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Market Development of Video Games
Video Game Markets and Marketing

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DESCRIPTION

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Abstract

   This diploma work focus on analysing the markets and marketing of video game industry. After the research of this study, I found out that console game markets are growing dramatically in the recent years. On the other hand, PC game markets (excluding online game markets) are growing slowly due to the problem of illegal copies.

   So my study will then focus on the development of console game markets and marketing. A new concept called Three Parties is introduced in chapter 5 to help analysing the relationship between console manufacturers and software developers. The study will explain what role of each party is acting in the gaming industry.

   Console game markets will be the future of the video game industry, but it needs good environment to grow. The consumers are the core of the console game marketing.

Subject headings, (keywords)

Marketing, Markets, console game, three parities, experience industry, software, hardware

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CONTENTS

List of Figures

List of Tables

1 INTRODUCTION

1.1 Aim of the study

The aim of the study is to find out the situation of video game industry nowadays, to analyze and compare the video game markets and marketing on different video game platforms, search the best way to develop the video game markets.

In the theoretical part, my study will cover some knowledge related to video game industry, to let people learn information about this fresh industry which is growing incredibly fast. It is important to tell readers how video game industry contributes to the world economy. And make people to notice that video game is no long just a hobby in spare time, but a real business spread all over the world and creating opportunities and wealth. My study will introduce reader video game as a new industry, what it belongs to and compare it with other industry in the same field.

In the markets development part, my study will analyze the world's pattern of video game markets. The histories of some enterprises and the ways they use to achieve the successes. Many successful video game manufactures will be listed as examples in order to point out what we should learn from them and what we should avoid to do.

In this study I will use SWOT to analyze the strength, weakness, opportunities and threat of video game marketing, from which we will conclude how we start a competitive enterprise in the business. Seek out what our advantages and disadvantages are, and the external situation of our business, good or bad.

Region related video game marketing is another important aspect in my study, because video game industry has entered so many countries nowadays, different regions will have very different requirements from video game markets. The different regions like Asia, American, and Europe as the main area will be introduced throughout my study.

1.2 Literature

There are not many books written about development of video game markets and marketing. But it is very easy to find the data and information needed from internet related to my study. The information includes the categories of video games, situations of video games markets, history of video games and so on, also some analysis of video game development and market growth.

But to research the development of video game market, we can treat it as a business case. Therefore many business related books can be useful to this study, like eBusiness books, marketing strategy books and international competence books. Since I have learned these topics during my studies here in MUAS, this is also a good opportunity for me to put this knowledge in use.

1.3 Thesis Structure

The study is organized into chapters and sections to help readers to understand my study. First the study will introduce readers the background and definition of video games, to let readers know that video game industry is playing a very important role in the world economy. Then the study will lead readers to go through the history of video game and how it became a industry.

The study continues to tell the difference performance of video game on different platforms, to understand the categories of video game and its markets. Then the study will focus on the analysis of video game markets and marketing on different platforms. There will be multiple subjects reflecting the differences of video game markets and marketing on different platforms. Because the conclusion of the comparison will lead the way to the next chapter ----- console game market and marketing is what we should focus on to make more profit in today's video game markets.

My study will further analyze console game markets. Use the certain concept given in the chapter 5 to introduce the console game markets and marketing development. Understand the meaning of each party and their roles in the system.

2. INTRODUCTION TO VIDEO GAMES

At the beginning, the first video games were invented just for people to spare time with them as a hobby, but if we take a closer look at the history and current development of video games, we will notice that video game as a business has already become a huge industry in the world.

Video games became a commercial entertainment media in the 1970s, in the late 1970s in Japan, the United States and Europe it became an important basis for the entertainment industry. Video game industry has experienced growth of more than 30 years, has become a 100 billion dollar industry and competition with the film and music industry to become the world's most profitable entertainment industry. rom 90s, the creative industry cut a striking figure in the development of the world economy and showing great potential in the world market. And video game industry then led the development of the whole creative industry. [1]

The video game industry is an important component of the creative industry. It has the unique character of the creative industry and also has increasing developing spaces of creative industries.

2.1 Definition of video game

The essence of video game is the virtual reality. It is a new form of entertainment when technology has developed to a very high level. The main idea is to use certain software and hardware to implement the interaction between human and programs, in this process of virtual experience the idea is to create good feeling in mental sense to the users. Because the interaction gives people joy, so the producer will get profits from providing this kind of entertainment.

A video game is an electronic game that involves interaction with a user interface to generate visual feedback on a video device. The word video in video game traditionally referred to a raster display device. However, with the popular use of the term "video game", it now implies any type of display device. The electronic systems used to play video games are known as platforms, like personal computers and video game consoles. These platforms ranged from

large mainframe computers to small handheld devices. Specialized video games such as arcade games, while previously common, have gradually declined in use.

Firstly we need to discuss the recognized definition of video game to limit the range of this reports, secondly we will discuss the features of video game and the difference with other similar products. In a way it helps our following researches.

The definitions of a video game found from literature are quite similar, here are some of them:

- On the screen, a game performed by graphics -----Lexico Publishing [2]

- Also called electronic games, programmed by computers, using text, graphics, videos, sounds to create animation effects. Range from simple children's game to intellectual games like virtual environment game to train pilots. ---- Grolier Incorporated [3]

- Players can control the contents of animation showed on screens when input commands using controller, buttons and mice.
  Using TV to play electronic games ----------- Yahoo dictionary
  [4]

- Electronic or computerized games, usually controlled by CPU, using movable graphics made to game, showing on screens of TV or computers or even on the pocket devices.
  [5]

From the definition we can see, the important contents of a video game are:

1. Electronic game
2. Programmed
3. Show in various kinds of ways (mainly graphics)
4. On screens

In this case, my report will exclude handheld game and focus on the topic of TV and Computer games, to research the trends and competition of this industry.

2.2 History of video game

The first video game was invented in 1952. It was a very simple program, only 3 stages, on platform of a vacuum tube computer. It was 10 years after computer invented. During that time, the game was made for scientist to relax only. But during 1961-1962, *SuperWar* created, it was the first flight game which started to draw people's attention.   And in 1966, Ralph Baer created the first home video game console called Brown Box. [6]

In 1971 Nolan Bushnell based on the *SuperWar,* made the first arcade game released on market but response was not good. That can be the first time video game as business brought to the society. Then in 1972 Ralph Baer and Magnavox together created game *Magnavox Odyssey*, video game officially became a business. The same year they improved a ping pong game, called pong, set them in bars. The pong was greatly success, Nolan Bushnell and his colleagues founded the first game company ------Atari. [7]

1975 Atari Company puts Pong into market and it became very popular, more and more companies started to produce video game machines. 1976 Fairchild Channel F on the market, it was the first console with cartridge as media, changeable games. 1977 Atari released Atari 2600, leading a trends of video games, the same year, Nintendo released first home game console Color TV Game 6 in Japan. This is the revolution of video game industry in not just Japan, but also in the world because the success of Nintendo brought so many opportunities and contributed a lot to the economy. [8]

1980 many classical games were released, first Namco Pac-man, after with Ultima Online, Nintendo's King Kong and Electronic Arts was founded in US. Late 1980s was a turning-point, computers were supported by graphic card and gradually became powerful .1990s Home consoles take 80% share of video game market, Nintendo released new console Super Nintendo, SEGA also declared that new generation console will come out soon. [9]

In the middle of 90s, new generation consoles conquered the market. SEGA and SONY released Sega Saturn and PlayStation, Nintendo then beaten down. Another important thing was that Microsoft created Windows 95. Entering 2000s, SONY won the battle of new generation consoles. Not because their machines are better than others but because there are some great games developing groups select to release their games on SONY's game console. Final Fantasy, Dragon Quest, Resident Evil are all landed on PlayStation 2. [10]

At the same time computer games separate into two paths, single-player game and online game. The Sims, as the best sell single-player game has taken the NO.1 place of computer game top for many years. Ever Quest representing the online games attracted more than 10 million people all over the world to its world. [11]

Nowadays, there are thousands of games released every year, game industry is becoming so commercial just like film and music industries. The increasing amount of video game copies also reflects a fact that the need of video games from customers is growing fast. It is not hard to see that in the future, video game markets will keep growing and become the most profitable industry.
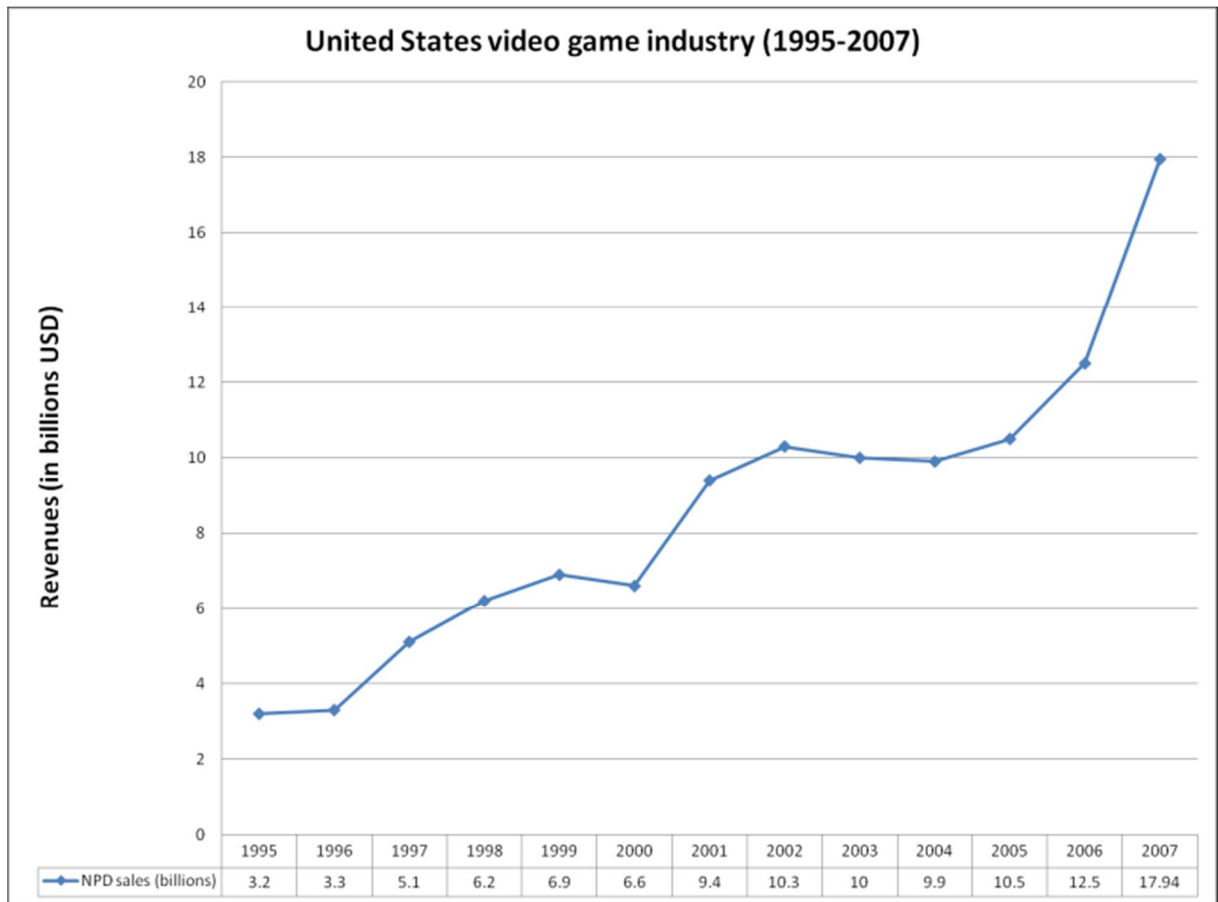
Here is a chart showing the history of video game industry:

Table 1: history of video game industry [12]

Year	Game industry
2008	$54 billion
2007	$41.7 billion
2006	$31.6 billion
2005	$ 29 billion
2004	$ 25.4billion-$3 billion
2002	$27 billion-$30 billion
2001	$20 billion
1999	$20 billion
1997	$18 billion
1993	$13 billion(Nintendo with 90% market share)
1982	$1.5 billion-2 billion
1981	$ 5 billion (Arcades)

There is the another table showed the video game sales in US during 1995-2007

Figure 1: the video game sales in US during 1995- 2007

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
NPD sales (billions)	3.2	3.3	5.1	6.2	6.9	6.6	9.4	10.3	10	9.9	10.5	12.5	17.94

United States video game industry (1995-2007)

Revenues (in billions USD)

3. VIDEO GAME MARKETING

3.1 The Prospects of Video Game

It has been not more than 30 years since the birth of video game industry. So it is a very young industry, but it has developed incredibly fast which has shocked the whole world. Today, a video game industry is very important to the economy in many countries and even the world.

The statistics from PC Data shows that in 1999 the retail sales of video game industry in US reached 7.4 billion dollars, the growth rate is 20.7%. Among the three parts of video game industry, TV game software takes 50.5% of the whole profits, 3,75billion dollars. And video game hardware and computer game software takes 30.9% and 18.6%. [14]

From 21th century, the profits of video game industry has exceeded the profits of movie industry which became the best proof that the video game industry in growing so fast. And before that, film industry in US has held the top of the entertainment industry for decades. From this we can see the influence of video game industry. [15]

Let's see how the industry goes in Asian countries. Japan is the NO.1 producer of home video game console and software. In 2001 the video game industry in Japan weights about 1000 billion Japanese Yen, close to 100 billion dollars which means the 20% of Japan's economy was from the video game industry. And in June of 1983, when Nintendo released the first home game console Family Computer, the Americans didn't take it granted. They thought TV game has no future, but they are just side products of computer games. But Japanese took control the home game markets for the recent 20 years, and Nintendo, from a game card workshop became one of the most profitable enterprise. At the same time, TV game industry gradually became one of the pillar industries of Japanese economy. Even when the world economy is going down these years, the video game industry is always doing well. SONY reports in the fourth season 2010, "game industry in US and Europe is developing well, PS3 (figure 2) and the software have good profits, became the most important parts of the company." [16]

Figure 2 : SONY Play Station 3

Size of this preview: 800 × 546 pixels

2001 in Korea, game industry formed a total 20billion profits, a research showed that because the growth rate is 30%-40%, game industry will become the most profitable industry. Driving by the great profits, the international software giant, Microsoft, can't wait any more, ready to get a share in the very competitive video game markets. 22th, February 2002 Microsoft officially entered Japan's home console markets, Bill Gates came to Tokyo, marketing their home console Xbox. From this we can see how important Microsoft takes the TV game market. The Japanese game marketing has not very long history but experienced many periods, from the Nintendo dominate the whole market, to Nintendo and SEGA compete each other, till now with SONY and them showing three kingdoms. And from this time American Microsoft's intervention, the competition now is no longer limited in Japan, but become the real global competition. [17]

3.2 Definition of video game industry

Basically, video game industry belongs to experience industry, XP. Experience industry is a fresh concept. There are many economical phenomenon, for example, holiday economy somehow improved very fast. World cup, Olympic games, and many other international games are getting great profits. Throughout the internet, the hottest zones are BBS, online games. Microsoft has named their software XP, just to push experience to the products.

What is experience?   Experience is the process of a consumer, a creative activity for people to enjoy. In commerce, enterprise provides services, and products to create activities for con-

sumers to join and memorize. Once this kind of activity becomes the core of economy actions, the experience industry is coming.

When a person's spare time is more than his work time, material requirement is no longer the lead, instead mental requirement is more needed. Thus, if people shop on street, then people would enjoy the process of shopping, not what they are going to buy. The experience economy theory is based on people's requirement. The experience industry is to fulfill people's emotional needs form.

Video game industry, as I thought is the highest level of experience industry. It shows activities and hope. Experience industry is to fulfill people's mental needs, while video game just like its definition, is totally on the mental level. See through the whole process of one consumer on video game, from the start to the end, the consumer doesn't spend any material except electricity. All he experiences are joyful, relax, exciting, or angry, sad experience from mental level. In this process, video game takes a role of the tool to help players to create potential mental stages.

The popularity of video game is increasing so fast, because this industry has very different way to entertain people. Video game industry provides consumers an unlimited virtual space, consumers can achieve the dreams that they could never achieve, act the roles they could never act in the real life. As long as the hardware develops to improve the performance of video games, this virtual space is unlimited. In a way, video game satisfies consumers' needs which never can be obtained in other area of entertainment. So video game industry is the highest level of experience industry, representing the trends of the future experience industry. Although the games nowadays have reach the total freedom of reality, with the new technology, game industry will become more and more attractive.

If you compare video game industry and movie industry, you will find interesting results. Video game industry and related sales has exceeded the film industry, basically because films can't interact with people like video game. The same story for a game and a film, watching film is only about to know a story, but play the game is like acting the story itself.

To compare video game industry and other forms of entertainment, Table 2 shows the sales of some industries in U.S and global in the year 2008:

Table 2: The sales differences in U.S and global in the year 2008 [19]

Entertainment	U.S	Global
Video Game industry	$22 billion	$30-$40 billion
Music industry	$10 billion	$30-$40 billion
Movie industry	$9.5 billion	$27 billion
Book industry	$35.69 billion	$63 billion
DVD industry	$23 billion	$16 billion

3.3 Platforms of video game marketing

Video game is the overall name for all virtual games. My study will separate video game into TV game and PC game according to the two platforms.

The difference between a TV game and a PC game seems just to be the different platform. In fact it's not that simple. A TV game is the result after analyzing the requirement of consumers on marketing. From previous introduction of TV game marketing history we can see, TV game is has shorter history than PC game. Somehow PC game has developed for a period and it then divided into different markets. Because although games are firstly invented on PC, but PC is not made for games. PC has many other uses. This character brings a result, some people focus on games, so TV game invented just to fulfill the needs of this kind of people, to form a big market. The main difference between TV game and PC game is, TV game is a closed professional system while PC game system is more open.

Furthermore, different regions prefer different type of video games. In Japan, people will purchase console games over pc games because of the TV game tradition, while in South Korea, computer games are more preferred especially MMORPG games and real-time strategy games.

The NPD Group tracks computer and video game sales in the United States. It reported in 2004 that:
- Console and portable software sales: $6.2 billion, up 8% from 2003
- Console and portable hardware and accessory sales:$3.7 billion, down 35% from 2003
- PC game sales:$1.1 billion, down 15% from 2006   [20]

3.4 Categories of Video Game Marketing

In fact, TV game markets can be divided further, into home console, portable and arcade markets. Home console market is the core of the whole TV game industry. Taking the most share of the markets value, it also is the key point of the competition in this business. Every enterprise invest most energy and money into home console. Without home console, it is impossible to get a share in the competitive TV game industry. Until now there is no opposite example. The very famous Japanese toy and game software operation company BANDAI, had once very good advantage with its software brand, but without home console to support, soon lost its leading position to competitors. [21]

On the other hand, home console represent almost everything in TV game industry. For example, SONY enter the game market from 1994, and became the NO.1 in this business because of the success of the home console PlayStation. Also when XBOX (in Figure 3) enter the business, it didn't take part in every market of TV game zone but only focus on home console, that's also because Microsoft knows the position of portable and arcade market.
Figure 3: Microsoft Xbox [22]

A handheld game console and an arcade game device can be understood as special forms of TV games. They have more precise market position. Handheld game consoles, is a kind of miniature of TV game console. The intuitive expression is that handheld game console uses small LCD.

The advantages of handheld game console are:

Small and portable, not limited by geography, any time. Handheld console game fills up the critical disadvantage of a home console which is that home console games can only be played indoors. The consumers of handheld console games are children. This is because handheld console is small and lovely and meet the mind of children. A handheld console doesn't have the good performance like home console does for the reason of limited capability, and good performance usually draw more attention to adult players. In addition, the low price of handheld games is also an important factor attract to children. Therefore many home console manufacturing companies manufacture handheld console to complete the extension of their market, because handheld is closely related to children. The most famous handheld consoles are SONY's PSP (PlayStation Portable) and Nintendo's NDS (figure 4).

Figure 4 : Nintendo DS and SONY PSP(on the right)

Arcade consoles, are placed in a certain place, like shopping malls, bars and so on. The components of TV game console are sealed in the machine, and consumers have to purchase game coin to activate games. It is a kind of commercial use, so optimized hardware is used and performance is usually better than home consoles.

The advantages of arcade consoles are:

First, better software will perform better effect to draw people's attention. And many games are available for only arcade consoles only. For example somatic sense games, which use hardware to provide consumers with virtual world experiences. For example in a racing game, played by a home console is usually controlled by joysticks. But somatic sense game, a consumer sits in the model of a racing car and plays the game using a driving wheel. The differ-

ent feeling is obvious. But it costs a lot so somatic sense game is usually belongs to arcade consoles. [23]

From the analysis above we can conclude, a handheld console and an arcade console have quite narrow targeted markets. Handheld console are for children, but home console are focused on adult young people, the spending power among young people is very high. And nowadays the age of people playing home console is gradually increasing, but arcade console players only take small part of them. Home console software has certain group of core player, and also fresh new programs. PS is well known because of that.

Therefore, the essence of a handheld console and an arcade console proved that they can't take the main role in the video game markets. They are just the extension of a home console markets.

5. VIDEO GAME MARKETS

4.1 Meaning of Video Game Markets

As mentioned above, experience industry is a newly raised industry, It's a result of people's raising buying power and mental needs of their consuming. Among the experience industry, video game industry is developing so fast that it surpassed the film industry reaches the top. I have list the economic benefits above, so it will not repeat here. In the future, video game industry certainly will become the most lively and most hopeful industry, the potency is undetectable.

In the world nowadays, especially developed countries, due to the saturation in the market, new competitors are more than any period in history. So many marketing methods, producing technologies, concept of marketing make the competition so fierce. Many companies feel that business is getting harder, consumers are harder to be satisfied, and marketing is full of danger. For example in TV set manufacturing, even the NO.1 manufacturing country Japan has to face the recession on its own land. After 21th century, all TV manufacturing companies in Japan have reallocated their manufacturing base to some other Asian countries around, like China, to lower the cost of labor and increase the competition. Even though, TV manufacturing is still a very tough situation. [24]

How to survive in this kind of environment? The answer is, by developing new markets, and chase every fresh marketing opportunity. Video game market is such a market, video game is not born to be needed, but video game created humans needs. In the future, the trends is going to be, whoever granted the best smell on marketing they will create new requirements on consumers, and then become the rule maker of the business, the executioner. Though the danger is serious, it is how businessman can break the deadlock of market, and achieve the real meaning of developing. If one just keep lower the price, keep lower the cost of manufacturing, following other's operating mode, it is still a low level competition. The result will always put the industry into a low profitable, low brand value, average products, and prevent the development of products. The best example is SONY, it's such a miracle that SONY has made from entering the industry till it reaches the top in the business, that's all because that almost every time, SONY studies special consumer groups and create new fashion, new ideas. For example: WALKMAN and PLAYSTATION. Therefore, SONY does not lower their

price, their products are always expensive than the same level products from other companies, but they still have so many fans go after them. [25]

So, strong and smart companies will definitely land on video game industry this fresh and lively land. They will start a new era themselves. 2001 Microsoft entered the video game market just for this purpose.

In addition, the meaning of video game marketing is to develop the peripheral industries When SONY planed to operate PS3, they cooperated with international PC manufacture company IBM to operate it, declared that they will combine the technology of SONY and IBM as know-how. IBM, SONY and Toshiba invested more than 400 million dollars to operate new micro CPU. [26]

No matter what kind of video game, hardware is always needed. And obviously is future video games, especially to perform better effects, the requirements for hardware is higher and higher, even surpass the PC hardware in the same period. Then powerful international cooperation will setup, a single enterprise, even with high technology like SONY, could not achieve the business. Therefore video game industry pushes other industry to move forward, especially IT technology. [27]

Furthermore, because the interface of video game can't be created without graphics, sounds and other features, video games have has also pushed comics, animation industries. CG and music and other industries also have improved thank to the video game industry. Video game industry will create new entertaining life style.

4.2 Importance of console game markets

Video game includes both console games and PC games.
Here are some different between them, looks not so much, but in fact they are very different.

Console game: simple fun
First let's compare them from the simplest but easily overlooked aspect -----controlling.
A console game player can play on couch, on bed, on the street even in toilet, not limited by space.

While PC game players have to sit in front of the computer, kind of being constrained, and lost the feeling of freedom. Although environments indirectly affect games, but usually will affect players' attention and attitude. From this point of view, PC game at a disadvantage.

Another advantage of console game is Plug and Play. PC players, as well as have to know something about computers, deal with install and capability problems, know their system configuration before buying games. Simply, before gaming, players need to learn some details not related to the game itself. So, in most cases, PC player has to concern about "if it can run on my computer", console game players don't need to worry about those matters.

With unlimited scalability of memory space make computer game designer try to operate more complicated game but not fun games. Therefore players have to learn how to play a game from start from tutorial. While console games are much easier to understand and handle, players can enter the game very fast, no need to spend additional time to learn, will have the fun quickly. Compare both of them, we can find out that, nowadays computer games are becoming a complicated simulation tools but not an entertainment tools.

Price as a important factor also can't be ignored. What PC game players are proud of is that they can experience new technology with PC, but the problem is, new technologies need more money. It surely brings people excellent joy, but to the contents of game itself, it doesn't change too much. Better and better graphics and sounds become the goal of game design. But you can lose the meaning of game itself: entertaining, experience. For example 3D technology is increasing so fast nowadays, but the best 3D strategy games have never changed for many years. Furthermore, every time hardware upgrade will bring people inconvenience on installing and operating. [28]

Overall, the cost-effectiveness of computer games is always a very low level. This is because computer is not only used to play games. But we must see this, to a kind of entertainment platform, what decides its destiny is not purely its capability, but cost-effective. To those who just want to play games, computers are not necessary.

Console game: very strict technical specifications
During the development of TV game console, because it's limited by hardware and technologies. Gradually it forms a set of operating rules. Even computer development is also limited

by some restriction, but it's minor, finally the operating environments are open and free. The different developments lead them into very different direction nowadays.

Usually home console games are made for a set of fixed hardware and system, but computer games need to refer to hardware development by time, so it would be more complicated, in fact, the real situation is not so. Firstly, computer game workstation costs lower, and operated just on targeted platform, without technology barriers. While home console games need workstation to spend a lot, and operating in a totally different environment, during the operating they will be limited by hardware standard. Therefore, many home console designers like to use the word "LAZY" for PC game designers. Which means, software obey to hardware for console games but for PC games, hardware obeys to software. The operating environment of PC games are far more free than home console games, just because of this convenience, lazy designed game become more and more. Even computer has a great amount of consumers, solid structures, and every advantage of open platform, but as an entertainment platform, the disadvantage is revealed. [29]

Another major different between a PC game and a console game is the control. This directly lead them to different contents and style. The input equipments of a PC are keyboard and mouse, but controllers are the control for home console. Without mouse, there is no clicking, Diablo III, STARCRAFT, and other games which need clicks can't performed on the platform.

Usually computer games allow players to configure the settings of mouse and keyboard, how to design the best console is not an issue for PC game designer. But to console game, how to completely use the limited buttons, always affects the final performance of a game. Like a flying simulating game, if the control is too complicated, then there are few this kind of game for TV game console. Therefore when a new type of console released, experienced designer will not put the core on the amount of graphic units, they will research the controls time after time to decide how to make a comfortable design for the game.

Another technical problem for console game console is lack of memory, because console game console has limited memory space, can't extend, and no virtual memory. Therefore, the operation will be limited by that.
Limited memory space brings critical problem, one of them is game loading. PC game usually copy all needed files on hard drives to make loading fast, but console games can only read

data from discs, most console game operator will limit the loading time to 5 to 10 seconds. This is after the research of consumers' mind and then concluded. This period of time will not make player get annoyed. Then it makes developers to use some special technology to shorten the loading time. As we know, there is no such limit on PC games. But because PC game designer never care about such matters, so many games takes more than 10 seconds to load, it depends on consumers' PC configuration.[30]

Based on the details above, the difference between console game and PC game are:

Console games

- Hardware simple, for games only
- Hardware is not open, totally sealed, operated by certain manufacture
- Hardware upgrade not possible
- Capability of hardware and software is excellent
- Controlling with joystick makes it easier to play and different kinds, so there will be a lot of different types of games.
- Marketing targets are consumers who only play games.

PC games

- Hardware has multiple uses, except game, can be used to program, business, multimedia and entertainment and so on.
- Hardware development is open, hardware is PC
- Hardware upgrade is possible, and can change it whenever needs to, and different consumers may have different configurations.
- Capability of hardware and software are not good, game designer usually don't need to care about consumer's personal configuration, to achieve good performance consumers always need to upgrade their hardware.
- Controlling with mouse and keyboard, makes it more complicated to control, good to play with some strategy games.

Cost-effective is low, just for playing games it is a wasted to upgrade hardware

Marketing targets are people want to play games and also want to use computer as a tool for other things.

So obviously consol game is the core of whole video game industry. The development of console games is most necessary. Compare to PC games, console games as an industry is more professional and mature. Marketing targets are clearer. PC game exists for some reason, but

we can predict that when PC game developed on a higher level, many problems will be extended and become the barrier of developing. [31]

5 ANALIYSIS OF CONSOLE GAME MARKET

As mentioned above, console game market is a closed industry, but it is still difficult to be replaced by any other game industry. It grows so fast, now has become the head of the whole game industry. What makes the rules for the unique character of console game market is the "three parties" concept. This is very important to analyze the console game marketing. The study will research the concept. [32]

5.1. The Concept of Three Parties

Market is made of two major parts, producer and consumer. The three parties in console game industry belong to producers.

The first party, TV game console manufacturer, manager. TV game console is hardware, to run software and provide players joys. Some famous manufactures are SONY, Nintendo and Microsoft.

The second party and the other manufacture which provides some important parts of hardware and some time also join the developing of game console, but do not sell game console. Some famous examples of second parties are, IBM, TOSHIBA, NVIDIA and so on. IBM helps SONY to develop the chip for PS3, and NVIDIA is the manufacture for graphic units of XBOX360. [33]

The third party are software developers. They focus on making games, they have to pay a certain amount of money to be allowed to develop games on that platform to earn money. The number of the third party is the most. [34]

The mode of console game markets is as follows.
The first party and the second party cooperate to develop the console game hardware, and the first party will draw the third party to join them to develop games for their platform. The third party make ally with the first party by paying for rights. Usually every released game will have certain part of the profit give to the first party. [35]

Goals and meaning for the first party are:
The first party is the core of the three parties in the industry. Because no matter how good a game can be, it must be run on the platform. and the cost of hardware development is very

high, and is the most dangerous investment among the three. This is because console game hardware are different from PC hardware, PC hardware can only focus on technology. INTEL and AMD has repeatable changes on CPUs just verified this. CPU represents the performance, or speed. But console game can't set a goal like this. The reason is just because software is the console games essence not hardware. Software gives people joys, hardware are only machines, without software. When the first party is developing hardware, they have to consider many factors. [36]

The first thing is price. The first party has to consider the buying power of consumers. There is a limit price for consumers. For example in Japan, the manufacture has researched the mind of consumers on price. Below are the prices of different consoles on markets (table 3). [37]
Table 3: Price of different home consoles

Game console	manufacture	price
Xbox	Microsoft	39800 (yen)
PS 2	SEGA	39800
Dreamcast	SEGA	29800
Nintendo GC	Nintendo	25000
PS3	SONY	59800

The software price is usually between 50-60 dollars. Therefore if the hardware price is too high, consumer will not afford it. They will think it's too high for a game console. The limit of this unseen rules means the first party has to be careful when developing the game console, they must consider more about the cost. Sometimes the first party has to give up the price to draw more consumers to buy their product so they can make profit from selling software on their platform. XBOX used to do, when they lost 150 dollars for every console sold, they still sell the console with very a low price to keep competition in the business. The pressure then transferred to PS2, and they also lowered price after 3 months. [38]

And hardware serving software makes the first party has to consider the other factor when they are developing hardware: whether they can provide friendly software develop platform. there are some technical difficulties the study will not cover, it is reason we have to know

about. As the partner of the third party, the first party has to consider if the third party can get used to the feature of the new hardware, search the potential of the hardware. Can they make good games in short period with low costs? Thus it will benefit both, the cooperation will be stronger. Sometimes, hardware is powerful and not expensive, but it is hard for the third party to develop games, that's also a threat to success of the first party. The best example is SEGA Saturn, this machine has very good performance on 32bit home console market, while it has some difficulties on developing games on this platform and then it lost to PLAYSTATION. The third factor need to be considered is the future of the hardware, which means the first party has to know if the hardware can lead the trends of future game development. It requires the first party to have very far sight. [39]

The second party helps the first party to develop hardware and then share the profits with the first party. The first party must adjust the relationship with the second party, cooperate to build low cost and powerful game console. It is difficult. For example when Microsoft lower the price of XBOX, the graphics chips provider NVIDIA was not satisfied with that because they have to take part of the loss. [40]

Another important factor, even beyond the second party is to hook in the third party-software manufacturer, especially powerful one. This is the key to success. Most of the victory competitors in the industry must have a powerful third party to support it. The first party created hardware, but finally it depend the third party to make profit. The first party usually chooses the third party, but now it's more like the first party invite the third party or the third party chooses the first party. Because the third party is the one to make games that decides the fate of the console.

The most famous case is the cooperation between SONY and Square. Referring Japanese game developers, Square can't be missed. In the industry, Square is considered to be the one with magical power. It can even affect the stock of the first party. Why so? It is because they have powerful developing group, they master very advanced technology and they have a lot of experience. Keep developing games like Final Fantasy series, known by the world. before 1996, Square was the cash cow for Nintendo, but at the time Nintendo developed next generation console N64 using card as media, conflict with Square's mind of using cdrom to operate big high quality graphics game. The cooperation was broken and Square joined SONY. Square put all effort on PS games, released FF series, and beat SEGA and N64. [41]

From above we can see, as the first party, must take the highest risk, pay the most effort. always a one decision will make the company lose. The last console of SEGA--- Dreamcast, sold for 8 million consoles, but it made the company lost billions of dollars. The hardware company had to change into the third party----software maker before it lost all. Nowadays the few companies that can stand in the console game industry are very powerful enterprises like SONY and Microsoft. [42]

Conclusion the key to the first party in the markets are:

1. Design the most cost-effective hardware (price, performance, future)
2. Consider the consumers' favorite
3. Try to make hardware character and company character different
4. Seek a proper second party
5. Hook in the outstanding third party to join

On the other hand, the first party is a great push to the industry, they make many standard to help growth of console game industry. Nintendo designed the cross button controllers are still in use today; SEGA is the earliest to bring games into 3D world; SONY invented vibration controller give home console new feelings. These companies, often put hardware design into their further strategies, showing the ambitions. SONY PS2 using Linux as system, just reflects that they don't want be limited by Microsoft windows. And Microsoft xbox is part of .net plan. Microsoft hopes to enter the console game market with xbox in order to become the master of both PC games and console games. [43]

5.2 The meaning and importance of the third party

The third party develops new games on the console from the first party to make profit. With the competition becoming fierce, video game market is turning more and more different. Stronger software producer has great influence to the industry. For example Square and ENIX are keys to the success of Play station. Software developing companies like them are affecting the first party deeply. The first party sometimes has to listen to their offer, because they are the main factor to lead the win. At the same time, the profits for them are also amazing. And many medium and small game companies are in crisis of living. Even the very famous arcade game company SNK has announced to close. [44]

Markets strategies of the third party:

First is to choose the right first party. Learn the strength, brand power and hardware of the first party. Strong first party will assure that the first part is going to be responsible for the console, and even it didn't take the top place in the market it still have enough space to elevate, meaning that the software producer can feel safe developing games on its home console. For example 1994 SONY enter the market, released Play station. Before that SONY never did business in the industry, and there were better known brands in the markets like SEGA and Nintendo, but Square still choose to join SONY. Although there must be many reasons for that, but the most important thing is SONY showed its ambition and power. To learn the conditions of hardware, is to analyze if it is suitable to develop games on this platform and what kind of games. Good game platform should be easily to develop, easily to consume the resources, lower their cost, because the developing fees are very high nowadays. Some famous game can easily cost hundreds of million dollars to operate. So how to save the cost is important to the third party too. [45]

If the choice of the first party is right, then the popularity of the first party devices will increase. And software producer develop a same cost, same quality game will get more sales. This is what software producers want to see. Therefore many first parties will hook in more software producers, so increase the sales of the home console.

But it is not all good to the third party. Because there will be so many producers join the same first party. The quantity is increasing but not the quality. Sometimes a lot of low quality games can have good sales. Thus, the industry will lease bad effects to consumers' feelings and finally make people to lose interests in the game. This will lead the whole game industry to a difficult time. A extreme example is that end of 70s in America, arcade console were so popular but they didn't control and observe the markets and it collapsed in the 80s, after that the centre of video game market moved to Japan from U.S. [46]

The console game company SONY has the same situation, many consumers feel that the qualities of games are not balance, this led the game sales, popularity into 2 different parts. Famous manufacturer will sell millions of copies while smaller ones usually take not more than 10 thousand copies. This already became the trends in the business, because in a healthy video game market the price for each game is balanced no matter what products, and how much it costs to develop. In US it's about 49-59 dollars. As long as the price of games are in a same level, people will more likely to buy good games, consumers chargeable money is limited.

Nowadays it is big manufacturers' era, or big works era. Not only the developing fees are high, including commercial and other costs also. For example on Play Station 2, Final Fantasy 10 costs more than 40 million dollars to develop, achieve 2,4 million copies sales in Japan's market, but the profit is far behind the super Mario released for 10 million copies. So Nintendo learned after analyze people's needs, they know that always cost a lot to make big games will bury the whole industry some day. The game is to play not to cost so much.

Secondly, the 3rd party has to closely look at consumer, detect consumers' tastes to tale advantages in the market. In this aspect, the Konami is a good example, it uses special developing mode to grasp consumers' mind. The most famous example is the dancing machine they created to be popular in the world. [47]

6. ANALYSIS OF VIDEO GAME CONSUMERS

Through the analysis from previous chapter it is obviously to draw the conclusion that: console game markets is a total consumer's market. The whole market is decided by consumers. The situation includes many factors, consumers' income, attitude and changes, some special events will also affect the game industry. Because of it, monitoring, researching and specifying consumers means a lot to all 1st, 2nd and 3rd parties. Some characters of video game markets concluded before:

1 the industry require a lot on markets developing

Just like the CEO of Sony said, video game is not the must need for human's daily life. In a way, video game market grows enough, it is the luxury products for consumers.[48]

2. video game industry is a vulnerable industry.

Because video games are not the most necessary in daily life, so it's a vulnerable and sensitive industry. Need support from government and stable market environment, especially when video market is growing. Illegally copies are the first enemy in the market. Video game is a products with intelligent mental factors. Although the games need hardware, the hardware really need software to run. The illegal copies threat the industry a lot. From research of IDSA, video game lost 1,9billion dollars in 2002 because of illegal copies.

3. The life period of the products in the industry is shorter and shorter:

Video game industry belong to high tech industry, the core of the industry is closely related with computer industry. The life period of the product is following the Moore's law. In 21th century, the computer industry is growing faster and faster, and the competition with video game industry is becoming fierce, consumers request higher performance of games. From the development of the industry we can see that during the Nintendo FC, the life period was about 9 years, but today the main consoles have not more than 5 years. The industry is refreshing with a higher rate. [49]

7. CONCLUSION

The study has mainly introduced the three point of views:

First, console game market is full with hope, the future belong to the experience industry. To take a place in the future industry, every country with potential should give enough support and research the development of the market.

Second, TV game industry is the result of highly developed economy, it is vulnerable and uncertain, and it needs support from society..

Third, to get a share in the video game industry, one must have far sight, with great ambition, especially to study video game consumers. To the marketing part of video game industry, consumer is the core.

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