BS ritgerð

í viðskiptafræði

The video game console market

What changes are likely to affect the market and how should
it respond ?

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HÁSKÓLI ÍSLANDS

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Forward

This thesis is a 12 ECTS credits Bachelor's degree project in Business Administration at the University of Iceland. It was written under the tutition of Auður Hermannsdóttir adjunct. I would like to thank her for all the help. I would also like to thank my love Telma Guðbjörg, for showing me endless patience and support during this period.

Executive summary

The focus of this thesis is to analyze the video game console market as it stands today and research the affects of potential new competitors. There have been worries about the video game market as sales have declined and some even fear that it might be nearing its end. To better understand the affects of new competitors - smartphones, tablets and new consoles will be analyzed. To get a more detailed focus, the thesis will only research home consoles, ignoring the handheld consoles.

The thesis is based on second hand information on the video game console market and business terms that are useful in the context. The reason for not collecting first hand information is that researching Icelandic video game consumers might not give an accurate picture of the market as a whole. Icelandic video game retail outlets have complained that not all consoles are as accessible for selling and therefore it does not give a fair view into the global market. These second hand sources are mainly studies and researches that have been carried out on the video game market, as well as newspapers, magazines, website articles and other reports on the matter.

The main conclusion of the thesis is that the market is facing the declining period of its current product life cycles, but not the industry life cycle. There is however increased competition from smartphones and tablets, as casual gamers prefer playing simple games on these devices. The video game console creators should focus on innovation and pleasing medium and hardcore gamers as the environment changes.

Table of contents

List of figures

List of tables

1 Introduction

The video game market has been a rapidly growing industry ever since it became a commerical entertainment media in the 1970s. Up until the 1980s the market was mostly made up of arcade games. Today the video game industry is larger than the movie industry in some countries (Wallop, 2009), with a large share of revenues coming from video game consoles (Entertainment Software Rating Board, 2010).

The video game console market has gone through big changes from its birth, both technically and business wise. There have been several companies that have participated in developing video game consoles, but today there are only three big players – Microsoft, Nintendo and Sony.

The purpose of this study is to understand how the video game console market is developing. There have been increased worries that with the introduction of smartphones and tablet computers, the market can not survive. Since the release of the iPhone and the iPad - which started the revolutions of their markets respectively - video game console sales have declined. Some have pointed out that this might be the beginning of the end for the video game consoles (Snow, 2012).

The research question of this thesis is: what changes are likely to affect the video game console market and how should it respond? This thesis aims to explain how the recent changes in the environment will affect the market and understand which measures the market can and should take in order to defend itself.

This is important because history has taught us that with technical advances certain markets do not prevail. The music industry learned to use digital sales to their advantage and artists learned that going on tours can make up for lost profits. The video game console market will have to find ways to fulfill needs that others can not achieve.

The thesis aims to answer the research question by studying the history of the market, how it differentiates from other markets, where it stands today, how it has evolved, how new factors in the enviroment may affect it and conclude from that what it may evolve into. To understand where the market stands, the market demographics will be examined and the market will be further identified on both the Boston growth-

share matrix and the industry life cycle. Looking to affecting environmental factors – the potential change of smartphones, tablets and digital distribution will be studied. Finally to understand where the market might end - the next generation of consoles will be analysed, new competitors will be examined with respect to how they might affect the market and finally it will be concluded which measures must be taken to sustain the market.

2   The history of video game consoles

The first video game console was created by German-born television engineer Ralph Baer and released in 1967. The console, that would be called the "Brown box", featured very primitive and simple games in which players controlled moving squares on the television screen ("A History of Video Game Consoles, n.d.).

In the 1970s the market got new console creators like Atari, which would become successful with a few releases in the 1970s. It is however in the 1980s, which has been called "the Golden Age" of video gaming, that the market really got going. With releases of hugely successful consoles like Nintendo Entertainment System and Sega Mega/Drive the video game market had survived a video game market crash a few years earlier.

Nintendo and Sega would ultimitely start what has been called "console wars" ever since. Console wars is a term used for the battle of market share within the video game console market. In 1994, the innovative company behind the Walkman – Sony – joined the console wars with their release of the Playstation (Wright, 1994). The Sony Playstation is today the second best selling home console ever, only behind its sequal – the Playstation 2 ("Platform Totals", 2013).

The success of Sony came at a heavy cost for Sega that suffered with its last two consoles – Sega Saturn and Dreamcast. The market was congested with the three competitors and eventually Sega bowed out due to heavy losses and focused on video game development instead (Pham, 2001).

With the exit of Sega, high-flying Microsoft saw on opportunity to enter a rapidly growing market. Microsoft hoped to broaden the market, as well as win market share of its competitors. In order to achieve this Microsoft was going to spend a whopping $500 million dollars in launch budget for advertisements and marketing to appeal to new groups (Sharon, 2001). The Microsoft Xbox was released in 2001 in direct competition with the Sony Playstation 2 and the Nintendo Gamecube ("Microsoft Annoucnes Launch Details for Xbox", 2001). The Playstation 2 destroyed its competitors, selling more than 3 times more consoles than the Xbox and Gamecube combined - both selling a little more than 20 million units seperatly ("Platform Totals", 2013).

Nintendo and Microsoft were both struggling in the market and decided on two very different strategies for the next generation of consoles. Microsoft decided go head-to-head with Sony and released a powerful console with an emphasis on online play. Nintendo however recognized that the market was getting congested again and knew they would have to differentiate in order to enjoy success. They released the Nintendo Wii – a console that was a lot less powerful than its competitors and was built around its motion controllers, which tracked the movement of players. The company's focus on innovation and being fun for the whole family ("What is Wii, 2013) turned out to be a huge success for Nintendo, which lured in casual gamers that were not part of the market before (Lammers, 2007). The console is the third best selling home console to date and was the best selling console of the seventh generation consoles ("Platform Totals, 2013).

2.1 The meaning of video game consoles

A video game console is a specialized computer system that is designed for interactive video gameplay and display. A video game console works like a PC and is built from the same essential components – with a GPU, a CPU and RAM. (Cory Janssen, 2013). In other words a video game console is a specialized desktop computer used to play video games that require a TV or monitor for display. ("Definition of: video game console", 2013)

Video game consoles do however use outdated CPU's in order to keep prices down. While a PC can play top of the art games easily, many people prefer to keep their gaming on a video game console. There are several reasons for this. First of all video game consoles are simpler to use for gamers. Not only are the consoles plug-and-play, but all games for video game consoles are written to function with excactly that hardware. This means that you can be sure that when you buy a video game for your console, it will work. It can be harder to be sure if a video game will work for your model of a PC. At the same time consoles have a life expectancy of around 6-8 years, where you can be sure of being able to play all the newest games smoothly – this is well above an average PC life expectancy. At the same time video game consoles that are capable of playing the newest games are considerably less expensive than PC's that are capable of doing the same (Cory Janssen, 2013).

2.2 Market demographics

The Entertainment Software Association researched the sales, demographic and usage data on the computer and video game industry in 2012 and released the following facts.
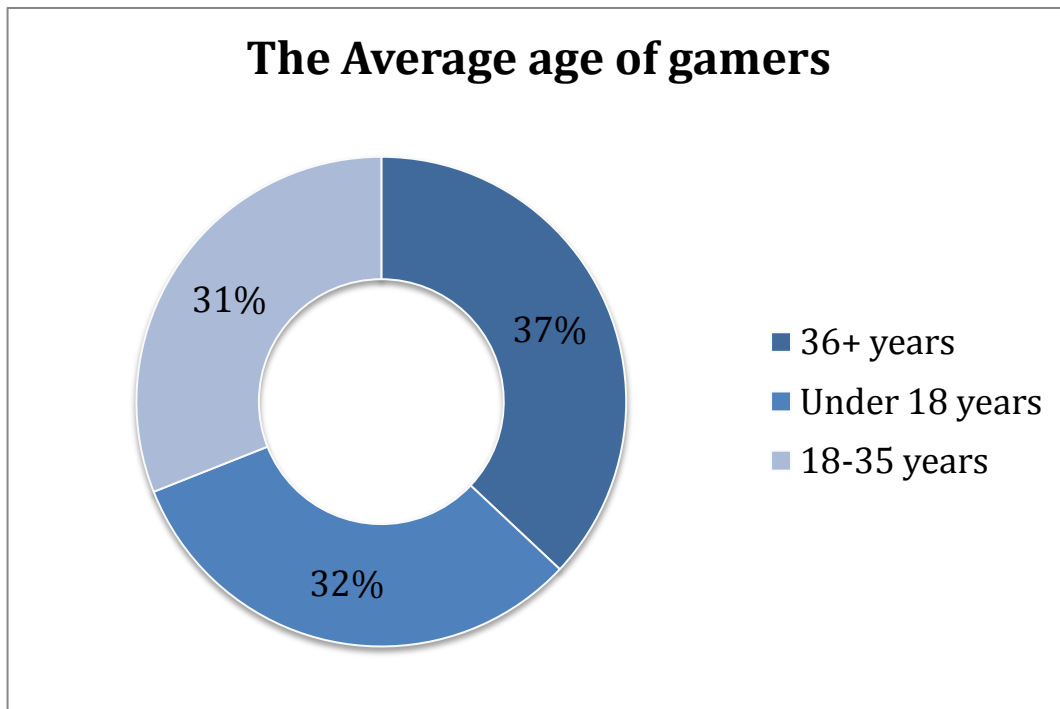
Figure 1. The Age of Gamers (Video Game Industry Statistics, 2010)

The average age of a gamer is 30 years and over two thirds of the market is aged 18 or above. The average age of most frequant purchasers is 36 years. This age distribution is demonstrated on Figure 1.
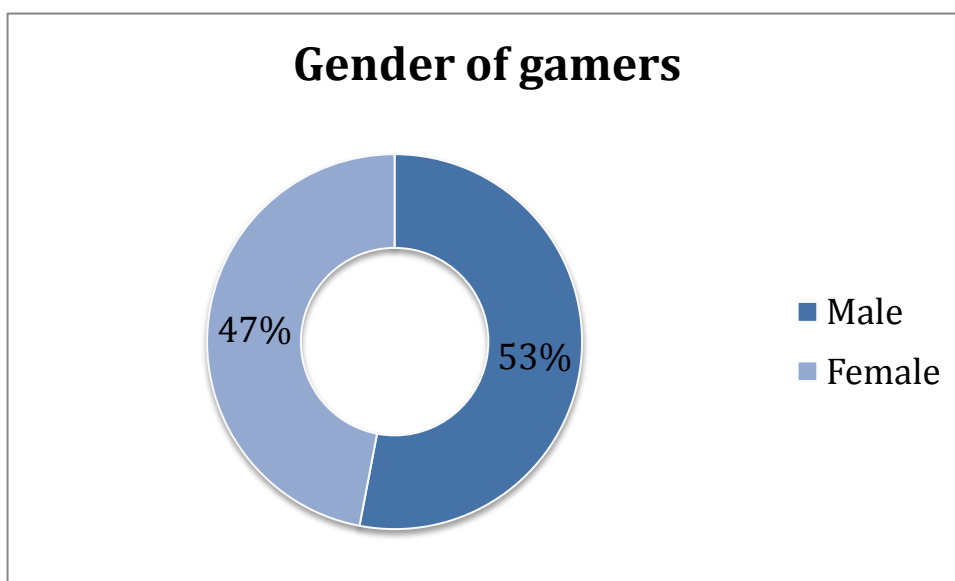
Figure 2. The Gender of Gamers (Video Game Industry Statistics, 2010)

Genders are divided rather equally with 53% of gamers male and 47% female as demonstrated on Figure 2. Of the most frequent purchasers 52% are male while 48% are female.

The average time gamers have been playing video games is 12 years, while adult gamers average 14 years – males 16 years and females 12 years.

90% of the time, parents are present when games are either purchased or rented and 91% of parents pay attention to the content their children play. 59% of parents play video games with their children at least monthly while 40% play at least weekly. ("Essential Facts About The Computer and Video Game Industry", 2012)

3 Current position

The currently passing generation of consoles is referred to as the seventh generation of video game consoles. There are three big players competing for market share – Microsoft, Nintendo and Sony. Microsoft released the Xbox 360, Nintendo the Wii and Sony the Playstation 3.
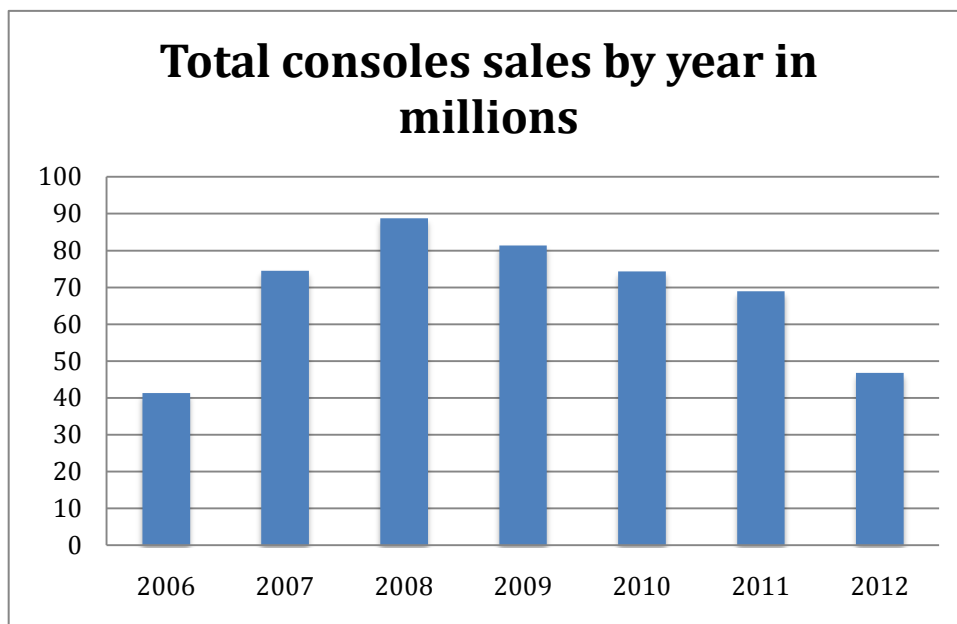
Figure 3. Total Console Sales By Year, both handheld and home consoles (Yearly Hardware Comparison – Global, 2013)

Figure 3 shows a year-on-year comparison of global hardware sales on the video game console market. The comparison shows a steady increase in sales from the year 2006, until it reaches its peak in 2008-2009, after which it has only been downhill. Most notably it was the Nintendo Wii that peaked during those years, which is the best selling console of the last generation. The reason for the huge leap from 2006 and 2007 is partly because Microsoft and Nintendo released their consoles late in 2006. As shown in Figure 4, after the Wii lost pace – it affected the whole market.
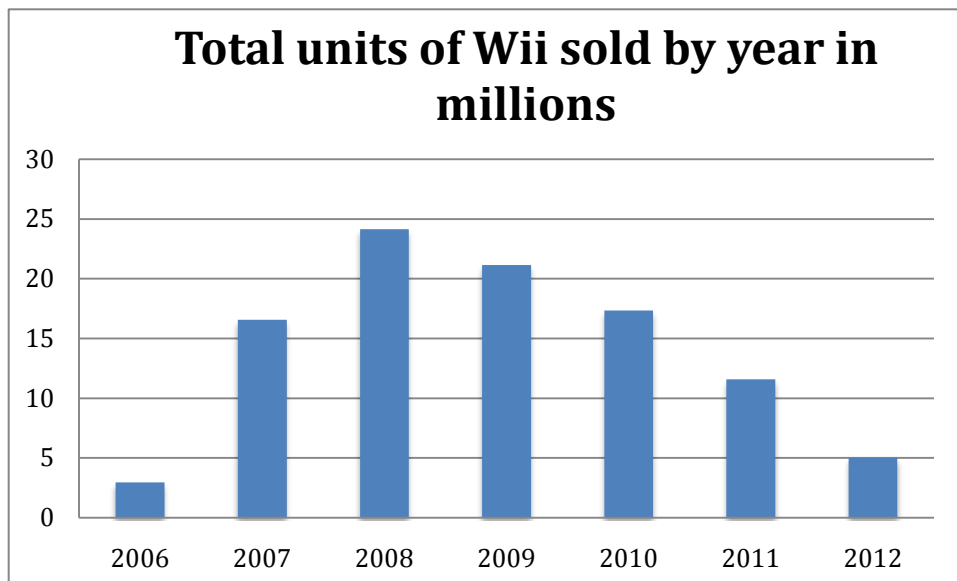
Figure 4. Total Wii Sales By Year in Millions (Yearly Hardware Comparison – Global)

In a larger context the video game console market has been growing for a long time and the last generation, the seventh, accumulated the more sales than any other generation. Although the Nintendo Wii, the best selling console of this generation, sold less than Playstation and Playstation 2 from previous generations the market as a whole grew. This is because all three consoles sold more than 70 million units, as demonstrated on Figure 5.
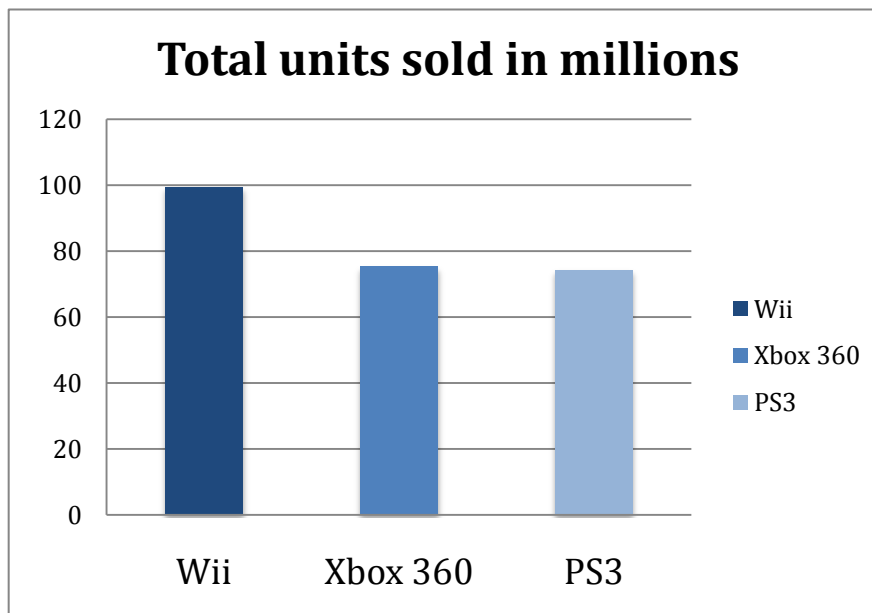
Figure 5. Total Sales of Consoles in millions ("Platform Totals", 2013)

3.1 Industry life cycle

Industries, much like living beings, experience a life cycle. They are born as they are introduced, they then enter a growth period, which leads to maturity as they reach their peak and in the end they experience decline and death. The typical process is demonstrated in Figure 6, showing how sales variate between life cycle stages. Industry life cycles are not strictly linear however, an industry can move from decline back to growth for example (Seeger, 1984). Different industries experience these stages differently - they can last long in some cases but short in others, making it harder to determine where an industry is positioned on the life cycle.
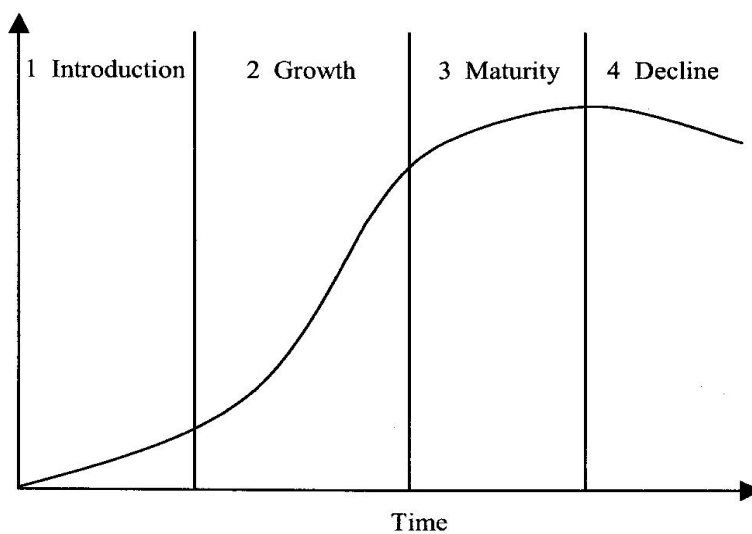
Figure 6. Industry life cycle. ("Biotech Revolution", 2008, p. 182-193).

The key indicator of where an industry is placed in the life cycle is growth in sales. In the introduction stage sales are slow but as they start to surge the industry has entered the growth stage. As sales begin to slow down and level out, maturity has hit and eventually sales begin to decline. While sales do decline in the latter stages of life cycles, profit continues to grow as companies can put economies of scale and scope into practice and reduce unit cost (Seeger, 1984).
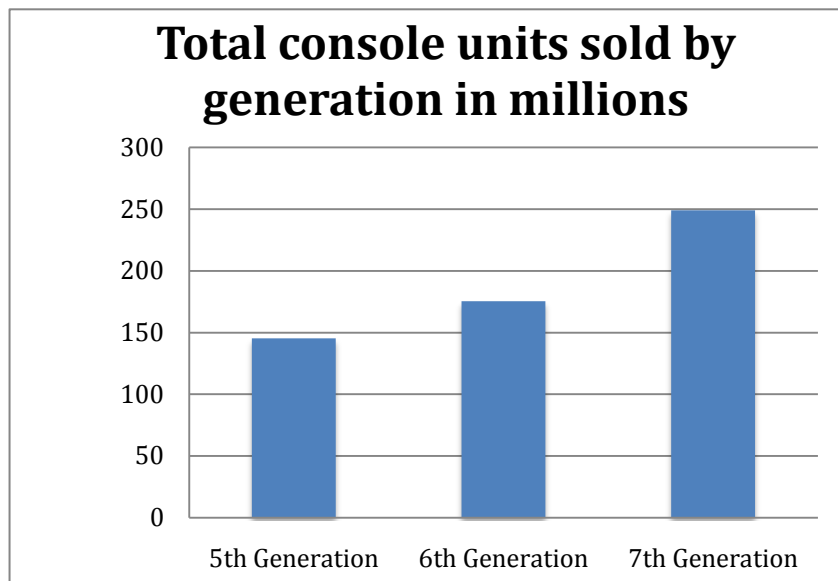
Figure 7. A comparison of console generation sales, only home consoles. ("Platform Totals", 2013)

Judging from sales numbers in the video game console market the growth does not seem to have declined and stopped. This is an indicator that the industry has not matured yet. Although console sales have declined in recent years compared to before the current generation has sold more than the generation before, as demonstrated on Figure 7. It must also be taken into consideration that the current generation of consoles might have reached the end of their product life cycles and thus sales are declining. The current generation of home consoles has lasted longer than previous ones, which could explain partly the video game industry's 22% plunge in sales last year (Molina, 2013).

3.2 Boston growth-share matrix

The Boston Consulting group developed the Boston growth-share matrix to help firms strategically allocate funds based on cash returns, helping them to prioritize their different businesses (Srivastava & Prakash, 2011). Although typically thought for products, here it will be applied for the video game console market. The two axes of the matrix are relative market share and growth – or the ability to generate cash and the need for cash. The four categories are given four memorable names – cash cow, star, dog and question mark (Thakur & Das, 1991).

Cash cows have high market share and low growth prospects. The cash cow often describes mature industries that are close to decline. Stars have high growth prospects

and high market share. Question marks have high growth prospects but low market share and are sometimes called wild cats. Dogs have both low growth prospects and market share. With time, question marks turn out to be either dogs or stars and cash cows become so drained of finance that they become dogs.

By applying the model for the video game console market we should be able to get a clearer view of its current position and get a glance into where it is headed.
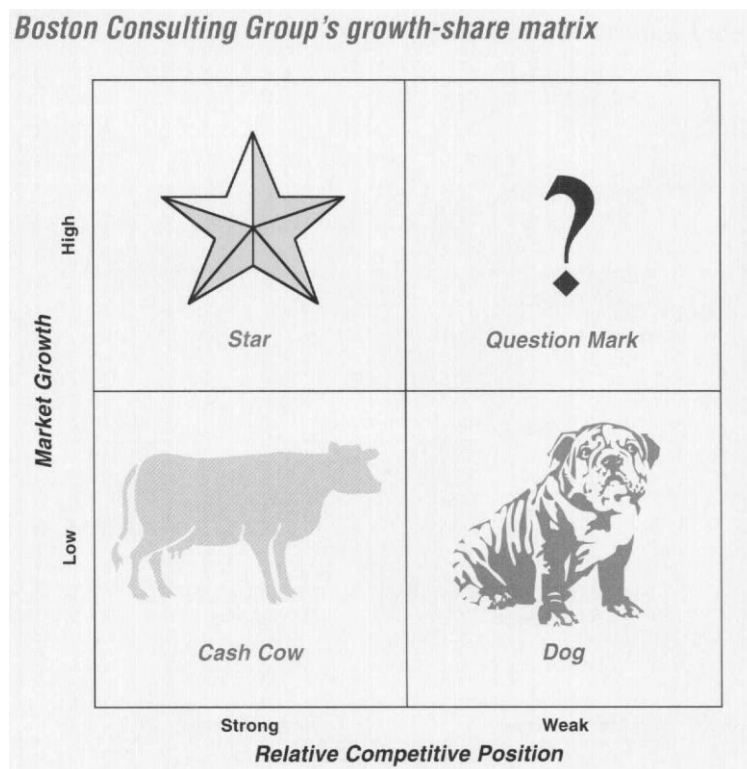
Figure 8. Boston Consulting Group's Growh-Share Matrix (Shay, 1997, p. 39)

As pointed out in the industry life cycle, the video game console market is still experiencing growth. However the growth within this generation has taken a steep decline in the past few years. The market has been growing fast for almost three decades now and it does not seem likely that it will keep growing at this pace.

With this in mind, the video game console market is located somewhere between the star and the cash cow. The industry is generating tremendous amount of cash and does seem to have growth ahead of itself – but perhaps not so much that it is a definite star.

4 Smartphones and tablets

For the past few years, smartphones and tablets have gone from being a cool idea to being one of the most profitable businesses in the world. Smartphones are cellular telephones with built-in applications and internet connectivity. They have built in text messaging, web browsing, camera, video camera, MP3 player amongst other things. Smartphones turn cellphones into mobile computers (Nykodym, Hoffman & Parker, 2012).

Although tablets were first introduced when Windows XP was the current version, iOS iPads and Android tablets have become dominant today ("Definition of Tablet PC, n.d.). In many ways these tablets are larger and sometimes more powerful versions of smartphones. As they use the same operating systems as the smartphones they also run the same applications.

As more applications have been developed, more games have followed for these devices. Customers can now satisfy their gaming needs by using their phones or tablets and thus the devices have become direct competitors to the video game console market.

4.1 Smarthphones

According to a study made by Business Insider Intelligence last year, amongst young Americans aged 18 to 24, smartphones are not just something that is nice to have, but they have become a necessity. Within that age group af people making less than $50,000 a year the market penetration is 59% with the percentage being higher with higher earning groups. Americans within the age group af 25 to 34 have the highest market penetration, reaching 81% for people earning more than $100,000 a year ("Courting Today's Mobile Consumer", 2012).

Even though the world wide smartphone user base reached 1 billion in 2012 the room for growth is huge (Don Reisinger, 2012). In high growth countries like Brazil, India and Russia – smartphones have yet to become dominant. In India and Russia, feature

phones and multimedia phones are still dominant ("Still Room to Grow in Emerging Markets, 2010).

Smartphones start to compete with video game consoles as consumers start to buy games for the gadgets. Rovio Entertainment's succesful Angry Birds is the best example of how popular games can potentially become on smartphones and tablets. Latest numbers show that Angry Birds has been downloaded 1.7 billion times across all platforms since the series initial release in 2009 (John Gaudiosi, 2013).

According to a study conducted by IDC, a leading technology research firm, game sales on smartphones will outpace game sales on handheld consoles like the Nintendo 3DS and the PS Vita by the end of the year (Nick Bilton, 2013).

4.2   Tablets

Like smartphones, tablets have sold at an incredible speed, reaching 50 million owners in the United States alone. This has made tablets one of the fastest selling devices in history ("Mobile Future In Focus Report, 2013). The device has become increasingly more popular for gaming and it was the fourth most popular activity on the iPad in the United States, with 66.3% of tablet owners engaging in the activity ("Mobile Future In Focus Report, 2013). Tablets play the same games as smartphones, as they generally run on the same operating system, but can be more appealing as they offer larger screens.

4.3   Mobile app

A mobile app, commonly called just "app", is digital content that is designed for mobile phones. The word app became popularized when Apple opened the "App Store" for their iPhone in 2008 Apps are sold or given for free through downloads on online shops like App Store and Google Play. This digital content can be services such as photography, video, films and electronic games (Kim, Geum & Park, 2012).

4.3.1   How apps differentiate from video games

Even though app games are getting up to 1.7 billion downloads and that could obviously take a chunk out of the video game market – some are quick to point out that these simple games are not fulfilling the same needs as video game consoles deliver

(Ingólfur). This is comparable to how handheld consoles like Game Boy and Playstation Portable have not threatened the home console market.

Most mobile app games are simple, easy-to-pick-up and easy-to-lay-down type of games. These games generally appeal to light gamers. In a study done by PwC on gamers in 2012, they found that gamers who use their smartphones for playing said the following ("The evolution of video gaming and content consumption", 2012).

"Your phone, you always have with you, so it's good to use basically anytime-especially when you're traveling."   *(Consumer, aged 18-34)*

"It's good for me, personally, for killing time. (Consumer, aged 18-34)

"I'm not as immersed in it... not as big a deal" (Consumer, aged 18-34)

Home consoles however seemed to work better as a social aspect according to the PwC focus group.

"It's the social aspect of it. Like it's physically there, social aspect, social network. Right, social interaction." (Consumer, aged 18-34)

– "When gathering with friends for entertainment. It's entertaining. Everybody can see it. It's sometimes like watching a show. The graphics are usually pretty good." (Consumer, aged 35-59)

– "It's a party starter because when we have family functions, it kind of gets everybody going, especially the dancing (games) with the kids." (Consumer, aged 35-59)

The same study showed that heavy gamers spent most time playing games on consoles.

Mobile app games are not replacing home consoles as the two products are satisfying two different consumer needs. Heavy gamers prefer playing on either home consoles or computers while light gamers prefer playing on their smartphones ("The evolution of video gaming and content consumption", 2012).

4.3.2   Apps becoming more advanced

At first, mobile app games were for the most part very simple games both graphically and gameplay wise. Games that were in 3D lacked in gameplay and felt clunky. This has however been changing recently, as big game developers like EA have been entering the app market. They have even released a version of their AAA game, Mass Effect, on the

app store to work on smartphones and tablets. These types of games offer deeper experiences and are aimed to fulfil deeper needs than simple games that have dominated the market.

These games have been thought to work better on tablets than on smartphones as consumer feel that playing longer games feels better on a larger screen and with better aesthetics. But as heavy gamers spend the least amount of time playing games on tablets – it does not seem to by appealing to them ("The evolution of video gaming and content consumption", 2012).

4.3.2.1   Samsung controller

Figure 9. Samsung Galaxy S4 With the Game Pad Accessory (Patrick Goss, 2013)

When Samsung announced its new Samsung Galaxy S4 smartphone in March 2013 the company also introduced an accessory called the Game Pad. The Game Pad, displayed on Figure 9, is a controller from the smartphone maker that can connect with the Galaxy S2, S3 and S4 and work as a game controller (Gaudiosi, 2013).

As the new S4 boasts a 4.99-inch full HD resolution the device instantly looks like it could offer the handheld console market serious competition (Gareth Beavis, 2010). Samsung also showed off a dock which the smartphone can be placed on, further connected to a television set with a HDMI cord – turning your smartphone into a home console with HD graphics (Gaudiosi, 2013).

Smartphones are getting more powerful every year with every new model being released. The new Galaxy S4 will use a 1.9 GHz quad-core Qualcomm Snapdragon 600 processor and 2 gigabytes of RAM (Gaudiosi, 2013). These advances are bridging the gap between home consoles and mobile phones.

EA seems impressed and does not want to miss out, as they are releasing 16 games on the smartphone's launch. These include games that have appealed to hardcore gamers on computers and home consoles, like The Sims and Need for Speed: Most Wanted.

This could be the move from the smartphone market, which Microsoft, Nintendo and Sony have dreaded. Samsung is taking the first step into the home console market and at the same time creating potentially serious problems for the handheld console market.

5   Digital distribution

"There is no question digital will overtake physical. It happened in music, and it will happen in our industry." – David Gosen, Microsoft VP of Strategic Marketing (French, 2008).

For the past few years there has been development in video game retail. Much in line with other businesses it has moved from the typical brick and mortar towards the digital. Digital distribution in the video game industry is the process of delivering a video game as digital information, without actually purchasing a physical product.

5.1   – Digital sales on the rise

There has been more and more data surfacing that shows that digital sales are on the rise. As many thought that PC gaming was declining in 2007 with retail sales lower than before, data showed that retail sales only contributed 30% of the industries revenues. Online income was around 45% and digital distribution contributed for almost 19% or $2 billion (Thorsen, 2010).

In the year 2009 digital sales counted for only 20% of all video game sales. Only two years later the number had reached 31%. In march 2013 Sony announced that a third of its PS Vita game sales were through digital distribution (Jacksson, 2013). Last year digital sales grew by a further 16% (O'Mara, 2013).

Video game publishers have complained in recent years over used games sales, where people trade in their old games to video game retailers who then go on to sell the game again. As video game publishers do not get any off the profits and customers can buy these used games for less money than new ones, this has been reducing their revenues. However in 2012 these used game sales were in a steep decline as digital distribution was on the rise. Digital games as well as downloadable conent for games in the United States and Europe rose 33% last year alone (Peterson, 2013). As this trend continues – video game developers and video game publishers will see a more incentive

to emphasize on digital distribution and adding downloadable content to their games.

Physical versus digital format

■ Total Physical Format   ■ Total Digital Format

	2009	2010	2011
Digital	20%	28%	31%
Physical	80%	72%	69%
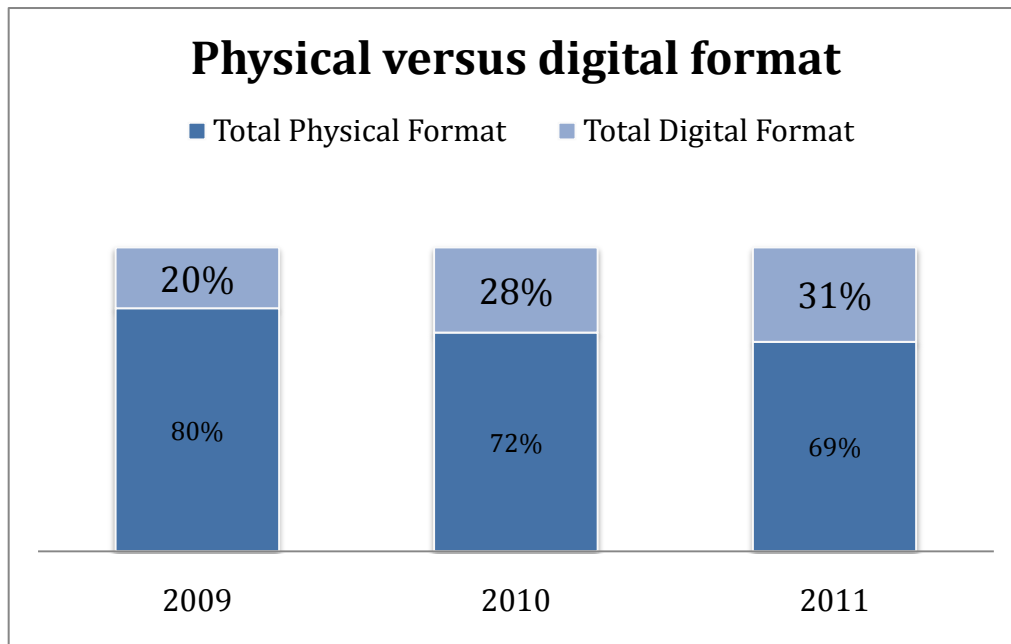
Figure 10. Total Digital Format Versus Total Physical Format in the United States ("Essential Facts About Computer and Video Game Industry", 2012*)***

As shown on Figure 10, between the year 2009 and 2011 the total digital format grew from 20% to 31% against the physical format. This growth happened at a time that none of the consoles showed much interest in the digital distribution. As Microsoft, Nintendo and Sony all seem to be realizing that digital format is the future they have been working on ways to make it more accessible.

5.2   Online shops

Lewis Ward, research manager of gaming at IDC says that when comparing the gaming industry to the music industry, that it is still in the pre-iTunes and pre-Pandora era (White, 2013). Meaning that the 16% increase in sales of digital games is only the beginning and that the sales will surge when digital games will be as easily accessable as music became with iTunes and Pandora (White, 2013).

Nintendo, Sony and Microsoft seem to agree with this – at least to a certain extent. All three have built online shops for their latest systems where customers can buy games, watch trailers of games and download demos. There are even online shop exclusive games that are usually less expensive and appeal more to casual gamers.

5.2.1 Nintendo eShop

Nintendo has the eShop available on thei Wii U and Wii console that interacts with their handheld system as well – the Nintendo 3DS. Nintendo has not put much emphasis on their online shop over the years but they are trying to catch up with their newest systems. The president of Nintendo America, Reggie Fils-Aime said in an interview with Games Industry International in April that their digital sales were soaring. Their latest release on digital form, Fire Emblem Awakening had one third of its sales on digital form. So far this year around 11% of their game sales came through their eShop (Morris, 2010).

5.2.2 Xbox Live

Microsoft has a store that sells downloadable content for existing games as well as original digital versions of retail games on their online system – Xbox Live – in an initiative called Games on Demand ("Xbox Game Store", n.d.). The online shop has however recieved criticism for being expensive, in some cases even more expensive than retail stores (Qualls, n.d.). Microsoft has also been reluctant to release games online at the same time as they release them in retail. Games are generally released in digital form on Xbox Live 6 months after they are released in retail shops. U.K. Xbox product manager Pav Bhardwaj has claimed that Microsoft doesn't do games on demand on day one, they focus on the importance of retail. Adding further that is the way it will be for the foreseeable future (Sacco, 2012). A possible explaination for this is the fact that most Xbox owners only have 20 gigabyte hard drives or smaller and some games can be close to half of that - and with games only getting bigger there is little room on those hard drives for multiple games. However Microsoft started the Xbox Live Ultimate Game Sale program in February, where they sell selected games for far less than retail price. This could well have been an initiative to test the waters for digital distribution as they plan for future strategies.

5.2.3 Playstation Store

Sony has the Playstation Store, which sells almost all the latest games shortly after or at the same time as they are released on retail. Like the Nintendo eShop, the Playstation Store interacts with their handheld system – Playstation Vita. Sony recieved widespread criticism of its online store when it was hacked in 2011 and was offline for several

weeks – many customers got their personal information stolen in the process ("Sony faces legal action", 2011). Sony has however put more of an emphasis on the online store recently, much like Microsoft. Last Christmas the company offered games with big discounts for a limited amount of time in a deal called 12 Deals of Christmas ("12 Deals of Christmas", 2012) and had a similar initiative last Easter with the Playstation Store Egg Hunt ("The Playstation Store Easter Egg Hunt", 2013). This could also be an indicator of Sony testing the waters for the future.

6 The future of the market

The next generation of video game console will mark the eight generation. It will be a battle between the same companies as in the sixth and seventh generations – Microsoft, Nintendo and Sony. There will however be some new additions to the market, most notably the Valve Steam Box and a kickstart project called Ouya.

6.1 The next generation

Microsoft, Nintendo and Sony have all either released or confirmed a next generation video game console. Nintendo released their Nintendo Wii U worldwide in the holiday season of 2012 (Cundy, 2012). On February 20th Sony confirmed the Playstation 4 (Kain, 2013) set for release worldwide sometime in the holiday season of 2013 (Rivington, 2013). Although Microsoft has yet to officially announce their next console, sources say that they will release the Xbox 720 in October or November this year (Savitz, 2012).

6.1.1 Wii U

Nintendo's main focus point on the Wii U revolves around a new controller – the GamePad. The GamePad is a traditional controller with the same basic buttons as before, but it incorporates a 6.2-inch LCD touchscreen. On Nintendo's official Wii U webpage it says, "The Wii U GamePad controller removes the traditional barriers between games, players and the TV by creating a second window into the video game world." (Wii U Technical Specs, n.d.).

The GamePad does not seem to have the same appeal as the motion controller the Wii used. Wii U's sales have struggled after a promising launch where it sold over 3 million copies until December. The console has only sold 390,000 units worldwide between January and March bringing the total number to 3.45 million units – far less than Nintendo's inital estimate of 5.5 million.

6.1.1.1 Third party support

The Wii U is Nintendo's first video game console that supports HD graphics. This seems to be a bid by Nintendo to lure back the hardcore gamers that were not impressed by the original Wii's outdated SD graphics. At the same time the HD graphics are set to

increase third party support for the console, that the Wii sorely lacked as game developers would have to downgrade games to work on the Wii's hardware. Even though Wii U is early in its life cycle it already seems like they are falling behind the competition on third party support (Sapieha, 2013). Epic games has announced that their new Unreal 4 game engine will not be available on the Wii U as they claimed it was built for next generation consoles – not the Wii U (Eddie Makuch, 2013). Epic co-founder Mark Rein explained that while it would technically be possible to run the engine on Wii U, developers should rather use the old Unreal 3 game engine. EA's Frostbite game engine which is also aimed for next generation console is not meant for Wii U either – meaning the console will miss out on huge games like the Battlefield series (Dyer, 2013).

6.1.1.2   Wii U branding

Nintendo decided to use the favorable brand image they had created with the original Wii and call their new console Wii U – similar to what Microsoft and Sony have done with the Playstation and Xbox. This seems however to have created problems for Nitnendo, as some people seem to think of the Wii U only as a controller upgrade from the Wii (Tassi, 2013). It has even created such a problem that Nintendo has been distributing flyers directly aimed at the problem – where the Wii U is compared with the Wii and showing of all the new features (Rougeau, 2013). It is becoming more obvious that the Wii U's naming decision was a mistake and that Nintendo should rather have depended on the brand image of their company, using the Nintendo name. Whereas Microsoft and Sony are huge and diversifyed companies participating on multiple markets, they can not rely on the image of their company as a whole and have to create brands within the video gaming industry.

6.1.1.3   Casual gamers

The main reason for the Wii's huge success is the fact that it brought in casual gamers and appealed to the whole family. It was new and it brought in customers who would not buy a video game console otherwise. But while being appealing to the casual gamer they missed the mark with hardcore gamers and Nitnendo understood this ("Iwata Asks", 2011). In a bid to make the Wii U not only wider but also deeper – to appeal to the hardcore gamers – Nintendo developed the console with HD graphics, but also

focused on innovation by adding the screen controller and motion sensors ("Iwata Asks", 2011). However, early sales numbers indicate that they are failing.

The difference of the industry landscape is immense since the release of the Wii in 2006. Now that smartphones and tablets have become so popular casual gamers are getting most of their needs fulfilled with games that cost only a few dollars or even for free (The evolution of video gaming and content consumption", 2012). The touchscreen on the GamePad looks even less attractive to consumers since they are already used to them from their phones and tablets.

At the same time it seems that Nintendo did not improve their hardware power enough and they are even deemed on par with the last generation by some (Dyer, 2013). The system is lacking third party support as a result as well as customers are waiting for Playstation 4 and Xbox 720 (Tassi, 2013).

6.1.1.4   The future

A bad start for the Wii U does not neccessarily mean that the console is destined for failure. As an example, Nintendo's handheld console – Nintendo 3DS – had a slow start as well. Nintendo aknowledged the problem and they cut the price of the 3DS in order to make it more appealing ("Nintendo 3DS price drops to $169.99", 2011). After the pricecut the 3DS has reached total sales of over 30 million units and even broke a record in Japan for being the fastest selling console to date – selling 5 million units in its first year (Krupa, 2012). A pricecut does not seem to by likely quite yet though as Nintendo is already selling the Wii U at a loss (Goldfarb, 2012).

At the same time Nintendo must focus on broadening the game library for the console. Nintendo has an appeal to gamers because of their exclusive rights on intellectual property like Super Mario, Legend of Zelda and Pokémon. If Nintendo starts developing and selling these games for the Wii U the sales numbers are likely to pick up. This is especially true since the console has been criticised for not having an appealing game library and they are losing third party support (Tassi, 2013).

Nintendo's games have always been their strong suit and that is backed by the numbers. Of both home consoles and handhelds, Nintendo occupies all the spots on the top 10 best sold games list and on the top 20 list they occupy 18 spots, as demonstrated on Table 1 ("Game Database", 2013).

Table 1. The 20 Best Selling Video Games on a Single Console. ("Game Database", 2013)

Position	Game	Platform	Year	Publisher	Sales (in millions)
1.	Wii Sports	Wii	2006	Nintendo	81.21
2.	Super Mario Bros.	NES	1985	Nintendo	40.24
3.	Mario Kart Wii	Wii	2008	Nintendo	33.66
4.	Wii Sports Resort	Wii	2009	Nintendo	31.59
5.	Pokémon Red/Green/Blue Version	GB	1996	Nintendo	31.37
6.	Tetris	GB	1989	Nintendo	30.26
7.	New Super Mario Bros.	DS	2006	Nintendo	29.14
8.	Wii Play	Wii	2006	Nintendo	28.72
9.	Duck Hunt	NES	1984	Nintendo	28.31
10.	New Super Mario Bros. Wii	Wii	2009	Nintendo	26.84
11.	Nintendogs	DS	2005	Nintendo	24.51
12.	Pokémon Gold/Silver Versions	GB	1999	Nintendo	23.10
13.	Wii Fit	Wii	2007	Nintendo	22.74
14.	Mario Kart DS	DS	2005	Nintendo	22.50
15.	Wii Fit Plus	Wii	2009	Nintendo	21.18
16.	Grand Theft Auto: San Andreas	PS2	2004	Capcom	20.81
17.	Super Mario World	SNES	1990	Nintendo	20.61
18.	Brain Age: Train Your Brain...	DS	2005	Nintendo	20.02
19.	Kinect Adventures!	X360	2010	Microsoft	19.98
20.	Super Mario Land	GB	1989	Nintendo	18.14

It should however be noted that Nintendo often sells consoles and games as a bundle which could attribute somewhat to the successes of Wii Sports and Super Mario Bros.

6.1.2 Playstation 4

On February the 20th Sony announced the Playstation 4 – set for release in the holiday season 2013 (Molina, 2013). On the event they told the world that the console had been under development for the past 5 years and that the system would boast highly advanced graphics processing, comparable to high-end PC's (Molina, 2013). To back this statement, several next generation titles have been announced for the console that use next generation game engines and require next generation consoles to work (Dyer, 2013). Sony also had several of video trailers of games that boasted next generation graphics.

6.1.2.1 Third party support

Even though the console has yet to be released it is already obvious that it will recieve massive third party support. On the announcement event Sony showed over 70 game developers who are currently working on at least one game for the console ("List of Companies Making Playstation 4 Games", 2013). This list included Activision and Rockstar who are working on bringing their massive Grand Theft Auto and Call of Duty series to the system – as well as former Xbox exclusive Bungie that is working on Halo.

It proved vital in the last generation to have third party support and by the looks of it – the Sony Playstation 4 already has an advantage over Nintendo's Wii U. Sony set out with this as they claim the Playstation is distinguishable by its ease to develop for ("Sony inc. introduces PlayStation(R)4", 2013).

6.1.2.2 Innovation

As Microsoft and Sony learned the hard way – innovation can pay big in the video game console industry. Both companies tried to play catch up with Nintendo with their latest systems, Sony inserting motion sensors in their Dual Shock controllers ("Dualshock 4", n.d.) and Microsoft developing the Kinect for the Xbox 360. This time around Sony will want to be innovative to have points-of-differences against the other two.

It seems however that the two most innovative things on the Playstation 4 are points-of-parity rather than points-of-difference. The new Playstation 4 controller, the Dual Shock 4, has a touchpad on the center which could come as a response to Nintendo's GamePad which has the touchscreen at the center of the controller as well.

The other big innovative thing is the Playstation 4 Eye which is a camera that can recognize the depth of space ("Playstation 4 Eye", n.d.). This enables the Playstation 4 to see where the player is stationed in front of the television so the player is capable to use body movements and voices as part of the gameplay. This does infact work very much like the Kinect for Xbox 360.

Sony has put a lot of emphasis in these points-of-parity, to sway customers from buying the other consoles, because their console can do everything the others can. With their emphasis on third party support and points-of-parity, their strategy looks like they aim to offer everything the competition has to offer – only with a wider game selection.

6.1.2.3   Social media

The huge rise of social media is one of the things that has happened since the release of the last generation consoles. Now social media will make its mark in the video game console market as Sony aims to exploit it. On the new Dual Shock 4 controller is a special social media button called "Share". The share button allows players to upload videos at anytime with a push of a button ("Playstation 4:Focus on social", 2013).

By exploiting the social media Sony could not only be satisfying customer's needs for bragging – but also creating an environment for buzz-marketing. As gamers share their videos on youtube and with their friends on Facebook they are getting the word out on the new console. This could act as a type of word-of-mouth as those who are sharing the video are endorsing the product. Non-customers might want to get in on the fun and therefor opt for the Playstation 4 rather than competing consoles.

It is likely that Nintendo and Microsoft will respond to this – building points-of-parity.

6.1.3 Xbox 720

Although Microsoft has not yet announced their sequal to the Xbox 360 it is widely expected that they will release the their new Xbox this holiday season. The new console has not even recieved a name yet, but it has been called "Xbox 720" by the press and industry experts. On April 24th Microsoft invited the press to the next Xbox reveal, to be held May 21st (Greene, 2013).

6.1.3.1   What to expect

Although there have not been any offical releases about the Xbox 720 from Microsoft, there have been many alleged leaks. These leaks are often accurate as the hardware companies ship developer kits to developers well before launch. IGN has reported that the new Xbox will have six times the raw graphics processing power of the Xbox 360 (Lowe, 2012). This would allow the new Xbox to boast true next generation graphics – like the Playstation 4 rather than the Wii U.

Microsoft is expected to further improve on its Kinect by releasing the Kinect 2 for Xbox 720. However the rumor that has been catching the most attention is that Microsoft intends to put on some sorts of restrictions so that gamers will not be able to play used games (Tassi, 2012). This is done to attract more third party developers to the

console as they will not be suspect to losses of used game sales and at the same time boost Microsoft's gains from game sales.

Until May 21st these rumors will only be rumors. This does however give an idea of where the market is heading – focusing on improving graphics, innovation and trying to tackle problems of used game sales.

6.1.3.2 *IllumiRoom*

One of the most innovative things expected to be featured with the Xbox 720 is the IllumiRoom. Although Microsoft has denied that it will be available at launch, it is very possible that it will be released for the console at some later stage (Dent, 2013).

The IllumiRoom is a work in progress wide-angle projector that is placed in front of your TV and pointed towards it. It will have a built in Kinect sensor that uses an automatic calibration process to capture the color, shape and depth of the wall and furniture around the TV. Using its knowledge of the surroundings it can create a range of visual effects. These effects include boosting the color saturation of your surroundings, turn them black and white, outline every edge, create cartoony effects and even make your surroundings look like the surroundings of the game. If its snowing in the game it will look like its snowing in your living room, if a grenade is thrown towards you, you will see it rolling on the floor of your living (Sebastian, 2013).

These are just a handful of the potential ways of using the IllumiRoom. Although its still in its development stage, it does show a clear intent from Microsoft to differentiate itself with innovation.

6.2 New competitors

Competition is the effort where multiple parties act independently in order to secure the business of a third party by offering the most desirable terms (Rothman, 1987). In other words, it is a contest between rivals for the customers. When new competitors start competing for consumers – companies must build strategies to differentiate from each other. As Michael Porter has said, "Strategy is about making trade-offs; it's about deliberately choosing to be different" (Hammonds, 2001).

This happened when Microsoft entered the video game console market with its Xbox. Nintendo realized it had to take a different path and focused on more family

centric fun with emphasis on motion control. As new competitors aim to disrupt the market they must have a point-of-difference, which will appeal to consumers.

6.2.1 Ouya

The Ouya is an Android based video game console that was funded by Kickstarter. The development team behind the Ouya includes a number of gaming industry veterans (Kain, 2012). Ouya's mission is to disrupt the video game console market with cost leadership strategy – trying to appeal to the most cost-concious consumers.

The console does not differentiate sufficiently from the other consoles and therefore has to penetrate the market with cost leadership. Ouya works much like smartphones, using CPU's built for smartphones, it has 1 gigabyte of RAM which is common in smartphones and it uses Google's operating system for smartphones – Android ("Boxer8 Ouya", 2013).

Ouya's focus on cost will make the console available for only $99 at launch – way less than any of the three big players on the market. The company also demands that all game developers offer their games – at least to some extent – for free. They can only charge for the full version gameplay ("Discover", n.d.).

The console can render graphics in 1080 HD, uses a traditional 15 button controller, plugs directly in to a television and offers multiplayer and online play ("Discover", n.d.). These are however all features that can be found on the other consoles. There is one feature that differentiates the console from the lot and could very possible be Ouya's attraction point – its hackability. The console has very few limitations and has been promised to be very easy to hack. Reviews have indicated that the console is infact as easy to hack as promised and it was easy to set up classic games on to the system (Kain, 2013).

As the console uses smartphone technology which has a lifespan of roughly a year, the company will release a new Ouya annually. It is likely that the console will become nothing more than a niche product for hack enthusiasts as it lacks a real point-of-difference. To further indicate this, reviews of the console have been very negative – claiming that the console is miles away from being something worth spending money on (Kain, 2013).

It will not be sufficient for Ouya to compete solely on their cost leadership as they start to compete with older consoles like the Wii in the same price category. A Wii currently sells for $129 in the United States compared to the $99 price of the Ouya – but Nintendo's product comes with an already huge game library.

6.2.2 Steam Box

Valve, the digital distribution company behind Steam, is now working on a video game console that will play PC games on your television without using Windows (Brunner, 2013). The Steam Box is a small cuboid that can fit in the palm of your hand and functions like a PC (Plafke, 2013).

The console will be gaming machine that is optimised for playing games that are on the Steam cloud gaming distributor. This is an initiative by Valve to enhance the reach of their digital distribution system as well as get in on hardware profits.

The console will come in more than one type with the price ranging from $499 for the basic unit and $999 for the top end (McCormick, 2013). These different units however split up the consumer base and goes against one of the main advantages of owning a video game console – being sure your console can play all the games. It is also expected that these Steam Boxes will have regular hardware updates, much like PC's. Thus it seems more likely that the Steam Box will compete within the PC gaming market rather than the video game console market. However this could lead to some customer choosing PC gaming over video game consoles – and that is why Microsoft, Nintendo and Sony should keep an eye out for the Steam Box.

6.3 – A possible market exit

There were rumours before Playstation 4 and Xbox 720 had been announced that either Sony or Microsoft would leave the video game console market before the next generation. Although those rumors appear to have been false, there is still a realistic possibility of that happening in the near future. The market has been getting increasing pressure from substitute markets and Nintendo and Sony have been going through a tough financial period.

6.3.1 Nintendo

Nintendo has gone through a rough patch financially, for the past few years as the Wii sales have halted. For the fiscal year of 2011 the company posted a historical loss of $530 million dollars despite its handheld console, Nintendo 3DS having a succesful year (MacDonald, 2013). Nintendo returned to profit for the fiscal year of 2012 although it made an operating loss of $365.5 million dollars. Their profit was not due to their sales of Nintendo products – but largely due to favorable changes in the currency market and the firm's investments (MacDonald, 2013). However Nintendo forecast a 100 million yen operating profit for the fiscal year of 2013.

This operating loss comes despite the 3DS selling nearly 14 million units worldwide. The Wii U sold more than 35% less than Nintendo initally forecasted and that has hit them hard (Byford, 2013). It is evident that strong sales from the handheld department can not counter weak sales in the home console department.

Nintendo is a company that is solely focused on video game hardware and software development. It does not have huge financial backing as a major international corperation. If things do not look up for the company they might have to consider taking the Sega rout and focus on software rather than hardware. But as their handheld devices have been immensely popular for the past two decades they could still make a healhty profit from them – while exiting only the home console market.

But even if the Wii U does not pick up it does not mean that Nintendo is forced to leave the home console market. It is most likely that they would participate in the generation after Wii U as they did after disappointing with the Nintendo 64 and the Gamecube. Unlike Sony and Microsoft – the video game industry is all that Nintendo has.

6.3.2 Sony

Sony is in the worst position of the three companies. Last November Fitch Ratings downgraded Sony Corp. loan rating to junk with a negative outlook (Riley, 2012). In February Sony posted its eigth consecutive quarterly of loss. As Sony is fighting to save the company they have plans of downsizing, by eliminating 10,000 jobs or around 6% of their workforce (Ozasa & Fujimura, 2012).

Sony is a huge international corporation with huge influence throughout not only the video game market but the entertainment sector. In its last quarter, Sony's film division posted a profit, while the company as a whole posted a loss ("Sony cuts quarterly losses", 2013). This means that the company will have to pick winners and losers as it works on balancing its books. The Playstation 4 is a huge investment for a company in Sony's position and it is plausible that if the console does not succeed they will have to exit the market and focus on other markets.

7 Results

The aim of this thesis was to understand what changes were likely to affect the video game console market and how the participants of the market should respond to these changes. To realize which changes were likely to threaten the industry, new console competitors, smartphones and tablets were given a close look. The upcoming consoles that are supposed to challange Microsoft, Nintendo and Sony do not pose a real threat, but smartphones and tablets are an ever growing market which offers easy and cheap access to video games. The best response for the industry is to differentiate from this new threat with an emphasis on innovation.

Other changes are the imminent downfall of retail sales, which the industry must answer with accessible digital distribution of games - and the possible exit of Sony from the market as the company struggles to balance it books and will look to exit markets that are not profitable.

7.1 – Smartphones and tablets a real threat

Smartphones and tablets are not a phase and they will not go away. They are here to stay and they are a real threat for the video game console market. Unlike video game consoles smartphones and tablets get upgrades every year. It is very possible that during the 6-8 year life cycle of the consoles that smartphones and tablets will catch up with them and even become more powerful.

The fact that a big game developer like EA has so much belief in this new market is very worrying for the home console competitors. The new Game Pad and dock for the Samsung Galaxy S4 is a sign that the market is ready to move into this new market. Microsoft, Nintendo and Sony will have to make sure that they can differentiate from these products and deliver wants and needs that they can not.

7.2   The end of retail

Last year, for the first time since 1999, the music industry rose in sales. The reason for the rise was digital revenue (Pfanner, 2013). This is seen as a road to recovery for the music industry as it battles to find a business model built around digital distribution.

The video game industry will be wise to act before it takes a hit like the music industry did because of piracy. Video game consoles are well equipped to fight piracy as the developers can ban hacked consoles from competing online.

This evolution is likely to mark the end of retail. Devoted video game stores like Gamestop are likely to be the victims as customers will prefer a more convinient and cheaper way of shopping online. The question is how far down the road this change will occur. EA's COO, Peter Moore, has claimed that EA will do more in digital media than physical media in the near future – whether it is in two or three years he did not know (Harro, 2012).

7.3   Innovation and cost the key

"Too many powerful consoles can't coexist. It's like having only ferocious dinosaurs. They might fight and hasten their own extinction."- Shigeru Miyamoto, General Manager of Nintendo Entertainment Analysis and Development (Murphy, 2008).

In most markets innovation can be the key to success. In technology driven markets – like the video game console market – this is even truer. Michael Porter has warned that if a company only strives to be like their rivals, they will not be successful (Hammond, 2001).

As PC computers will continue to have more cutting edge graphics than video game consoles and it becomes easier to plug the computer straight to the television set – customers will lose incentive to buy video game consoles. Before Nintendo's release of the Wii, the industry seemed to revolve around releasing the most powerful console and having the most cutting edge graphics. Michael Porter has further said, "The worst error is to compete with your competition on the same things. That only leads to escalation, which leads to lower prices or higher costs unless the competitor is inept. Instead, companies should strive to be unique." ("Michael porter says gulf companies", 2009).

What the video game console industry must do to defend itself is to focus on innovation. Nintendo paved the way for innovation with its motion controllers and Microsoft followed suit with its Kinect. This emphasis on innovation must continue in order for the consoles to differentiate themselves from others in the video game industry.

At the same time they must focus on keeping costs at a minimum to appear more attractive to consumers. A PC that is capable of playing top of the line games can be very expensive and consumers will be attracted to a less expensive option to fulfill their needs.

7.4 – Casual gamers are gone

It is time that Nintendo understands that the casual gamers are gone. The Nintendo Wii was a huge hit, especially with the casual crowd. This crowd however will not have the same incentive to buy new consoles as they come. Casual gamers have a more easily accessible way to fulfill their gaming needs with their smartphones and tablets. Smartphones are already owned by over 1 billion people in the world and the tablet is one of the fastest selling devices of all time.

Nintendo or the other companies must not focus their consoles around appealing to these gamers at the cost of medium and hardcore gamers. But as a result the market might become congested again, as three competitors compete for the same consumer base.

7.5 – Sony is in serious trouble

The most probable scenario is that Nintendo, Microsoft and Sony will all participate beyond the next generation of consoles. Microsoft is in the healthiest position of the companies and has enough financial backing to stay on the market. Nintendo has survived hardship before and has a healthy handheld system to rely on for the moment. Sony has been cutting their losses and will have to continue to do that ("Sony cuts quarterly loss", 2013).

If one company was to exit the market, Sony would be the most likely of the bunch. Because of the terrible state that the company is in - in the next round of console wars they can ill afford more losses. If their Playstation 4 will be an absolute bust an exit would be likely.

8 Conclusion

The video game console market has been declining in recent years and this has naturally caused some scares. However these declines are probably a result of the current generation of consoles being late in their product life cycles.

The goal of this thesis was to understand what changes are likely to affect the video game console market and how it should respond. To study this, the market's current state was identifed, possible competition was given examination and valued to be either threatening or not and the market environment was researched in order to understand changes and ways to respond to them. After reading this thesis it should be clear that the biggest threat that the market faces is the loss of casual gamers to the smartphone and tablet industry. Research shows that smartphones and tablets will keep on growing and more games are being developed for them ("Still Room to Grow in Emerging Markets, 2010). It will be hard to compete with them and it will be wiser for the console creators to focus on other market segments. The smartest thing is to focus on innovation to differentiate the market from other video game markets and try to create an experience that others can not imitate. There have been encouraging signs of innovation from the developers and they are all working on digital distribution to make their games more easily accessible.

But as the casual gamers move elsewhere, it will be harder for the market hold three consoles and it might get congested again. Sony is already in a very bad financial state and this could be their last console if things do not go well.

9   Limitations

Every study and research made has had several limitations. This thesis no exeption. First of all, all the information gathered is secondary information. It come from sources like scholarly articles, reaserch reports, magazines and websites. No direct contact was established with these sources to get the secondary information verified.

In the demographics part, all information was built on a study made in the United States. No information was given on the global market demographics. Given cultural diversity there is a good chance that the market demographics are different in other countries. The demographics also focus on the video game market as a whole but not just the home consoles.

In the part where the market is compared to the industry life cycle and the Boston growth share matrix it is difficult to realize if the decline in sales is down to decline of the market or simple because it is late in the product life cycle. This is even harder to realize as this generation of video game consoles has lasted longer than the previous ones.

When discussing future consoles there are severe limitations as some consoles have not been released yet. Although it is pointed out that some of these things are alleged leaks it is important to understand that even what has been announced to date can take changes.

While speculating if casual gamers have left the video game console market to the smartphone and tablet market, it is hard to be sure why casual gamers seem to have left. Although it seems to be because of smartphones and tablets there has not been any research made on that particular subject.

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