

Market expansion through disruption: the Nintendo vision

Robin Di Capua

Media Technology and Games, Design and Analysis

IT University of Copenhagen, Denmark

Contents

1	Description	3
2	Introduction	4
3	The Revolution project and the disruptive strategy	6
4	Disruptive games	8
5	Where is the revolution?	10
6	Conclusion	12

1 Description

In 2006 Satoru Iwata stated that Nintendo was going to disrupt the market thanks to the DS and the Wii¹. The goal of the company would be reaching the non gamers with products that are playable and enjoyable by everyone, i.e. gamers and non gamers.

The question this synopsis will try to answer is how Nintendo is implementing this disruption, i.e. what are the strategies, choices, and games etc. that are contributing to the success of both Wii and DS. The method used for trying to answer this question is based on analyzing videogames sales charts for both hardware and software with an in depth look at some of the last press conferences that Nintendo held in the last two years.

Trying to analyze why this strategy is working with great success can help to better understand how people in the market relate to videogames and this synopsis will try to show which changes are happening in the industry right now. Having a vision of such changes can help us thinking about their influence on the future generation of consoles in regard of both hardware and software products.

¹Satoru Iwata GDC 2006, <http://kotaku.com/gaming/satoruiwata/iwatasgdckeynote-uncut163582.php>, 01/05/2007

2 Introduction

In order to better understand how and why things have changed with the current generation of console, a lot of introductory information is necessary. The following part will briefly talk about the history of the main consoles produced from the early eighties until today.

Back in 1983 Nintendo launched the Nintendo Entertainment System (NES) (1983, Nintendo) and helped saving the industry from the videogame crush that happened in 1983-1984 in the United States ². The core of the industry was shifted from United States to Japan, where Nintendo took the leadership of the market as a videogame company. Nintendo kept this leadership for twelve years of battling against Sega during the 8 bit and 16 bit era.

In 1994 Sony launched the Sony Playstation (PSX) (1994, Sony) in Japan, a 32 bit console with a CD-ROM reader and high 3D performances. In 1994 and 1995 the PSX had to face the new Sega console, the Sega Saturn (1994, Sega), that was also a 32 bit console. The PSX found a place in the market and literally crushed both Nintendo and Sega consoles. Sony undertook a very effective marketing campaign, which presented the PSX as a console for grownups with incredible 3D graphics and mature games. All too often however, gamers and critics tend to emphasize the good strategies of a company without looking at the bad choices made by the opponents. In this case, both Sega and Nintendo made very bad choices in terms of hardware implementation and marketing, which allowed Sony its strong position.

With the Saturn, Sega produced a console that was 2D oriented and lots of developers found it very difficult to program. This proved to be a mistake as 3D graphics were entering the console market and most people were fascinated by PSX games like Ridge Racer (1994, Namco) or Battle Arena Toshinden (1994, Tamssoft, SCEA) that provided, at that time, very advanced 3D graphics.

In 1996 it was the time for the Nintendo 64 to launch itself in the market which was now dominated by the PSX, since the Saturn had been greatly outsold by Sony's console. When the Nintendo 64 came out with its 64 bit processor it was far more powerful than both the Saturn and PSX. Nintendo also introduced a very innovative joypad that featured an analogue stick that allowed the input of directions in 3D environments with 360 degrees of freedom. In addition, one of the launch titles was Super Mario 64 (1996, Nintendo), a game that at that time was considered by most of the reviews

²The Great Videogame Crash, <http://www.thedoteaters.com/p3.stage6.php>, 01/05/2007

one of the best games ever made³. But Nintendo made one big mistake, it chose to use the old cartridge units for the games instead of CDs and that meant a huge limitation of space that motivated a number of third parties to choose to develop their games for the PSX instead.

In particular, Squaresoft decided to abandon Nintendo and produce Final Fantasy VII (1997, Squaresoft) and all its next games on PSX. This was one big loss for Nintendo since Squaresoft has always been a very popular and appreciated software house in Japan especially thanks to its Final Fantasy brand.

Nevertheless, when the Nintendo 64 was released, it was the most powerful console to date, and in addition to featuring a game like Super Mario 64, it featured a unique and innovative controller system. However, right after the N64 launch, Sega came out with a new analogue controller for their Sega Saturn's game Nights: Into Dreams (1996, Sonic Team, Sega) so it's difficult to determine who had the idea first.

The introduction of the analogue stick was so important that Sony decided to create a new version of the PSX controller that featured two analogue sticks and called it the Dual Analog Controller. Later, when Nintendo launched the Rumble Pack for the N64 controller (a device that allowed force feedback if plugged into the controller), Sony came out with a Dual Analog Controller with rumble feedback inside and called it Dual Shock.

Unfortunately for Nintendo, the lack of third party games and the aggressive marketing of Sony pushing its console to be the console of choice *for adults*, meant that the Kyoto company began to lose its leadership. In the community, the Nintendo consoles also started to be seen as the console of choice *for kids*, in contrast with the Playstation.

This reputation of being a *console for kids* continued in the 128 bit era, where Sony again crushed the opponents. First of all there was the Sega Dreamcast (1998, Sega), a console that started the 128 bit era and provided, according to the game community, some of the most outstanding games of the 128bit era. However, in this venture Sega failed completely and decided to concentrate exclusively on software production and to stop producing consoles⁴.

In 2000 Sony came out with the Playstation 2 (PS2) (2000, SCEI). The hype was so huge that the console immediately became a great success. The Playstation 2 architecture was more powerful than the Dreamcast and also allowed retro compatibility with the old PSX games. The optical support was now compatible with new DVDs so the PS2 was not only a console but

³GameSpot, http://www.gamespot.com/gamespot/features/video/15influential/p15_01.html, 19/05/07

⁴Games Investor, http://www.gamesinvestor.com/Thinkpieces/Past_Thinkpieces//Sega_exits_the_console_busines/sega_exits_the_console_busines.html, 02/05/07

also a DVD reader.

For this unit, online capabilities were implemented but never really used a lot outside Japan. The controller, called Dual Shock 2, was exactly the same as the first Dual Shock, except that now the buttons were pressure sensitive. The PS2 managed to outsell the Dreamcast very quickly.

By 2001 the Dreamcast was no longer a competitor, and two new rivals had appeared, the Nintendo Game Cube (2001, Nintendo) and Microsoft X-Box (2001, Microsoft). Nintendo had come out with a cubic console using mini-DVDs for the physical support. Microsoft on the other hand launched a very technologically advanced console, featuring online services, internal hard disk, and a killer application like Halo: Combat Evolved (2001, Bungie Software, Microsoft Game Studios).

Both consoles were more powerful than the Playstation 2. However, both consoles were failures compared with the PS2, which sold more than 100 million units⁵.

In fact, the Nintendo Game Cube was tagged by many gamers as a console *for kids*, while on the other hand the PS2 and X-Box were considered consoles *for grownups* due to the more adult games available.

3 The Revolution project and the disruptive strategy

When the 128 bit era was reaching its end, every manufacturer started announcing their projects for their upcoming console.

Nintendo mentioned its new console under the name *Revolution* at Electronic Entertainment Expo 2005 (E3 2005), speaking about a revolutionary system that will "storm the gates"⁶. At the beginning, the amount of information about the new console was very poor. The only thing that was stated was its revolutionary philosophy, something that Nintendo has always followed with its games and hardware devices since it entered the industry. But at this particular point in history, they were claiming innovation and changes like they had never done before.

In 2006 at the Game Development Conference (GDC) Satoru Iwata presented a keynote⁷ where the main topics were the DS and the Revolution.

⁵Sony Computer Entertainment Inc., http://www.scei.co.jp/corporate/data/bizdataps2_e.html, 07/05/07

⁶IGN, <http://cube.ign.com/articles/615/615089p1.html>, 07/05/07

⁷Kotaku, <http://kotaku.com/gaming/satoruiwata/iwatasgdckeynoteuncut163582.php>, 07/05/07

Iwata started by speaking about Pepsi and how it took back his leadership from Coke by starting to produce other drinking beverages like sports drinks or health drinks. Coke "expanded its market beyond current core users" said Iwata, and this is now the idea about the DS and the Revolution. Nintendo's president talked a lot about the DS and his games, he pointed out that "the disruption of the Nintendo DS arises from how the software takes advantage of the hardware" and he take as an example Brain Age: Train Your Brain In Minutes A Day (Nintendo, 2005).

Iwata said that Brain Age was developed by a team of nine people in ninety days, and that it is now one of the most successful games for the DS. At some point of his keynote Iwata says: "our business is beginning to resemble a bookstore where you can only buy expensive, full sets of encyclopedias. No romance novels. No paperbacks. No magazines". A game like Brain Age is absolutely more like a magazine than an encyclopedia, and has since been considered by the community as being very accessible, even for people who don't usually play games.

This game forces the user to keep the DS like a book and to use the stylus to interact with the game. This is something that emphasizes the simple usability since it refers to something most people know how to do (keep a book in their hand and write on it).

Brain Age offers a variety of mental exercises to train the mind. It's something different from many other games where we usually move an avatar and the aim is to finish the game. However, it is important to note that Nintendo is not new to introducing *exercising games*. Some readers will perhaps remember games like Donkey Kong Junior Math (Nintendo, 1985) or Mario no Super Picross (Nintendo 1995).

Nevertheless, Brain Age is still something more unique and elaborate when compared with these old games; particularly as it also uses icons and visual conventions similar to PC software, which is something commonly understood by most people.

Iwata pointed out that during the prototyping of the Revolution the goals were the same; being accessible and inviting, for both casual, and hardcore gamers. These goals were met thanks to the Revolution's controller (shown for the first time during Iwata's keynote). This controller is shaped like a TV remote with a pointing device allowing the user to point at the screen in a manner like a mouse on a PC screen. The controller also features motion-sensing capability allowing it to detect the movement of the hand of the player.

Another feature of the controller is that it provides a plug at the bottom where we the user can insert additional devices. One of these was shown during the conference and is known by the name *nunchaku*. This add-on is a

controller with analogue stick, two buttons and featuring a motion- sensing device like the standard controller. In that way we can keep the remote-like controller in one hand and the *nunchaku* in the other, using both hands to play the games.

During his keynote Iwata said: "It met our goals. It was wireless. It was inviting to new players. It offered something new for core players, and, it was also a new interface we could offer to every player".

Reaching the missing masses, the people who never played videogames, was the intention from the beginning, but wasn't this the intention of all consoles ever produced? Didn't Nintendo launch the Family Computer (Famicom in Japan and Nintendo Entertainment System in the rest of the world), the computer for all the family, easy to use when compared with the old computers like Commodore 64 or Atari? However, this point will be returned to later.

After a couple of months the E3 was held. Nintendo had a press conference and this time it was all about the next console, the Wii. The official name, Wii, was announced some days before the E3⁸. During the press conference the actual president of Nintendo America, Reggie Fils-Aime, explained the meaning of the Wii name. "It was simple, short, it sounded like the English word *we*, "it's a sound of inclusion", Reggie said.

The main topic of the Nintendo conference was focused on two points, the difference between the Wii, the PS3 and X-Box 360, and the fact that it will be attractive for everyone, including people who never played games. The console is "not about the look, it's about the feel", this is one of the strongest sentences that Reggie Fils-Aime uses during his speech.

4 Disruptive games

If we look at some of the best selling games for the DS so far⁹ we have the following titles, ordered by copies sold: Nintendogs (Nintendo, 2005), New Super Mario Bros. (Nintendo, 2006), Brain Age: Train your Brain in Minutes a Day! (Nintendo 2005), Pokmon Diamond and Pearl (Nintendo, 2006), Animal Crossing: Wild World (Nintendo, 2005).

As we can see, the franchise of Brain Age has really pushed console sales and it's continuing to have a huge success, especially in Japan. On the other

⁸Consolewatcher, <http://www.consolewatcher.com/2006/05/nintendorevolution-renamedtonintendowii/>, 09/05/07

⁹Nintendo Financial Statements, <http://www.nintendo.co.jp/ir/pdf/2007/070426e.pdf>, 09/05/07

hand we can also notice that the other best selling games are New Super Mario Bros., Animal Crossing and Pokmon.

What can we say about these games? Mario Bros. is a mix of the old Super Mario Bros. games. Animal Crossing is a remake of the Game Cube version of the game (that was already a remake of the Nintendo 64 game Animal Forest only published in Japan) with WiFi capabilities and some new features. Pokmon is a sequel to the Pokmon games for Game Boy (Nintendo, 1989) and Game Boy Advance (Nintendo, 2001).

None of these games are recognized by the game community for using the hardware of the DS in a very revolutionary way.

If we think about what a disruptive game is, following the words used by Nintendo during their conferences, we can presume that we are talking about games that appeal to non gamers. Disruptive games should be different from what we are used to, they should be easily accessible by everyone, and provide a new way of conceiving games. With that definition it's clear how a game like Brain Age fits perfectly within this definition. It's different from other games, it's designed to be accessible by everyone and it uses the videogame medium to make exercises for the brain. It is possible to say that one reason for why Nintendo focuses so much on franchises like Mario, Animal Crossing or Pokemon, despite saying that they will expand the market with disruptive products like Brain Age, is due to the answer that these franchises sell very well.

Here we are at the crucial point of this discussion; in which direction is Nintendo expanding the market? In fact, the videogame market is expanding year after year¹⁰. The question is to find out is if the reason for that expansion is the forty or fifty year-old people that have suddenly decided to play games on a console, or if it is due to children that turn eight or ten years old and want to buy a console to play videogames. Unfortunately we don't have accurate statistics for that but the fact that games like Pokmon, Mario Bros and Nintendogs are among the best selling games should tell us something about the audience of these games. Since these games are not considered by the community adult games we can suppose that the average age of their players is below forty years old.

Something we can argue is that a game like Super Mario Bros. can appeal to non gamers as much as a Brain Age game, however we don't possess accurate statistics showing how many non gamers have bought these two games on the Nintendo DS. We can also argue that a game like Super Mario Bros. is more complicated to play than a Brain Age although even inexperienced players

¹⁰ESA, <http://www.theesa.com/archives/files/Essential%20Facts%202006.pdf>, 09/05/07

can enjoy the experience after a short time practicing.

The Wii will probably follow the same trend since, apart from successful¹¹ games like *Wii Sports* (Nintendo, 2006) or *Wii Play* (Nintendo, 2006), Nintendo has announced titles like *Super Paper Mario*, *Mario Party 8*, *Super Smash Bros Brawl*, *Mario Galaxy* and *Metroid Prime: Corruption*.

A *Brain Age* game for the Wii has already been published in Japan as well, but among all the titles of Nintendo, it's clear that Nintendo is relying again more on his well known (and profitable) franchises instead of games like *Brain Age*.

5 Where is the revolution?

Calling a project under the name *Revolution* is in my opinion a clear sign of ambition. Iwata during his speech at the GDC 2006 presented the new console as something that will bring a revolution to the game industry.

The controller of the Wii is indeed very innovative since it introduces features that no other controller has, thus it is the touch screen of the DS, among portable consoles. We can also argue that adding the *nunchaku* expansion for the Wiimote, transforms the controller into something less accessible than a normal controller since, on top of the buttons and the analogue stick, the player also has to manage the pointing and motion sensing devices using both hands. This point fits within the intention of Nintendo to appeal also to hardcore gamers, searching for games that use a more deep and complex interface. In that regard the developers can choose to make the players use the Wiimote alone if they want.

I think it's interesting to consider that Nintendo claims that the Wii is playable by the whole family. As I said before, the idea of the *family computer* was already used with the NES to contrast the idea of personal computers like Atari or Commodore 64. Surprisingly, this *family vision* was not used during SNES, N64 or GC and now it comes up again with the Wii twenty years later as a part of Nintendo's strategy.

What I think Nintendo is doing is trying to be different, thanks to a philosophy that states a clear vision about what videogames should be. For Nintendo, games are not all about graphics but more about interaction.

Apparently the community has been intrigued by this message since the DS and Wii are selling a great deal¹².

¹¹Nintendo Financial Statements, <http://www.nintendo.co.jp/ir/pdf/2007/070426e.pdf>, 09/05/07

¹²Media Create, http://www.mcreate.com/jpn/s_ranking.html, 10/05/07

Perhaps this is due to a number of factors; games like Brain Age and Wii Sports encourage non gamers to approach Nintendo consoles, the peculiar controller of the Wii and the touch screen of the DS tease both casual and hardcore gamers, the price of Wii and DS is lower than the other consoles, and Nintendo franchises are well known and appreciated by the community. We can see, through successful consoles like NES, PSX and now Wii and DS that there is a vision that goes beyond technology. A good marketing strategy and campaign, and giving a *soul* to the product can differentiate it from the others and lead to success. Of course however, the success of a product is also influenced by the mistakes made by the opponents. In the end however, a console should also provide games that emphasize a vision, in the way that Brain Age or Wii Sports have done so for DS and Wii.

Since it is the games that have to take advantage of the hardware (like Iwata said during his keynote) we can try to search for signs of a revolution among them. It's a common opinion in the community that some titles for both DS and Wii showed interesting use of the interface but none of them could be considered truly revolutionary in their gameplay. This is a very crucial aspect that should be recognized by Nintendo and the other developers. The body involvement per se doesn't enable revolutionary gameplay all by itself. Touch or shake, instead of pressing a button, can be more involving for the player but it doesn't mean that there is a new gameplay. What we have seen so far in the large majority of games is a *button replacing* pattern applied to the touch screen of the DS or the pointing/shaking features of the Wiimote. From this perspective it seems that the likelihood of a game revolution, from a gameplay point of view, has not been realized until now.

The intuitive involvement of the body is becoming crucial in the Nintendo's strategy and we can suppose that every manufacturer willing to follow the same philosophy in the next generation will be inspired by what Nintendo has done.

Another crucial aspect that Nintendo is promoting is about the costs of production. Since both Wii and DS have less powerful architectures than the other main consoles on the market, producing a game for them can be cheaper since they don't require high definition content or expensive and powerful game engines to compete with the other games on the machine. Keeping the costs of production low allows small developers to produce and publish triple-A games, decreasing the risks publishers have to take in terms of money. In that way the market of triple-A games become less aggressive in terms of money requests, creating more potential involvement of small companies.

The last aspect I wanted to point out is maybe the most important. For the last ten years the industry has tended to focus a lot on visual elements,

spending a huge amount of time in developing cutting edge technologies capable of putting more and more polygons on the screen, managing complex light effects and realistic physics. Now Nintendo is showing that there are other aspects like hardware interfaces that haven't received as much of attention in recent years and that they are the key feature in distinguishing its consoles from the others.

6 Conclusion

We have seen that in the last twenty years of console history, many things have changed, not only in terms of processing power but also in terms of market share. Nintendo lost the leadership gained in the early eighties and now Sony has ruled the last ten years with its Playstation brand. Sega stopped producing consoles and became a simple software house and Microsoft has entered the console industry with the X-Box, attempting to conquer a portion of the market.

Every new generation, the manufacturers try to succeed against their opponents by searching for new ways to appeal to customers. During the current console war Nintendo has settle for a very different philosophy than both Sony and Microsoft. Instead of aiming at the power of its machine Nintendo has chosen to use the same strategy of the DS and design a very peculiar and unique interface for the Wii, thus trying to appeal both core gamers and non gamers. Until now the success of its console suggest that this strategy is working very well.

If both Nintendo Wii and DS will result as the winner in the console and portable market, we can think about which changes will arise for the next generation with regard to the design of both processor and controller. In that regard it could also be interesting to research to what extent we should involve the body of the player and also to research the physical limitations of this.

We should also follow very carefully how the companies will present their products to the masses to see if they will try new ways to appeal the gamers, or if they will follow Nintendo, aiming to both core and non gamers with new interfaces.