

# Out of Red Ocean and Soaring into Blue Ocean: The Wii U Nintendo Selling Strategy in Gaming Industry

Murtaza Hussain Shaikh<sup>1\*</sup>, Pashmina Soomro<sup>2</sup>

<sup>1</sup> Kyungsung University, 309 Suyeong-Ro, Nam - GU, Busan, South Korea

<sup>2</sup> Shandong University, Qingdao, Shandong- 266237, China

\* Corresponding author e-mail: murtaza [AT] ieee-ukandireland.org

---

**ABSTRACT**—Since the release of its home console, the "Wii," Nintendo had fought mostly successfully off the competition in the gaming market by using a blue ocean strategy. The blue ocean strategy is the idea to create new market space with no or minimal competition through differentiation, low cost, and innovation. It is the idea to not compete against the competition but to create new demand and make the competition irrelevant instead. Nintendo's first step in pursuing the blue ocean strategy was to get out of the Red Ocean, to create demand where there was none before, and making to competition primarily irrelevant. To do this, Nintendo needed to disrupt the market. This study intends to analyze Nintendo's journey from the Nintendo Wii's success to the less successful Nintendo Wii U, to its hybrid console Nintendo Switch's current triumph from the point of view of the blue ocean strategy. How it made innovative ideas, social gaming, health, and the simple but most important factor of gaming fun, its primary goal, often going against mainstream ideas, reinventing itself but still staying loyal to its core customers. These factors, a significant software catalog with a broad spectrum of available games, and targeting casual gamers contributed to Nintendo's success that brought it back to the gaming industry's top.

**Keywords**— Gaming Market; Red Ocean; Strategy; Competition; Blue Ocean; Innovation

---

## 1. INTRODUCTION

Since the year 2006 and the release of their highly successful gaming console, the Nintendo Wii, Nintendo is continuously searching for new innovative ideas to create a blue ocean. These efforts have resulted in the Wii's less triumphant successor, the Wii U, in 2012 and still a very profitable successor, the Nintendo Switch, in 2017. Seeing why Nintendo felt the need to change its strategy away from the red ocean can be observed by taking a brief look at some crucial points in the history of Nintendo [5]. In 1980, Nintendo went overseas and created its subsidiary Nintendo of America Inc. It was starting to sell the "Game & Watch" product line, the first portable LCD videogames with a microprocessor, and their famous artist Shigeru Miyamoto created the game "Donkey Kong" and the hero; of the game "Jumpman" later renamed "Mario" [1].

Nintendo finally launched its famous "Famicom" system in Japan, later renamed "Nintendo Entertainment System" when launched worldwide in 1986. The system became a huge hit. In 1989 Nintendo released its first portable handheld gaming system, the "Game Boy" in Asia, and released it one year later in Europe [1]. Starting a very successful tradition of Nintendo handhelds continued with the Game Boy Color; Game Boy Advance; Nintendo DS, and the Nintendo 3DS. In 1990 Nintendo of Europe was set up in Germany. Even though the Nintendo 64 bit got positive reviews from critics, it was the first Nintendo home console that did not sell more than the competition. This trend continued with the release of the Nintendo game cube in the year 2001 [1]. After many unsuccessful years, Nintendo had to get out of the bloody red ocean of the gaming industry. Nintendo could not compete with its main rivals Sony and Microsoft, traditionally anymore. The competition was too far ahead technically and financially and had most core gamers as loyal customers [2].

	2005		2006		2007		2008		2009		2010		2011		2012	
	Mill		Mill		Mill		Mill		Mill		Mill		Mill		Mill	
	units	%	units	%	units	%	units	%	units	%	units	%	units	%	units	%
Sony PS 3 (+earlier versions)	16.8	69	12.9	53	15.8	40	17.7	33	17.5	35	17.4	35	14.1	36	11.9	40
Microsoft Xbox 360 (+ earlier versions)	4.8	20	7.5	31	7.8	20	11.2	21	10.2	21	13.6	28	13.8	35	10.5	35
Nintendo Wii + 'U' (+earlier version - GameCube)	2.7	11	4.0	16	15.5	40	24.8	46	21.8	44	18.1	37	11.6	29	5.1+2.4=7.5	25
Total	24.3	100	24.4	100	39.1	100	53.7	100	49.5	100	49.2	100	39.5	100	30.0	100

Table 1: Worldwide sales of games consoles (units) and market shares [5]

Their only chance was to create a blue ocean with innovative ideas and turn the market on its head. The result of these attempts, the Nintendo Wii, was a triumphant success. With the Wii's successor, the Nintendo Wii U, Nintendo tried to build on this success. However, mistakes in the marketing of the Wii U, an involuntary return to the red oceans, and several other factors made the Wii U a failure as determined in table 1 [5]. After this failure, Nintendo had to find itself a new blue ocean. Nintendo looked at what they have done right in the past, built on it, and came up with the Nintendo Switch, the world's first hybrid video console. The hybrid aspect of the Nintendo Switch made it their unique selling point, and since there was no comparable alternative on the gaming market, it became Nintendo's new blue ocean [6].

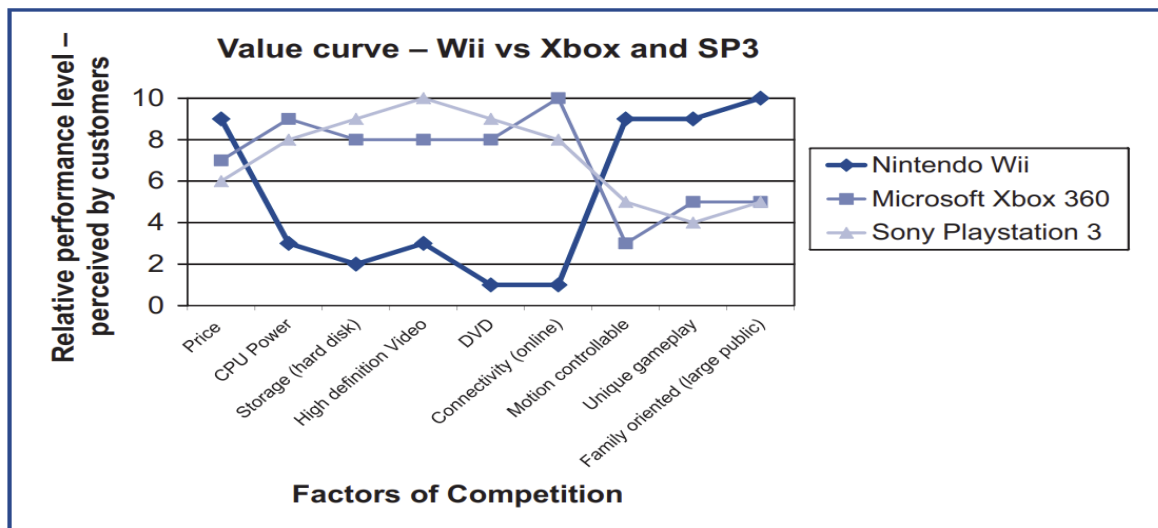


Figure 1: Strategy canvas for Nintendo Wii's [9]

The above figure 1 illustrates the value curve of Wii vs Xbox and PS3. It illustrates the relative performance level of customers versus different factors of competition. In terms of price, Wii's price was much higher as compared to Xbox and PS3 while having the lowest CPU power among others. The CPU power of Xbox was rated the highest. The storage, HD video, and DVD were again the lowest of the Wii and the highest of the PS3. Xbox and PS3 were rated 8 and 10 respectively in terms of online connectivity and Wii was rated motion-controllable performance level was 9, the highest of all three. Wii also got a performance level of unique gameplay and Family oriented 9 and 10 which was the highest of all three. It can be seen from the graph that Nintendo Wii's strategy was to provide healthy and social gaming and did not focus on high-end video gaming while others' focus was only on high-end video gaming and providing the best overall experience in gaming. This article primarily aims to analyze the three cases of Nintendo's latest home video game consoles in light of the blue ocean strategy. Where Nintendo did the right things, and where Nintendo went wrong. Why Nintendo changed its focus from high-end video game consoles and focused instead on innovative ideas, social gaming, and healthy gaming, and made the simple but most important factor in gaming fun its foremost priority [6]. How Nintendo made its way, with some setbacks, back to the top of the gaming industry - successfully creating a blue ocean, creating new demand in places where there is none, thus making the pie bigger instead of fighting over whom gets the most significant slice of the pie, and making the competition irrelevant [2].

## 2. METHODOLOGY & CASES OF NINTENDO'S PRODUCT

The study of the cases of Nintendo's last three video game consoles from the point of view of the blue ocean strategy. Nintendo's three latest video game systems are perfect examples of the blue ocean strategy and were chosen because they showcase both success and failure of the blue ocean strategy. The three cases showcase what Nintendo did right and what it did wrong and therefore is a perfect example of the blue ocean strategy. Analyzing the cases and comparing them to each other is the best way of researching the blue ocean strategy since it's almost impossible to conduct different research methods from this study (e.g. experiments, interviews, any observational trials, etc.).

### 1) Case of Nintendo Wii

Since the Wii launch, Nintendo has constantly tried to add new innovative features and improve the Wii's attributes to give their customers a better gaming experience. The Wii's most prominent feature is its primary controller, the so-called "Wiimote", with its essential motion-sensing capability. This motion-sensing ability is the heart of the gaming concept of the Wii. It allows for a more active and healthy gaming experience without forcing the gamer to renounce the classical way of playing video games [2]. Nintendo also offered various alternative gaming controllers and add-ons for the Wiimote for those customers that looked for a classical controller or an alternative way to enjoy their games [3]. That accompanied by a broad spectrum of software titles, innovative gaming concepts, and, not to forget, low prices made the Wii a successful product [3], [19]. Figure 2 pie chart is depicting the relative distribution of game consoles (units) present in sales marketing. The slices with information represent the distribution percentile that has more than 1%. Nintendo Wii's success is that it achieved everything differently from Microsoft and Sony, Nintendo's main competitors. Nintendo's two main rivals were far ahead of Nintendo in the technical aspect and offered high-end graphics and faster processors that appealed to the core gamers [7]. Nintendo knew that it could not keep up with the competition anymore. Its only choice was to disrupt the market, get out of the red ocean, create a blue ocean, and find customers that never were customers before [4].

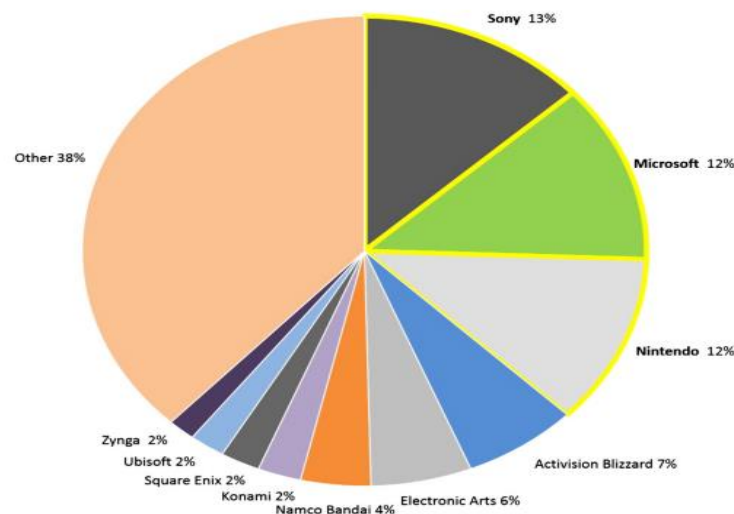


Figure 2: Nintendo Wii's contrast with other key players in the gaming industry [16]

### 2) Case of Nintendo Wii U

In late 2012 Nintendo launched its home video game console, the Nintendo Wii U, the Wii's successor. Nintendo unsuccessfully tried to build on the Wii's success by making its heir backward compatible with all Wii software and accessories and introducing new features. The Wii U is the first Nintendo console capable of HD graphics and introduced a new primary controller, the Wii U Game-Pad, a tablet-like controller that features a touchscreen supposed to create another blue ocean [5]. The strategy in the long term had worked against the firm itself had to propose a console without a precise market target. It could not target Wii's customers because they were outside the process of generational transition, and at the same time, it was positioned in such a way that had repulsed client-net that could have bought Wii U [4]. The failure of Wii U was not only due to the blue ocean strategy's fault since there was also a series of causes uniquely related to the console, but it was the primary motivation [10]. Having underestimated the impression that Nintendo Wii left on the market and consumers, the company's marketing campaign for Wii U fell flat, failing to live up

to the expectations of yet another innovative, ground-breaking product. Wii remote became a shadow that was proven difficult for Nintendo to overcome, as the Wii U's new and motion-sensitive screen pad seemed unimpressive compared to the previous controller [11]. Instead of struggling in a competition against Sony and Microsoft, Nintendo was struggling against itself. While there were other problems with the Wii U, its lack of original games, for example, the most glaring fault of the marketing campaign for Nintendo's biggest failure was its inability to convey what was new and valuable about the product [8], [10].

### 3) Case of Nintendo Switch

Nintendo's current video game console, the "Nintendo Switch," hit the tech market in early 2017 and has been an enormous success ever since. The Nintendo Switch is considered the coherent continuation of Wii's blue ocean strategy [9]. The switch is the world's first hybrid console and combines a home video console and a handheld console. The players can connect it to a television through a dock or carry it around using its internal batteries. Targeting another clientele and keeping itself away from the main competition, it has created its market segment conscious that its console is less powerful than the others but has the uniqueness to be hybrid [5].

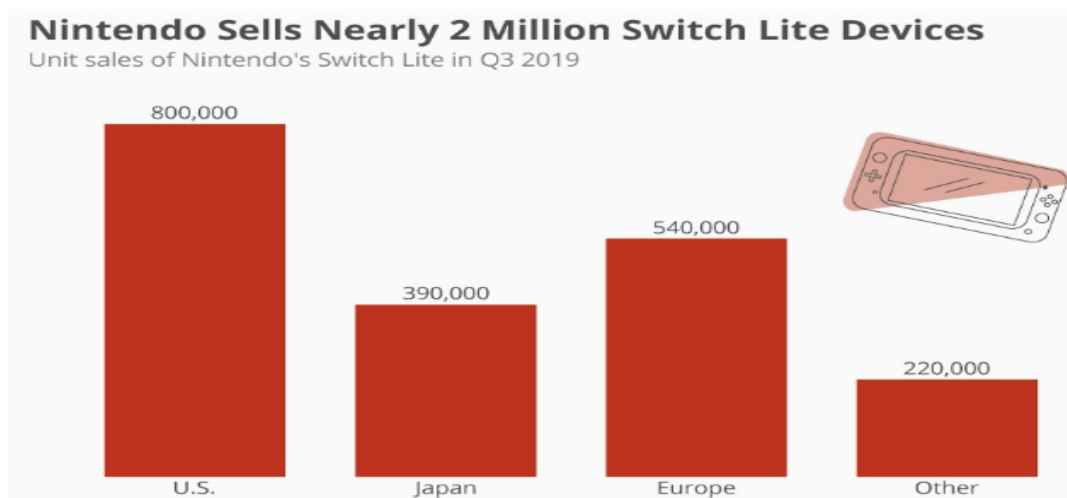


Figure 3: Nintendo's selling rate in the third quarter of 2019 [7]

The bar chart illustrates in figure 3, the Unit sales of Nintendo's Switch Lite in Q3 2019 in the US, Japan, Europe, and other regions. The maximum number of unit sales was in the US compared to the other regions, which is 800,000 units. The second highest unit sales are in Europe, having 540,000 sales. On the third, it is Japan where the unit sales are 390,000. The unit sales of Nintendo's Switch in other regions were 220,000. The bar chart suggests that the maximum unit sales were in the United States. Second, it is Europe where the sales are maximum. Third, it is Japan, and, in the end, there are other countries combined where Nintendo Switch Lite Devices are sold. The switch console takes the paramount from its predecessors. Thus its controllers, a pair of joy-con, can be used both joined to the console but also detached, permitting some controls with movements similar to the Wii remote. In handheld modality, its display is a touchscreen, and its shape is similar to a tablet; it is a finishing of the concept behind the Wii U Game-Pad, not to mention the previous experience in the field due to Nintendo DS and 3DS [5]. Another possible contributing factor to the success of the "Nintendo Switch" was that many customers bought the system during the COVID-19 pandemic to occupy themselves without risking themselves or others in the safety of their homes.

### 3. BLUE & RED OCEAN STRATEGY IMPLEMENTATION

According to the blue ocean strategy, there are blue oceans and red oceans. The blue oceans are a metaphor for wide-open market spaces, while red oceans stand for highly competitive market spaces that require overcoming the competition. The blue ocean strategy aims to identify and create demand where there was none before and therefore make the competition irrelevant. The successful creation of a blue ocean would lead to a short period when an uncontested market space is free to explore with many opportunities and growth potential. The red ocean strategy aims to compete in existing market spaces, exploit existing demand, and beat the competition. The blue ocean strategy is incredibly vital when the supply exceeds the demand in a market, as it can create new demand and helps a company to break free from the competition. While the primary beneficiary is the original user of the strategy, it also opens up new possibilities for competition. They will naturally try to exploit the new market space, transforming the blue ocean back into a red ocean [11].

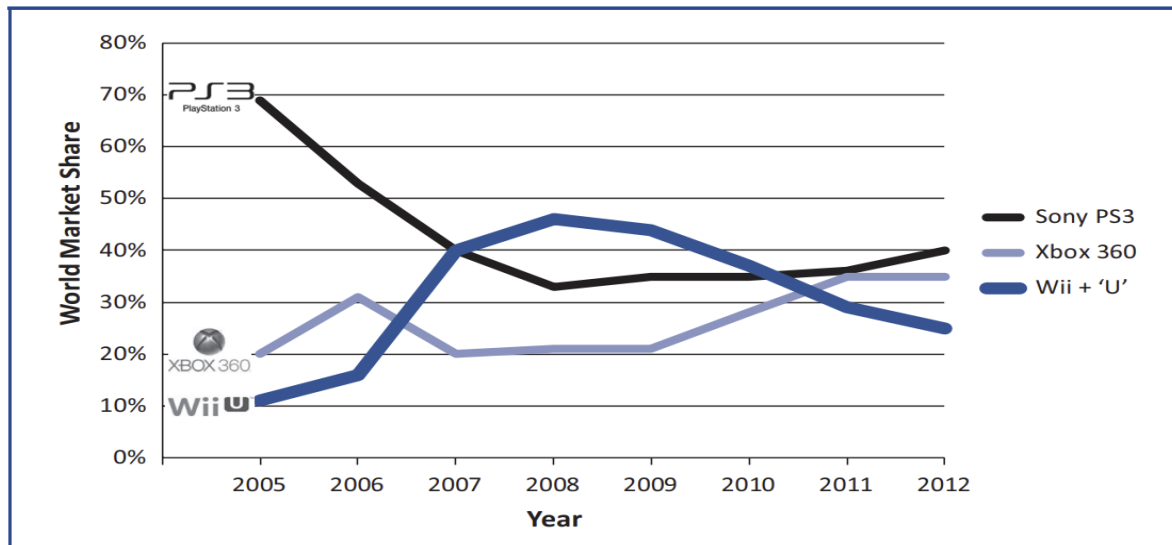


Figure 4: Development of world market shares of Sony PS3, Microsoft Xbox 360, and Wii <sup>[13]</sup>

The line graph in figure 4 shows the development of world market shares of Sony PS3, Microsoft Xbox 360, and Wii “U” from the year 2005 to 2012. Initially, in 2005, PS3’s world market shares were at their peak level at 70%, Microsoft Xbox 360’s was at 20% and Wii was the lowest having 10%. PS3’s shares halved till 2008 because of continuous depreciation. After 2008, Sony PS3 remained stable at 35% till 2011 and rose a little bit in 2012. On the other hand, Xbox 360 fluctuated and remained stable at 20% from 2007 to 2009. Microsoft’s Xbox soared in its market share and reached 35% in 2 years. Wii’s market share in 2005 was 10 percent, the lowest of all three. But it multiplied its market share each year, making it 45% in 2008. After 2008, a drop in market shares was seen each year making it 25% in 2012. Overall, Wii and Xbox 360 managed to increase their shares by 15% from the lowest level in 2005 till 2012 but PS3 witnessed a continuous fall in their market shares making it half of the percentage of the initial share.

#### 4. OUTCOMES OF STRATEGY

##### Findings 1

The blue ocean strategy is a strategy with high benefits but can also be highly risky. The whole premise of the blue ocean strategy is to make the competition irrelevant. Therefore, successful implementation would lead to an almost monopolistic position in the market. Nevertheless, there will always be competition since a successful product will always lead to substitution products. However, a soundly applied blue ocean strategy will give an organization a head start, transform it into a unique organization, create new customers, strengthen the brand value, and will most likely establish a company as the market leader for the time being. Nonetheless, the risks of this strategy are high. An organization might invest much time, resources, and research in a product that fails to create new demand and find itself back in the red ocean competition it tried to avoid. Thus, fighting the competition with an inferior product is not up to the market’s standards, and suffer substantial financial losses in the process.

##### Findings 2

Several features contributed to Nintendo’s success with the Nintendo Wii and the Nintendo switch. In the Nintendo Wii case, Nintendo decided not to compete in a race for better, more powerful technology but instead chose to build a product, although technically inferior, that sets to capture the lion’s share of the market by focusing its firepower on factors besides technical prowess [5]. While the competition tried to build the most powerful video game system, Nintendo tried to get out of that red ocean through innovation. Nintendo changed its focus away from the technical side to the gameplay side, giving gamers more options and a more realistic experience in the form of the Nintendo Wii’s wireless motion sensor controller, the so-called “Wii mote” [11]. The changing focus away from the powerful, high-end video game consoles made the Wii more affordable and led to higher sales. Nintendo also changed its target groups, trying to appeal not just to regular gamers but to everyone. The fitness & sports trend, added to the general social or family gaming the Wii has enjoyed is also a revenue generator and should help to fight the stereotype of unhealthy gaming [12]. The ancillary product is the Wii sports, bundled with the basic hardware offering. More than a year after the Wii launch, Wii fit came out. Wii fit is a balancing board (i.e. additional computer-based hardware) that comes with a full exercise program, equipped for fun (i.e. soccer headers or slalom), fitness (jogging), and balance activities (yoga), among others.



Some games are specially designed to interact with the board, thus also driving game revenue [5]. Nintendo again found a way to develop a video game system that appealed to many people in the Nintendo switch case while not directly competing with the competition, again successfully creating a blue ocean. The Nintendo Switch was the world's first hybrid console, a mixture of handheld and home consoles. Nintendo profited hugely from its long and successful history of developing handhelds [8]. The possibility for gamers to play a game at home on their TVs and then go out to the park, metro, or any place they want and continue their game continues to appeal to many people worldwide. Again the machine is less powerful than its competition but scores points with its mobility and lower price. Besides, this console takes the best from its predecessors [5]. In handheld mode, its display is a touchscreen, and its shape is similar to a basic tablet; it is a finishing of the concept the behind Wii U Game-Pad, not to mention the previous experience in the field due to Nintendo DS and 3DS [5], [17]. It is fair to say that even the current pandemic profited Nintendo in a way. Many people within the gaming community were buying the switch to occupy themselves while being sheltered in place at home, creating a great way to build a sense of community and interaction with others without having to leave their homes [10].

### **Findings 3**

After the triumphant success of Nintendo's Wii, the company tried to build on this success with its successor, the Wii U. However, Nintendo made several mistakes. For one, the marketing campaign was not clear. Many customers thought of the Wii U as an upgrade of its predecessor, while it was a completely new system [13], [18]. Other than that, the hardware system of the Wii U took longer to load and start gameplay. The Wii U also failed to have the consistency of new game releases, which can take interest away from buying the system or continuing to play the home video game system consistently [14]. Nintendo tried to position Wii U as a console dedicated to passionate players, returning to compete with Sony and Microsoft (i.e. it returned to a red ocean strategy, maybe involuntarily). However, that is where the console showed its weakness. It was judged as less performing compared to competitors, a factor that led to limited support by third-party developers [15], and there were concerns about Wii U Game-Pad, its tablet-like controller [5]. Nintendo's strategy had worked against the firm itself, which had to propose a console without a precise market target. It could not target Wii's customers because they were outside the process of generational transition, and at the same time, it was positioned in such a way that it had repulsed clientele that could have bought Wii U [5]. The failure of Wii U was not only due to the blue ocean strategy's fault since there was also a series of causes uniquely related to the console, but it was the primary motivation [5].

## **5. SUPPLEMENTARY WORK**

Impending researchers could research if the blue ocean strategy can make the competition wholly irrelevant or just partially, the deciding factors that decide between success and failure, and what the best possible response of the competition would be. Additionally, researchers could analyze what would happen if all the major players in a market decide to engage in a blue ocean strategy, how the market would react, and the consequences [11]. Furthermore, scholars could experiment if a blue ocean could turn into a red ocean and a red ocean into a blue ocean if enough companies try to use a blue ocean strategy [17]. Thereby creating a red ocean and transforming the original red ocean into a blue ocean because the only company left will be relieved from its competition by the other companies retreating from the initial market [19].

## **6. CONCLUSION**

In the case of the Nintendo Wii, Nintendo successfully turned the market on its head. Nintendo did not want or could not compete with its competition by building more powerful technology, so Nintendo developed an innovative, cheaper console that targeted everyone, instead of just the hardcore gamers traditionally more interested in high-end video game systems. By this, Nintendo created a blue ocean for itself. With the Nintendo Wii U, Nintendo failed to market the new system accordingly, making many potential customers think that the Wii U was just an upgrade of its predecessor instead of a new system. A lack of game releases for the Wii U, problems with the hardware system, and a failed attempt to target hardcore gamers resulted in a return to compete with the competition again directly, judged less performing than its competition [1], [19]. All these factors contributed to the failure of the Nintendo Wii U. In the Nintendo switch case, Nintendo identified a demand the competition ignored, the demand to play a game anywhere. Taking the best out of its predecessors in the home and handheld sector, an on-point marketing campaign, a well-rounded gaming catalog, fast hardware, and a low price made the Nintendo switch a huge success [4]. Nintendo proved that the blue ocean strategy could be instrumental if a company cannot or does not want to compete with its competition anymore. Nintendo predominantly used it in a very effective way. However, the failure of the Wii U shows that there is not much space for miscalculations. What made the Nintendo Wii and Nintendo switch successful examples of the blue ocean strategy, and where did Nintendo fail to create a blue ocean with the Nintendo Wii U several factors contributed to both outcomes [19]. In the cases of Wii and switch, Nintendo did not attempt to compete in a race for more powerful technology with the competition [5]. It focused on low prices and innovation instead. While the Wii introduced brand new ideas like motion

sensor control, the switch is an accumulation of its predecessors and also introduced unique features - being the world's first hybrid console. A combination of Nintendo's very successful handheld video consoles and home video consoles. Both systems scored with low prices, proper marketing, formidable gaming catalogs, and unique features [12]. Nintendo targeted everyone and not just the hardcore gamers. In the case of the Nintendo Wii U, on the other hand, Nintendo failed to market the system correctly while also trying to build on the predecessor, the Nintendo Wii. The marketing lacked precision and could not convert to the customers that the Wii U is more than just an update of the Wii. In contrast to its pre-and successor, it failed to have consistent new game releases, and the hardware took a long time to load [6], [14].

Additionally, Nintendo tried to position it as a console dedicated to passionate players and thereby, probably unintentionally, returned to the competition of the red ocean, where it was judged as less performing than its competitors. The three cases of Nintendo's use of the blue ocean strategy show how successful the use of the blue ocean strategy can be and how easy it can go wrong. If Nintendo had not changed its strategy to the blue ocean strategy and continued to compete in the traditional red ocean against its competitors, it would not be where it is now. Overall, it is a success for Nintendo and helped bring the company back to the top of the gaming industry. However, every blue ocean will eventually turn back to a red ocean after some time; the competition and new market entrants will eventually try to copy any new successful innovation and thereby transform a blue ocean back into a red ocean [16].

## 7. REFERENCES

- [1] Bendixen M., Bukasa K. A., Abratt R. (2004). Brand equity in the business-to-business market. *Industrial Marketing Management*, 33, 371–380.
- [2] Chan-Olmsted S., Kim Y. (2002). The PBS brand versus cable brands: Assessing the brand image of public television in a multichannel environment. *Journal of Broadcasting & Electronic Media*, 46, 300–320.
- [3] Coley, R. J., Cradler, J., & Engel, P. K. (2000). *Computers and the classroom: the status of technology in U.S. schools*. Princeton, NJ: Policy Information Center, Educational Testing Service.
- [4] Cheung, Gifford and Jett Huang (2011), “StarCraft from the Stands: Understanding the Game Spectator,” CHI '11 Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems. Vancouver, BC, Canada: ACM. 763–772
- [5] Chou, Ting-Jui and Chih-Chen Ting (2003), “The Role of Flow Experience in Cyber-Game Addiction,” *Cyberpsychology & Behavior*, 6, 6, 663–75.
- [6] Clements, Matthew T. and Hiroshi Ohashi (2005), “Indirect Network Effects and the Product Cycle: Video Games in the U.S., 1994–2002,” *The Journal of Industrial Economics*, 53, 4, 515–42.
- [7] Colwell, John and Makiko Kato (2019), “Investigation of the Relationship between Social Isolation, Self-Esteem, Aggression and Computer Game Play in Japanese Adolescents,” *Asian Journal of Social Psychology*, 6, 2, 149–58.
- [8] Anderson, Craig A. (2003), *Violent Video Games: Myths, Facts, and Unanswered Questions*. Psychological Science Agenda. October, (<http://www.apa.org/science/about/psa/2003/10/anderson.aspx>).
- [9] Acquisti, Alessandro and Sarah Spiekermann (2011), “Do Interruptions Pay Off? Effects of Interruptive Ads on Consumers' Willingness to Pay,” *Journal of Interactive Marketing*, 25, 4, 226–40.
- [10] Bavelier, Daphne, C. Shawn Green, Alexandre Pouget, and Paul Schrater (2012), “Brain Plasticity Through the Life Span: Learning to Learn and Action Video Games,” *Annual Reviews of Neuroscience*, 35, July, 391–416.
- [11] Barnett, Jane and Mark Coulson (2010), “Virtually Real: A Psychological Perspective on Massively Multiplayer Online Games,” *Review of General Psychology*, 14, 2, 167–79.
- [12] Jeong, Eui Jun, Corey J. Bohil, and Frank A. Biocca (2011), “Brand Logo Placements in Violent Games,” *Journal of Advertising*, 40, 3, 59–72.
- [13] Kim S., Lamont, I., Ogasawara, H., Park, M., & Takaoka, H., (2011). Nintendo's “Revolution”. *MIT Sloan, Management*. 11 (124), 1-23.

- [14] Bogost, I. (2007). *Persuasive games: The expressive power of video games*. Cambridge, MA: MIT, USA.
- [15] Jakobsson M. (2011). The achievement machine: Understanding Xbox 360 achievements in gaming practices. *Game Studies*, 11. Retrieved from (<http://gamestudies.org/1101/articles/jakobsson>).
- [16] Huntemann, Nina (2000), *Game Over: Gender, Race & Violence in Video Games*. Media Education Foundation. ([http://www.mediaed.org/assets/products/205/transcript\\_205.pdf](http://www.mediaed.org/assets/products/205/transcript_205.pdf)).
- [17] Bélisle, Jean-François and H. Onur Bodur (2010), “Avatars as Information: Perception of Consumers Based on Their Avatars in Virtual Worlds,” *Psychology and Marketing*, 27, 8, 741–65.
- [18] Kim, Yongjae, and Stephen D. Ross (2006), “An Exploration of Motives in Sports Video Gaming,” *International Journal of Sports Marketing and Sponsorship*, 8, 1, 34–47.
- [19] Gretz, Richard T. (2010), “Hardware Quality vs. Network Size in the Home Video Game Industry,” *Journal of Economic Behavior & Organization*, 76, 2, 168–83.