \$2.29, while Facebook's decreased just \$0.04 or 0.15% to \$27.28 (Geron, 2012b). Now, Zynga has developed its own platform and makes a concerted effort to expand to more mobile markets, but the company is still regarded as the Facebook game developers without significant results in new platforms. Zynga's case shows how risky it is when a game developer highly depends on a sole platform. In this sense, the effort of Activision-Blizzard and Electronic Arts to diversify the platform for service is appreciated.

#### **4.3.3 Extend the services to casual games including social games**

Both companies, Activision-Blizzard and Electronic Arts, are known for their hardcore fandoms for the successful sequels. Their best-seller blockbuster sequels, Call of Duty series of Activision-Blizzard and Battlefield series of Electronic Arts have been designed to appeal to the taste of hardcore console game players. The main revenue sources of the companies, MMORPG such as World of Warcraft for Activision-Blizzard and Star Wars: The Old Republic for Electronic Arts, have been mostly played by hardcore players who are willing to pay monthly subscriptions and to spend more than 10 hours per a week playing. However, considering the current movement of the two



companies, we can observe that these two companies are expanding their services to cover rising casual gamers.

Electronic Arts took a step forward with casual gamers with its conventional games including Sims series and SimCitys. The acquisitions of a free game service provider, Pogo.com, and a casual game maker, Popcap, enable Electronic Arts to strongly position itself in the casual game market.

Currently, EA's game, Sims Social has ranked the second most played game among Facebook game applications, showing the success of the service in the new platform. The company has established its name in casual games and is expected to continue its effort in the growing casual market.

A relative newcomer in casual games, Activision-Blizzard has shown its interest in the market. So far, the company has not been deeply engaged with casual games. However, since October 2011, the company has made a success of the Skylander series that shows characteristics of casual games, such as simple mechanism and less practice required. The acquisition of Budcat Creation in 2008 that focused on the development of the Wii's casual product lines also demonstrates the company's interest in casual games (William Usher, 2008). Furthermore, in an interview with Forbes.com, the CEO, Bobby Kotick, mentioned the potential of Facebook as a gaming platform and the need to hire social game professionals, which the company lacks, further implying its interest in casual games market as its next target (Ewalt David M, 2012). The next steps for Activision-Blizzard in social games and casual games have not been officially announced yet. However, more engagement in casual games for the company is highly anticipated:

**"I think we generally try and promote from within. You know, we have really, really long tenure; the people who come to Activision generally stay for a really long time. So we have a long history of seeing who's performed and who's been successful in developing new innovative ideas, and we would generally try and promote from within.**

**Sometimes we need some kind of a specialized skill—like right now, there is a lot of work being done on Facebook games. We've always been a platform agnostic company, we've always said, if you have a platform and you have a big enough installed base of that platform, we'll evaluate it as an opportunity to make games on. And Facebook, with 750 million users, clearly has enough of a platform.**

The challenge always is, can you deliver a shareholder return by investing in said platform, and in the case of Facebook, we think we can.

But the skills that are required to do social games on a Facebook platform include analytical skills that are different than what we have in our business intelligence unit today. So we've had to go out and find people who have these unique kinds of skills—and there are very few of them that actually have proven their skills. So you have to find people who have the characteristics of being able to develop systems to analyze game play or game behavior.

*Interview of Bobby Kotick, Activision-Blizzard CEO in Forbes in July 20, 2011*

#### **4.3.4 Accept free-to-play models**

With the embrace of casual games, two companies have aggressively applied the free-to-play models in their games titles. Electronic Arts has shown the active application of the free-to-play models in its games. An affiliated company, Pogo.com, provides all the games for free with the revenue from advertisements. All social games in Facebook and the mobile games, including The Sims Social, SimCity Social, EA Sports FIFA Allstars, Madden NFL Superstars, and others (EA, 2013b), are made available for free and generate money from micro-transactions. Interestingly, most free services provided by EA through social networks and mobile applications are sequels from previous well-selling series. It can be interpreted that EA has moved its emphasis to free games even with a series, which virtually guarantees popularity.

On the other hand, Activision-Blizzard, released Pitfall! to the mobile application platforms for free. The game was previously released in 1982 for the historical Atari platform. The mobile version inherits the characters and mechanism from its 30 year old ancestor and has enjoyed huge popularity with 3,120 reviews as of the April 20, 2013 in Google-play market (Activision Publishing, 2013).

On March 22, 2013 at East Pax, one of the internationally known game shows, Blizzard Entertainment announced a new game, which stands out from previous games developed by Blizzard: a strategy card game called Hearthstone: Heroes of Warcraft (Mitch Dyer, 2013). Blizzard

Entertainment has been famous for sticking to traditional, up-front payment pricing with PC-focused packaged games or a subscription for World of Warcraft. Hearthstone is the first game developed by Blizzard and provided for free. The game mechanism is a currently popular match-up. The counterparts show their cards in sequence and the player with a stronger status in total cards win the games. With the simple and traditional system, many games have shown the incredible profit creation. One of the most popular card-battler games, Millan Arthur (Original Name: 拡散性ミリオンアーサー\_) developed by Square Enix, has serviced Japan and South Korea and achieved over \$300,000 in revenue with a relatively low numbers of downloads, 500,000 as of January 2013 (문영수, 2013). Although there are many controversial issues regarding the card game, especially the low probability of strong cards and the highly induction of payment for better games which leads to extreme spending of users, the card battle game has settled its position in the gaming industry; Blizzard Entertainment quickly discovered its potential. Like other games in the same genre, the game, Hearthstone, will be offered for free and earn revenue from micro-transactions. Since the traditional charged business model is broken in Blizzard Entertainment, more upcoming free games are expected from the company.

#### **4.4. Why Casual Games?**

Shown throughout the previous chapters, the movement to the casual games with the free-to-play model is distinguishable in both companies. The growing popularity of casual games is still being analyzed both from the supply and demand sides.

From the demand side, the inflow of new players, especially female, with the penetration of social networks and mobiles has impacted the gaming industry, as discussed above. The video game is now not an exclusive culture for “geeks” stereotypically represented by young, white boys in middle

class suburbia, but for a broad entertainment culture for those who have any kinds of electronic devices. People started to play video games for which they did not need to invest an amount of time to learn how to play or spend money for exclusive game devices but can easily defeat their friends and kill spare time. With the penetration of electronic devices to all demographics, the escalating popularity of casual games has been the natural phenomena.

From the supply sides, the development of casual games dramatically reduces the risk related to huge cost. It was an enormous burden on the game companies to invest development on a single title's cost as much as on a Hollywood movie. After the development of the game service, gigantic marketing costs was needed in order to communicate with potential players in an environment of very fierce competition. Therefore, few blockbuster titles developed by biggest developers could survive in the console-game era. However, the casual games changed the process of development sides. Thanks to a simple mechanism and a shorter life cycle, the time and cost for casual games development is considerably reduced. Consequently the casual game company can develop numerous games with the same investment of time and money as a hardcore game. This leads to develop a variety of game genres to find niche markets of various new game players and provides huge financial opportunities to smaller game studios.

In this situation, two major companies who dominated console games realized the market opportunity and have worked hard to grasp it. The companies already established superior technology and marketing strategies, which can be easily transferred to current casual games. For example Blizzard Entertainment successfully launched the new casual game, Hearthstone, with previous technology and a brand name and with significantly less investment than preceding titles, with fifteen developers, diversifying the portfolio from its comfort zone, the RTSs and RPGs.

Moreover, when the companies acquired small casual games studios, they can fully utilize their marketing and management experiences with casual games. The expanded game titles developed by acquired game studios can diversify their game portfolio by fewer investments and costs.

Moreover, casual games require less cost to expand to the global market. Due to its simple mechanism, casual games do not require huge amounts of time and costs for localization. Because of these advantages, two companies have expanded their services to casual games, and their future is seen within the market.

#### 4.5. Takeaways from the financial analysis of two companies' performances

Although both companies have shown stable revenues for the past several years, net profits illustrated a huge difference between two companies' current performance. Electronic Arts has shown the high expenses especially for marketing & sales and research & development resulting in low net profit. At the same time, Activision-Blizzard shows uprising revenue for the last five years with lower operating expenses than Electronic Arts.

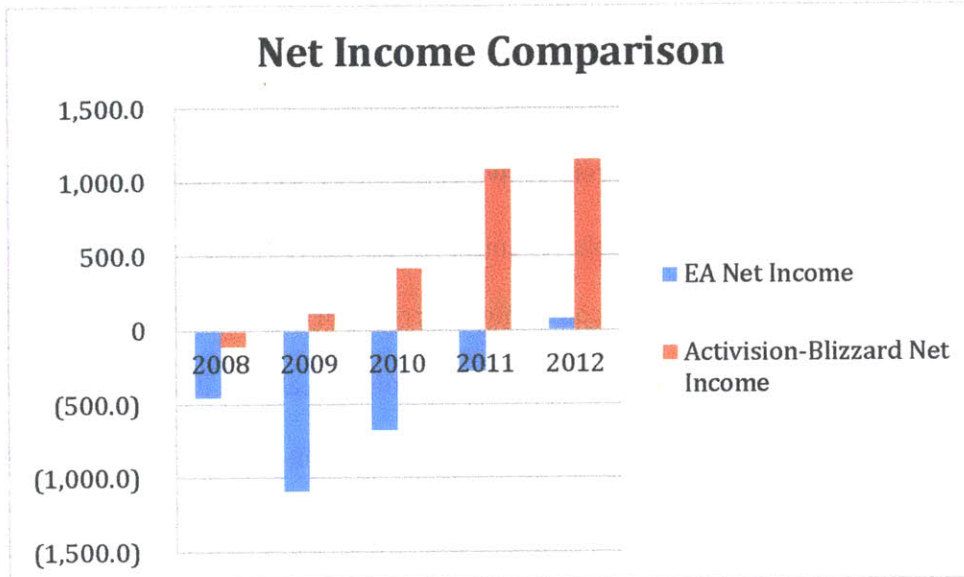
**Figure 19 Financial Comparison of Activision Blizzard and Electronic Arts**

(S&P Capital IP, 2013a; S&P Capital IP, 2013b)

	2008		2009		2010		2011		2012	
	A-B	EA	A-B	EA	A-B	EA	A-B	EA	A-B	EA
Revenue	3,026	3,665	4,729	4,212	4,447	3,654	4755	3,589	4,856	4,141
Growth	124%	18.6%	41.4%	14.9%	3.9%	-14%	6.9%	-1.8%	2.1%	15.4%
Gross Margin	39%	50.8%	46%	49.5%	52%	48.6%	63%	58.2%	66%	61.7%
R&D	19.6%	31.2%	14.7%	32.26%	14%	33.6%	13.2%	31.76%	12.4%	29.3%
Ad	8%	6.4%	8.6%	6.4%	7.5%	9%	7.2%	8.7%	8.2%	7.8%
Marketing & Sales	15.3%	16%	12.7%	16.4%	11.7%	20%	11.5%	20.9%	12%	20.6%
Operating Profit	<u>(-422)</u>	<u>(-540)</u>	<u>2</u>	<u>(-665)</u>	<u>429</u>	<u>(-908)</u>	<u>985</u>	<u>(-506)</u>	<u>1,018</u>	<u>(-343)</u>

**Figure 20 Net Income Comparison with Activision-Blizzard and Electronic Art**

(S&P Capital IP, 2013a; S&P Capital IP, 2013b)



Considering the fact that the both of these companies have earned stable revenues, meaning that they are keeping steady buyers, and that they are the biggest players in the gaming industry, the huge net loss of Electronic Arts implies the risk of too diverse a portfolio of games. Although more games in all kinds of genres and platforms can attract more gamers, it accompanies a huge amount of expenses. Since the company has dealt with games in every genre without the big blockbusters, a high marketing expenditure has been necessary to reach new customers. The enormous R&D costs have also been caused by too diverse portfolios. As mentioned above, the company spent more than \$200 million on Star Wars: The Old Republic. The game has ranked second of all MMORPGs. However, the revenue generated by the game has not been sufficient to cover all of the R&D costs. Since the company did not have a successful history of MMORPGs and because the popularity of the genre is in decline, \$200 million for an unfamiliar genre was not the optimal choice for the company. Currently, the company has committed \$80 million to a next-generation console game production (Rob LeFebvre, 2012) while developing eight huge titles including Battlefield 3 and Sims 3

University Life (EA, 2013a). As mentioned before, the EA failed to build the vivid branding of the company. Sims Series and products from EA Sports have made great successes and other casual games are also earning enough revenues. However, the identity of EA is in question for many users. This diluted branding cannot build the fandom for EA, resulting in a huge marketing expense to approach players.

In contrast, Activision-Blizzard has a strong position in hardcore games. Because of a strong brand name with well-established sequels such as Call of Duties, Diablo Series, and Warcraft Series, Activision-Blizzard has spent relatively less in marketing and sales costs than other competitors. The fandoms of Activision and Blizzard are very well known. When the company announced that Diablo III was to be released in Korea, more than 1,000 people waited more than 24 hours, camping out in front of the main stores. This huge phenomena itself acts as a marketing tool so that the company can minimize its own marketing expenses.

In sum, gaming companies should focus on developing mega hit games with clear branding strategies aimed at customers, while the approach to diverse genres and platforms are appreciated. Smart R&D strategies with deep market and users analysis are required, particularly if the company is not familiar with the new game titles or the genre of the game.

## Chapter 5 Conclusion

Professionally incepted from Pong by Atari Inc., the video game industry has expanded exponentially. After the era of arcade games and console games, all kinds of electronic platforms are involved in the video game industry in the company of the popularity of online games and the mobile game applications. As the biggest entertainment market, the video game industry generated a total of \$24.75 billion in 2011 from total consumer spending. Unlike in the past when hardware console devices produced the most revenues in the industry, currently the game software industry leads the growth of markets. The inflow of new game users, mostly females and elders, has induced the popularity of casual games in social networks and mobile apps, leading the changes on the development side. The sales of game software in console eras have been led by blockbuster sequels produced by major developing companies and the penetration and the expected release of the console game devices. The games for new platforms, computers and mobile games, are influenced by the diffusion of broadband and devices. The popularity of casual games in mobile apps and social networks show different characteristics from traditional games, expected to change the broad picture of the industry.

As reviewed in the previous chapters, the business models in the video game industry are continuously being re-invented and evolving. Therefore, it is difficult to say that one specific business model is superior to others, considering the fact that all game services have different genres, characteristics, and trends. Moreover, the service users prefer vary up to the geographic regions or the segmentations, whether they are casual gamers or hardcore gamers. However, through research, the growing trend of the free-to-model has been notably recognized even in the genres that provide services with traditional upfront fees or subscription, such as MMORPGs or RTSs. Because of fierce competition and the high potential for revenues from a free-to-play model, the revenue model is expected to continue its popularity and to permeate into the traditional business models with diverse modifications. The traditional models for packaged game software



and a subscription are still prevail especially in hardcore video games, but many of them have partially applied the free-to-play models for more revenue generation. In particular the virtual goods model has great potential, as the items provided in the in-game stores can vary in many different applications. Other business models such as a freemium and advertisements are being applied in various game services, while many companies work hard to come up with new ways to grasp users' willingness to pay.

The performance of the two big rivals and the largest players in the gaming industry, Activision-Blizzard and Electronic Arts, indicates a certain direction in the market, since they have applied many overlapping business strategies. For example, an aggressive expansion to the global market has been, needless to say, the major strategy for both companies. These two companies have earned more than 50% of their revenues from international markets. The companies nowadays concentrate on uprising markets, especially China.

Currently, the themes of business strategies found in both companies are "diversification" and "casual games". Unlike in the past when the companies focused on sales of console games and were heavily influenced by the cycle of console devices, companies have diversified their products to all kinds of possible platforms, from traditional console devices to mobiles, all to minimize a volatile position with manufacturers. Moreover, the expansion to casual games, including social games and mobile app games, shows that the two companies understand the current needs of players and try to meet all segmentations of players.

At the same time, the different financial performance of the two companies gives a lesson for the gaming companies; do not have too diversified a portfolio and focus on having a strong brand name with blockbusters. Due to too many titles in every genre, Electronic Arts has been losing profitability caused by unbalanced R&D and marketing expenses, while Activision-Blizzard has spent just half of the EA's expenses with much success. Various game titles can be beneficial since the company can reach all customer segments. However, Electronic Arts has too many titles for

single segmentation without a distinguishable blockbuster title. The too high investment on an unfamiliar genre, MMROPRG, also attribute the unbalance between revenue generated and R&D expense. Moreover, the shortage of blockbuster titles induces enormous marketing spending. Since Activision-Blizzard has built a strong fandom of successful sequels, the company is able to spend relatively less on marketing costs than competitors. In contrast, Electronic Arts has been required to pay huge marketing and sales costs in order to continuously promote its new games to the players.

The video gaming industry is very attractive in terms of growth rate and the total size of market. At the same time, the rapidly rising competition and uncertainty make the industry vulnerable, even with small changes. The gaming companies are currently more likely to have more success in casual games with free-to-play models. However, the companies are required to build a strong brand with successful sequels. Although it sounds contradictory, the lesson in all business worlds, the companies who work hard to catch up with customers can enjoy fruitful results, is also applied in the video gaming industry.

## Appendices (S&P Capital IP, 2013a; S&P Capital IP, 2013b)

Table 1 Key Financials: Activision Blizzard

Key Financials <sup>1</sup>					
For the Fiscal Period Ending	12 months Dec-31-2008A	12 months Dec-31- 2009A	12 months Dec-31- 2010A	12 months Dec-31- 2011A	12 months Dec-31- 2012A
Currency	USD	USD	USD	USD	USD
<b>Total Revenue</b>	<b>3,026.0</b>	<b>4,279.0</b>	<b>4,447.0</b>	<b>4,755.0</b>	<b>4,856.0</b>
<i>Growth Over Prior Year</i>	124.3%	41.4%	3.9%	6.9%	2.1%
<b>Gross Profit</b>	<b>1,187.0</b>	<b>1,972.0</b>	<b>2,312.0</b>	<b>2,983.0</b>	<b>3,194.0</b>
<i>Margin %</i>	39.2%	46.1%	52.0%	62.7%	65.8%
<b>EBITDA</b>	<b>316.0</b>	<b>753.0</b>	<b>996.0</b>	<b>1,514.0</b>	<b>1,571.0</b>
<i>Margin %</i>	10.4%	17.6%	22.4%	31.8%	32.4%
<b>EBIT</b>	<b>(69.0)</b>	<b>406.0</b>	<b>798.0</b>	<b>1,366.0</b>	<b>1,451.0</b>
<i>Margin %</i>	(2.3%)	9.5%	17.9%	28.7%	29.9%
<b>Earnings from Cont. Ops.</b>	<b>(107.0)</b>	<b>113.0</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>
<i>Margin %</i>	(3.5%)	2.6%	9.4%	22.8%	23.7%
<b>Net Income</b>	<b>(107.0)</b>	<b>113.0</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>
<i>Margin %</i>	(3.5%)	2.6%	9.4%	22.8%	23.7%
<b>Diluted EPS Excl. Extra Items<sup>3</sup></b>	<b>(0.11)</b>	<b>0.09</b>	<b>0.33</b>	<b>0.92</b>	<b>1.01</b>
<i>Growth Over Prior Year</i>	NM	NM	278.0%	178.8%	9.8% <sup>3</sup>

Table 2 Balance Sheet: Activision-Blizzard

Balance Sheet					
Balance Sheet as of:	Restated Dec-31-2008	Dec-31- 2009	Restated Dec-31-2010	Dec-31-2011	Dec-31- 2012
Currency	USD	USD	USD	USD	USD
<b>ASSETS</b>					
Cash And Equivalents	2,958.0	2,768.0	2,812.0	3,165.0	3,959.0
Short Term Investments	44.0	477.0	696.0	360.0	416.0
<b>Total Cash &amp; ST Investments</b>	<b>3,002.0</b>	<b>3,245.0</b>	<b>3,508.0</b>	<b>3,525.0</b>	<b>4,375.0</b>
Accounts Receivable	974.0	739.0	673.0	649.0	707.0
<b>Total Receivables</b>	<b>974.0</b>	<b>739.0</b>	<b>673.0</b>	<b>649.0</b>	<b>707.0</b>
Inventory	262.0	241.0	112.0	144.0	209.0
Deferred Tax Assets, Curr.	536.0	498.0	648.0	507.0	487.0
Other Current Assets	485.0	606.0	491.0	555.0	496.0
<b>Total Current Assets</b>	<b>5,259.0</b>	<b>5,329.0</b>	<b>5,432.0</b>	<b>5,380.0</b>	<b>6,274.0</b>
Gross Property, Plant & Equipment	396.0	437.0	512.0	533.0	513.0
Accumulated Depreciation	(247.0)	(299.0)	(343.0)	(370.0)	(372.0)
<b>Net Property, Plant &amp; Equipment</b>	<b>149.0</b>	<b>138.0</b>	<b>169.0</b>	<b>163.0</b>	<b>141.0</b>

<sup>3</sup> Capital IQ

Long-term Investments	78.0	23.0	23.0	16.0	8.0
Goodwill	7,227.0	7,154.0	7,132.0	7,111.0	7,106.0
Other Intangibles	1,722.0	1,089.0	676.0	595.0	660.0
Deferred Tax Assets, LT	-	-	-	-	-
Other Long-Term Assets	30.0	9.0	15.0	12.0	11.0
<b>Total Assets</b>	<b><u>14,465.0</u></b>	<b><u>13,742.0</u></b>	<b><u>13,447.0</u></b>	<b><u>13,277.0</u></b>	<b><u>14,200.0</u></b>
<b>LIABILITIES</b>					
Accounts Payable	319.0	302.0	363.0	390.0	343.0
Accrued Exp.	706.0	779.0	871.0	687.0	639.0
Curr. Income Taxes Payable	136.0	-	-	-	-
Unearned Revenue, Current	923.0	1,426.0	1,726.0	1,472.0	1,657.0
Other Current Liabilities	-	-	-	7.0	13.0
<b>Total Current Liabilities</b>	<b><u>2,084.0</u></b>	<b><u>2,507.0</u></b>	<b><u>2,960.0</u></b>	<b><u>2,556.0</u></b>	<b><u>2,652.0</u></b>
Def. Tax Liability, Non-Curr.	615.0	270.0	120.0	55.0	25.0
Other Non-Current Liabilities	239.0	209.0	164.0	174.0	206.0
<b>Total Liabilities</b>	<b><u>2,938.0</u></b>	<b><u>2,986.0</u></b>	<b><u>3,244.0</u></b>	<b><u>2,785.0</u></b>	<b><u>2,883.0</u></b>
Common Stock	-	-	-	-	-
Additional Paid In Capital	12,170.0	12,376.0	12,353.0	9,616.0	9,450.0
Retained Earnings	(474.0)	(361.0)	57.0	948.0	1,893.0
Treasury Stock	(126.0)	(1,235.0)	(2,194.0)	-	-
Comprehensive Inc. and Other	(43.0)	(24.0)	(13.0)	(72.0)	(26.0)
<b>Total Common Equity</b>	<b><u>11,527.0</u></b>	<b><u>10,75.0</u></b>	<b><u>10,203.0</u></b>	<b><u>10,492.0</u></b>	<b><u>11,317.0</u></b>
<b>Total Equity</b>	<b><u>11,527.0</u></b>	<b><u>10,756.0</u></b>	<b><u>10,203.0</u></b>	<b><u>10,492.0</u></b>	<b><u>11,317.0</u></b>
<b>Total Liabilities And Equity</b>	<b><u>14,465.0</u></b>	<b><u>13,742.0</u></b>	<b><u>13,447.0</u></b>	<b><u>13,277.0</u></b>	<b><u>14,200.0</u></b>

Table 3 Income Statement: Activision-Blizzard

Income Statement					
For the Fiscal Period Ending	Reclassified 12 months Dec-31-2008	12 months Dec-31- 2009	Reclassified 12 months Dec-31-2010	Reclassified 12 months Dec-31-2011	12 months Dec-31- 2012
Currency	USD	USD	USD	USD	USD
Revenue	3,026.0	4,279.0	4,447.0	4,755.0	4,856.0
Other Revenue	-	-	-	-	-
<b>Total Revenue</b>	<b>3,026.0</b>	<b>4,279.0</b>	<b>4,447.0</b>	<b>4,755.0</b>	<b>4,856.0</b>
Cost Of Goods Sold	1,839.0	2,307.0	2,135.0	1,772.0	1,662.0
<b>Gross Profit</b>	<b>1,187.0</b>	<b>1,972.0</b>	<b>2,312.0</b>	<b>2,983.0</b>	<b>3,194.0</b>
Selling General & Admin Exp.	735.0	939.0	888.0	988.0	1,139.0
R & D Exp.	521.0	627.0	626.0	629.0	604.0
Depreciation & Amort.	-	-	-	-	-
Other Operating Expense/(Income)	-	-	-	-	-
<b>Other Operating Exp., Total</b>	<b>1,256.0</b>	<b>1,566.0</b>	<b>1,514.0</b>	<b>1,617.0</b>	<b>1,743.0</b>
<b>Operating Income</b>	<b>(69.0)</b>	<b>406.0</b>	<b>798.0</b>	<b>1,366.0</b>	<b>1,451.0</b>

<sup>4</sup> Ibid

Interest Expense	(3.0)	(4.0)	(5.0)	(4.0)	(1.0)
Interest and Invest. Income	36.0	15.0	8.0	14.0	6.0
<b>Net Interest Exp.</b>	<b>33.0</b>	<b>11.0</b>	<b>3.0</b>	<b>10.0</b>	<b>5.0</b>
Currency Exchange Gains (Loss)	6.0	(1.0)	(2.0)	(7.0)	2.0
Other Non-Operating Inc. (Exp.)	-	-	-	-	-
<b>EBT Excl. Unusual Items</b>	<b>(30.0)</b>	<b>416.0</b>	<b>799.0</b>	<b>1,369.0</b>	<b>1,458.0</b>
Restructuring Charges	-	(23.0)	-	(25.0)	-
Merger & Related Restruct. Charges	(93.0)	-	(3.0)	(1.0)	-
Impairment of Goodwill	-	-	-	(12.0)	-
Gain (Loss) On Sale Of Invest.	7.0	-	-	-	-
Asset Writedown	(71.0)	(409.0)	(326.0)	-	-
Other Unusual Items	-	8.0	22.0	-	-
<b>EBT Incl. Unusual Items</b>	<b>(187.0)</b>	<b>(8.0)</b>	<b>492.0</b>	<b>1,331.0</b>	<b>1,458.0</b>
Income Tax Expense	(80.0)	(121.0)	74.0	246.0	309.0
<b>Earnings from Cont. Ops.</b>	<b>(107.0)</b>	<b>113.0</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>
Earnings of Discontinued Ops.	-	-	-	-	-
Extraord. Item & Account. Change	-	-	-	-	-
<b>Net Income to Company</b>	<b>(107.0)</b>	<b>113.0</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>
Minority Int. in Earnings	-	-	-	-	-
<b>Net Income</b>	<b>(107.0)</b>	<b>113.0</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>

Table 4 Key Financials: Electronic Arts

Key Financials <sup>1</sup>					
For the Fiscal Period Ending	12 months Mar-31- 2008A	12 months Mar-31-2009A	12 months Mar-31- 2010A	12 months Mar-31- 2011A	12 months Mar-31- 2012A
Currency	USD	USD	USD	USD	USD
<b>Total Revenue</b>	<b>3,665.0</b>	<b>4,212.0</b>	<b>3,654.0</b>	<b>3,589.0</b>	<b>4,143.0</b>
<i>Growth Over Prior Year</i>	<i>18.6%</i>	<i>14.9%</i>	<i>(13.2%)</i>	<i>(1.8%)</i>	<i>15.4%</i>
<b>Gross Profit</b>	<b>1,860.0</b>	<b>2,085.0</b>	<b>1,788.0</b>	<b>2,090.0</b>	<b>2,557.0</b>
<i>Margin %</i>	<i>50.8%</i>	<i>49.5%</i>	<i>48.9%</i>	<i>58.2%</i>	<i>61.7%</i>
<b>EBITDA</b>	<b>(60.0)</b>	<b>(157.0)</b>	<b>(352.0)</b>	<b>25.0</b>	<b>290.0</b>
<i>Margin %</i>	<i>(1.6%)</i>	<i>(3.7%)</i>	<i>(9.6%)</i>	<i>0.7%</i>	<i>7.0%</i>
<b>EBIT</b>	<b>(246.0)</b>	<b>(355.0)</b>	<b>(544.0)</b>	<b>(155.0)</b>	<b>74.0</b>
<i>Margin %</i>	<i>(6.7%)</i>	<i>(8.4%)</i>	<i>(14.9%)</i>	<i>(4.3%)</i>	<i>1.8%</i>
<b>Earnings from Cont. Ops.</b>	<b>(454.0)</b>	<b>(1,088.0)</b>	<b>(677.0)</b>	<b>(276.0)</b>	<b>76.0</b>
<i>Margin %</i>	<i>(12.4%)</i>	<i>(25.8%)</i>	<i>(18.5%)</i>	<i>(7.7%)</i>	<i>1.8%</i>
<b>Net Income</b>	<b>(454.0)</b>	<b>(1,088.0)</b>	<b>(677.0)</b>	<b>(276.0)</b>	<b>76.0</b>
<i>Margin %</i>	<i>(12.4%)</i>	<i>(25.8%)</i>	<i>(18.5%)</i>	<i>(7.7%)</i>	<i>1.8%</i>



Diluted EPS Excl. Extra Items <sup>3</sup>	(1.45)	(3.4)	(2.08)	(0.84)	0.23
Growth Over Prior Year	NM	NM	NM	NM	NM

Table 5 Balance Sheet: Electronic Arts

Balance Sheet					
Balance Sheet as of:	Mar-31-2008	Mar-31-2009	Mar-31-2010	Mar-31-2011	Mar-31-2012
Currency	USD	USD	USD	USD	USD
<b>ASSETS</b>					
Cash And Equivalents	1,553.0	1,621.0	1,273.0	1,579.0	1,293.0
Short Term Investments	1,463.0	899.0	723.0	658.0	556.0
<b>Total Cash &amp; ST Investments</b>	<b>3,016.0</b>	<b>2,520.0</b>	<b>1,996.0</b>	<b>2,237.0</b>	<b>1,849.0</b>
Accounts Receivable	306.0	116.0	206.0	335.0	366.0
<b>Total Receivables</b>	<b>306.0</b>	<b>116.0</b>	<b>206.0</b>	<b>335.0</b>	<b>366.0</b>
Inventory	168.0	217.0	100.0	77.0	59.0
Prepaid Exp.	54.0	74.0	66.0	89.0	85.0
Deferred Tax Assets, Curr.	145.0	51.0	44.0	56.0	67.0
Restricted Cash	-	-	39.0	100.0	31.0
Other Current Assets	236.0	142.0	134.0	138.0	152.0
<b>Total Current Assets</b>	<b>3,925.0</b>	<b>3,120.0</b>	<b>2,585.0</b>	<b>3,032.0</b>	<b>2,609.0</b>
Gross Property, Plant & Equipment	1,038.0	1,035.0	1,085.0	1,127.0	1,219.0
Accumulated Depreciation	(642.0)	(681.0)	(548.0)	(614.0)	(651.0)
<b>Net Property, Plant &amp; Equipment</b>	<b>396.0</b>	<b>354.0</b>	<b>537.0</b>	<b>513.0</b>	<b>568.0</b>
Long-term Investments	-	-	27.0	-	-
Goodwill	1,152.0	807.0	1,093.0	1,110.0	1,718.0
Other Intangibles	265.0	221.0	204.0	144.0	369.0
Deferred Tax Assets, LT	164.0	61.0	52.0	49.0	42.0
Other Long-Term Assets	157.0	115.0	148.0	80.0	185.0
<b>Total Assets</b>	<b>6,059.0</b>	<b>4,678.0</b>	<b>4,646.0</b>	<b>4,928.0</b>	<b>5,491.0</b>
<b>LIABILITIES</b>					
Accounts Payable	182.0	152.0	91.0	228.0	215.0
Accrued Exp.	657.0	616.0	614.0	687.0	772.0
Unearned Revenue, Current	460.0	368.0	869.0	1,086.0	1,133.0
Other Current Liabilities	-	-	-	-	-
<b>Total Current Liabilities</b>	<b>1,299.0</b>	<b>1,136.0</b>	<b>1,574.0</b>	<b>2,001.0</b>	<b>2,120.0</b>
Long-Term Debt	-	-	-	-	539.0
Def. Tax Liability, Non-Curr.	5.0	42.0	2.0	37.0	8.0
Other Non-Current Liabilities	416.0	366.0	341.0	326.0	366.0
<b>Total Liabilities</b>	<b>1,720.0</b>	<b>1,544.0</b>	<b>1,917.0</b>	<b>2,364.0</b>	<b>3,033.0</b>
Common Stock	3.0	3.0	3.0	3.0	3.0
Additional Paid In Capital	1,864.0	2,142.0	2,375.0	2,495.0	2,359.0
Retained Earnings	1,888.0	800.0	123.0	(153.0)	(77.0)
Treasury Stock	-	-	-	-	-
Comprehensive Inc. and Other	584.0	189.0	228.0	219.0	173.0
<b>Total Common Equity</b>	<b>4,339.0</b>	<b>3,134.0</b>	<b>2,729.0</b>	<b>2,564.0</b>	<b>2,458.0</b>
<b>Total Equity</b>	<b>4,339.0</b>	<b>3,134.0</b>	<b>2,729.0</b>	<b>2,564.0</b>	<b>2,458.0</b>

Total Liabilities And Equity 6,059.0 4,678.0 4,646.0 4,928.0 5,491.0

Table 6 Income Statement: Electronic Arts

Income Statement					
For the Fiscal Period Ending	12 months Mar-31- 2008	12 months Mar-31-2009	12 months Mar-31-2010	Reclassified 12 months Mar-31-2011	12 months Mar-31-2012
Currency	USD	USD	USD	USD	USD
Revenue	3,665.0	4,212.0	3,654.0	3,589.0	4,143.0
Other Revenue	-	-	-	-	-
<b>Total Revenue</b>	<b>3,665.0</b>	<b>4,212.0</b>	<b>3,654.0</b>	<b>3,589.0</b>	<b>4,143.0</b>
Cost Of Goods Sold	1,805.0	2,127.0	1,866.0	1,499.0	1,586.0
<b>Gross Profit</b>	<b>1,860.0</b>	<b>2,085.0</b>	<b>1,788.0</b>	<b>2,090.0</b>	<b>2,557.0</b>
Selling General & Admin Exp.	927.0	1,023.0	1,050.0	1,048.0	1,228.0
R & D Exp.	1,145.0	1,359.0	1,229.0	1,140.0	1,212.0
Depreciation & Amort.	-	-	-	-	-
Amort. of Goodwill and Intangibles	34.0	58.0	53.0	57.0	43.0
Other Operating Expense/(Income)	-	-	-	-	-
<b>Other Operating Exp., Total</b>	<b>2,106.0</b>	<b>2,440.0</b>	<b>2,332.0</b>	<b>2,245.0</b>	<b>2,483.0</b>
<b>Operating Income</b>	<b>(246.0)</b>	<b>(355.0)</b>	<b>(544.0)</b>	<b>(155.0)</b>	<b>74.0</b>
Interest Expense	-	-	(2.0)	(1.0)	(20.0)
Interest and Invest. Income	102.0	48.0	12.0	9.0	9.0
<b>Net Interest Exp.</b>	<b>102.0</b>	<b>48.0</b>	<b>10.0</b>	<b>8.0</b>	<b>(11.0)</b>
Currency Exchange Gains (Loss)	(11.0)	(15.0)	(9.0)	0	(8.0)
Other Non-Operating Inc. (Exp.)	7.0	1.0	5.0	2.0	2.0
<b>EBT Excl. Unusual Items</b>	<b>(148.0)</b>	<b>(321.0)</b>	<b>(538.0)</b>	<b>(145.0)</b>	<b>57.0</b>
Restructuring Charges	(103.0)	(80.0)	(140.0)	(161.0)	(16.0)
Merger & Related Restruct. Charges	-	(21.0)	-	-	-
Impairment of Goodwill	-	(368.0)	-	-	-
Gain (Loss) On Sale Of Invest.	(118.0)	(62.0)	(26.0)	23.0	-
Asset Writedown	-	-	-	(13.0)	(12.0)
In Process R & D Exp.	(138.0)	(3.0)	-	-	-
Other Unusual Items	-	-	(2.0)	17.0	(11.0)
<b>EBT Incl. Unusual Items</b>	<b>(507.0)</b>	<b>(855.0)</b>	<b>(706.0)</b>	<b>(279.0)</b>	<b>18.0</b>
Income Tax Expense	(53.0)	233.0	(29.0)	(3.0)	(58.0)
<b>Earnings from Cont. Ops.</b>	<b>(454.0)</b>	<b>(1,088.0)</b>	<b>(677.0)</b>	<b>(276.0)</b>	<b>76.0</b>
Earnings of Discontinued Ops.	-	-	-	-	-
Extraord. Item & Account. Change	-	-	-	-	-
<b>Net Income to Company</b>	<b>(454.0)</b>	<b>(1,088.0)</b>	<b>(677.0)</b>	<b>(276.0)</b>	<b>76.0</b>
Minority Int. in Earnings	-	-	-	-	-
<b>Net Income</b>	<b>(454.0)</b>	<b>(1,088.0)</b>	<b>(677.0)</b>	<b>(276.0)</b>	<b>76.0</b>

## Bibliography

1. *2011 market share and box office result by movie studio*. (2012). Retrieved 2/10, 2013, from <http://www.boxofficemojo.com/studio/?yr=2011&p=.htm>
2. Activision Blizzard. (2012). *2011 annual report: Innovation drives growth* (2011th ed.). Santa Monica, CA, USA: Activision Blizzard.
3. **Activision blizzard partnering with tencent**.(2012). *Bloomberg Businessweek*, , 05/08/2013.
4. Activision Publishing, I. (2013). *Pitfall!* Retrieved 05/08/2013, 2013, from <https://play.google.com/store/apps/details?id=com.activision.pitfall&hl=ko>
5. Aion. (2012, April 2). Conversion truly free gives players ncoin! Message posted to <http://na.aiononline.com/news/announcements/conversion-truly-free-gives-players-ncoin>
6. Alan Maccormack, E. D. (2005). *Activision: The kelly slater's pro surfer project* (HBS Case No. 605-020 ed.). Boston MA: Harvard Business School Publishing.
7. Barcraft. (2013). Retrieved 05/04/2013, 2013, from <https://www.facebook.com/Barcraft>
8. Blizzard Entertainment. (2011a). *Diablo III beta announcement*. Retrieved 05/04/2013, 2013, from <http://us.blizzard.com/en-us/company/events/diablo3-announcement/#auction:auction-summary>
9. Blizzard Entertainment. (2011b). *Gameplay - auctionhouse - fees*. Retrieved 05/04/2013, 2013, from <http://us.battle.net/d3/en/game/guide/items/auction-house#fees>
10. Blizzard Entertainment. (2013). *Additional services*. Retrieved 05/04/2013, 2013, from <http://stream.wsj.com/story/latest-headlines/SS-2-63399/SS-2-67074/>
11. Bloomberg. (2012, Dec 17 - 23). Console to mobile: Games on, dude. *Bloomberg Businessweek*, , 36-38.
12. Carter Thomas. (2012, ). How much does it cost to develop an app. Message posted to <http://www.bluecloudsolutions.com/blog/cost-develop-app/>
13. Chris Morrison. (2011). CityVille becomes facebook's biggest game ever. *Insidesocialgames.Com*, , 05/08/2013.
14. Chris Stokel-Walker. (2012, Nov 29). Atari teenage riot: The inside story of pong and the video game industry's Big Bang. Message posted to <http://www.buzzfeed.com/chrisstokelwalker/atari-teenage-riot-the-inside-story-of-pong-and-t>
15. *Commodore amiga 1000 computer*. (2006). Retrieved 2/5, 2013, from <http://oldcomputers.net/amiga1000.html>



16. EA. (2013a). *Coming soon games*. Retrieved 05/08/2013, 2013, from <http://www.ea.com/coming-soon>
17. EA. (2013b). *Free games*. Retrieved 05/08/2013, 2013, from <http://www.ea.com/free>
18. Eddie Makuch. (2012). Star wars: The old republic cost \$200 million to develop. *Gamespot.Com*, , 05/04/2013.
19. Eddie Makuch. (2013). **EA CEO resigns**. *Gamespot.Com*, , 05/08/2013.
20. Electronic Arts. (2011). *Electronic arts inc. fiscal year 2011 proxy statement and annual report* (2011th ed.). Redwood, CA, USA: Electronic Arts.
21. Entertainment Software Association. (2010). *Essential facts about computer and video industry 2009* (2009th ed.). Washington D.C, USA: Entertainment Software Association;.
22. Entertainment Software Association. (2012). *Essential facts about computer and video industry 2011* (2011th ed.). Washington D.C, USA: Entertainment Software Association;.
23. Entertainment Software Association. (2013). *Essential facts about computer and video industry 2012* (2012th ed.). Washington D.C, USA: Entertainment Software Association;.
24. Eric Eldon. (2011). **US virtual goods market to hit \$2.9 billion in 2012, with facebook games maturing, mobile booming**. *TechCrunch*, , 05/04/2013.
25. Erik Kain. (2012). Star wars: The old republic' goes free-to-play, but not too free. *Forbes.Com*, , 05/04/2013.
26. erikheriksen. (2011). **Angry birds will be bigger than mickey mouse and mario. is there a success formula for apps?**. *MIT Entrepreneurship Review*, , <http://mter.mit.edu/articleangry-birds-will-be-bigger-mickey-mouse-and-mario-there-success-formula-apps/>.
27. Evan Ramstad. (2012). **Anipang grabs time, heart of south koreans**. *The Wall Street Journal World*, , 05/04/2013.
28. Ewalt David M. (2012). Activision blizzard CEO bobby kotick: How to be an innovator. *Forbes*, , p2-p2.
29. Geron, T. (2012a). Facebook's dependence on zynga drops, zynga's revenue to facebook flat. *Forbes*, , 29-29.
30. Geron, T. (2012b). Zynga and facebook revamp deal, zynga shares drop. *Forbes*, , 05/08/2013.
31. GP International. (2013). *Period tacker*. Retrieved 05/04/2013, 2013, from <https://play.google.com/store/apps/details?id=com.period.tracker.lite>

32. *History of games - interactive timeline of game history*. (2007). Retrieved 2/5, 2013, from [http://www.pbs.org/kcts/videogamerevolution/history/timeline\\_flash.html](http://www.pbs.org/kcts/videogamerevolution/history/timeline_flash.html)
33. *Internet worlds stats*. (2013). Retrieved 2/15, 2013, from <http://www.internetworldstats.com/top25.htm>
34. Justin Smith. (2011). **Inside virtual goods: Tracking the US virtual goods market 2011-2012**. *Inside Network Research*, , 05/04/2013.
35. Kathleen De Vere. (2012). How japan's social game regulations will impact GREE, DeNA and the U.S. *Insidemobileapps.Com*, , 05/04/2013.
36. Konrad Alex. (2011). ELECTRONIC ARTS' DIGITAL MAKEOVER. *Fortune*, Vol. 164(9), 60-66.
37. Korea Creative Contents Agency. (2012). Industry trend. *White Paper on Korean Games*, 14, [www.kocca.kr](http://www.kocca.kr).
38. Lee Eun Byul. (2013). **Third week of february, mobile ranking**. *Inven Webzine*, , 02/20/2013.
39. LinkedIn.com. (2013). *About us*. Retrieved 05/04/2013, 2013, from <http://www.linkedin.com/about-us>
40. MarketLine. (2012a). *Company profile, activision blizzard, inc.* (2012th ed.). New York, NY, USA: MarketLine.
41. MarketLine. (2012b). *Company profile, electronic arts, inc.* (2012th ed.). New York, NY, USA: MarketLine.
42. Melissa Campanelli. (2012). **eMarketer: In-game advertising spending to reach \$650 million in 2012**. *eMC*, , 05/04/2013.
43. Mitch Dyer. (2013). **Blizzard reveals hearthstone: Heroes of warcraft**. *IGN.Com*, , 05/08/2013.
44. Paul Hyman. (2009). **What are the rewards of "Free-to-play" MMOs?**. *Gamasutra*, , 05/04/2013.
45. Peter Coughlan. (2000). **Note on home video game technology and industry structure** (HBS Case No 700-107 ed.). Boston, MA: : Harvard Business School Publishing.
46. *Player 3 stage 6: The great videogame crash*. (1999). Retrieved 2/5, 2013, from [http://www.thedoteaters.com/p3\\_stage6.php](http://www.thedoteaters.com/p3_stage6.php)
47. Poor earning virtual gaming gold.(2008). *BBC News*, , 05/04/2013.
48. PWC. (2012). IAB internet advertising revenue report - an industry survey conducted by PwC and sponsored by the interactive advertising bureau (IAB). *PwC, Iab*, 29, 05/04.2013.

49. Rob LeFebvre. (2012). Electronic arts commits \$80 million to next-gen console development<br />. *Venturebeat.Com*, , 05/08/2013.
50. Rovio.com. (2013, 01/11). 263 MILLION MONTHLY ACTIVE USERS IN DECEMBER. Message posted to <http://www.rovio.com/en/news/blog/261/263-million-monthly-active-users-in-december/>
51. S&P Capital IP. (2013a). *Activision blizzard, inc. financials*. Retrieved 05/04/2013, 2013, from <https://www.capitaliq.com/>
52. S&P Capital IP. (2013b). *Electronic arts inc. financials*. Retrieved 05/04/2013, 2013, from <https://www.capitaliq.com/>
53. Samuel Greengard. (2011). **Social games, virtual good**. *Communication of ACM*, , 05/04/2013.
54. SARAH WHEATON. (2007, ). **Obama is first in their second life**. Message posted to <http://thecause.blogs.nytimes.com/2007/03/31/obama-is-first-in-their-second-life/>
55. Stephanie N. Mehta. (2010). Video gaming's online explosion. *Fortune*, , 05/08/2013.
56. SundayToz inc. (2013). *Anipang for kakao*. Retrieved 4/20, 2013, from <https://play.google.com/store/apps/details?id=com.sundaytoz.mobile.anipang.google.service>
57. Thomas Debeauvais. (2012). Business intelligence in world of warcraft. (Master of Science, University of California, Irvine). *University of California, Irvine*, 66, 11.
58. Tori McGrath. (2013). **EA layoffs galore, two studio closings**. *Gamebreaker.Tv*, (05/08/2013)
59. Vii Lenhdonvirta. (2009). Virtual item sales as a revenue model: Identifying attributes that drive purchase decisions. *Springer Science+Business Media*, 97-113, 97.
60. William H. Dutton (Ed.). (2013). *The oxford handbook of internet studies* (First Edtion ed.). UK: Oxford University Press.
61. William Usher. (2008). **Activision wants more casual gaming with budcat creations**. *Cinemablend.Com*, , 05/08/2013.
62. xfire. (2013). *Xfire top ten*. Retrieved 10/05, 2009, from [www.xfire.com/games](http://www.xfire.com/games)
63. 문영수. (2013). 액토즈 밀리언아서 1 인당매출 '놀랍네' 50 만 회원에 3 억원. *Money Today*, , 05/08/2013.