

Case 12 Video Game Console Industry in 2012: The Next Round



At the beginning of 2012, the three remaining suppliers of video game consoles were facing an uncertain future. A new generation of video game consoles was dawning—the eighth since the beginnings of the industry in 1972—but only Nintendo had announced a new model: the Wii U would be launched late in 2012. Sony and Microsoft were known to be developing new models which would be launched late in 2013; however, neither had provided any details.

The reluctance of either Sony or Microsoft to make announcements concerning their next generation of consoles reflected their uncertainty over the evolution of the console market. Both companies had been shocked by the outcome of the most recent round of competition. The remarkable success of Nintendo's Wii, which had outsold the more sophisticated and powerful consoles of Sony and Microsoft, had overturned much of the conventional wisdom concerning key success factors in the industry. Both Sony and Microsoft had based their strategies on the assumptions that, first, consoles were increasingly becoming multifunctional home entertainment platforms and, second, that their primary target markets were "hardcore" gamers (primarily males aged between 13 and 30). The Nintendo Wii had shown that an easy-to-use, dedicated console targeted at the casual user could out-sell the more technologically advanced machines from Sony and Microsoft. Was Wii an aberration or did it point to a new evolutionary path for the video console market?

Nintendo's eagerness to take the lead in the new generation of consoles was a consequence of the rapid decline in the sales of its Wii model. Conversely, Sony and Microsoft sought to extend the lives of their PS3 and Xbox 360 models (Sony had committed to a 10-year life cycle for PS3); however, neither company wished to leave the field clear for Nintendo. There was also a risk that, unless the console market could sustain the interest of users, the video game market might be lost to other hardware devices, notably mobile devices such as smartphones and tablet computers. All three companies kept a wary eye on Apple. After dominating the music business with iPod and iTunes, video games seemed a natural extension to Apple's ambitions in home entertainment. Already its iPad was being positioned as a game-playing device.

Increasing competition between different types of hardware—video game consoles, PCs, portable game players (such as the Nintendo DS and the PlayStation Portable), mobile phones, and tablet computers—had implications for the console makers' market positioning. The success of the Wii was primarily due to its appeal

among casual video game players. However, these casual players were increasingly playing video games on multifunctional devices such as PCs, smartphones, and tablet computers than on dedicated video game consoles.¹ If consoles were to lose casual game players to other hardware devices, the console makers might be inclined to return to their traditional focus: the hard-core gamer for whom the video games console offered unparalleled speed and graphical realism.

History of the Video Game Industry, 1972–2012

The history of the video game console comprises a series of product generations, each defined by the power of the microprocessors used in the consoles and each lasting about five years (Table 1).

The First and Second Generations, 1972–1985: The Atari Era

The home video games market emerged during the 1970s as an extension of arcade video games. The first generation of home video consoles were dedicated machines that embodied a single game. One of the first was *Pong*, created by Nolan Bushnell in 1972. He formed Atari to market this game player. The second generation of players featured 4-bit processors and interchangeable cartridges. The Atari 2600 unleashed a craze for video games driven by *Space Invaders* (released in 1979) and *Pac-Man* (1981). Atari was unable to prevent independent software developers from marketing games for the Atari 2600. During 1982, 20 new suppliers of Atari-compatible consoles entered the market and 350 new game titles were released in

TABLE 1 Worldwide unit sales of video game consoles by product generation

Generation	Second, 1978–1985 ^a	Third, 1985–1990	Fourth, 1991–1995	Fifth, 1995–1998	Sixth, 1999–2005	Seventh, 2006–2012 ^b
Leader	Atari 2600: 30m	Nintendo NES: 60m	Nintendo Super NES: 49m	Sony PS: 102m	Sony PS2: 150m	Nintendo Wii: 96m
#2	Others: 12m	Sega Master System: 13m	Sega Genesis: 40m	Nintendo 64: 33m	MS Xbox: 24m	MS Xbox 360: 67m
#3	—	Others: 8m	Others: 16m	Sega Saturn: 9m	GameCube: 22m	Sony PS3: 64m
Others	—	—	—	Others: 3m	Dreamcast: 11m	—
Global sales	42m	81m	105m	147m	207m	227m

Notes:

^aThe product generations overlapped one another by much more than is indicated by the table. For example, sixth-generation consoles (especially the PS2) continued to sell strongly in 2006 and 2007, long after the launch of seventh-generation consoles. The sales data relate to the sales of each console over its entire life, not just to the years indicated for each generation.

^bThe sales data are up to end-March 2012.

Source: Wikipedia.

that year. With declining sales of consoles and oversupply of games, Atari's parent, Warner, incurred massive losses.

The Third Generation, 1985–1990: The Nintendo Era

In 1983, Nintendo, the leading Japanese supplier of arcade video games, released its 8-bit Famicom home video system. In 1985, the Famicom—renamed the Nintendo Entertainment System (NES)—was launched in the US. By 1988, Nintendo held 80% of the \$2.3 billion US video games industry—chiefly as a result of the hugely popular games created by Nintendo's legendary games developer, Sigeru Miyamoto: *Donkey Kong*, *Legend of Zelda*, and *Super Mario Brothers*.

Nintendo's market dominance and huge profits rested upon its careful management of the relationship between hardware and software. Nintendo kept tight control of the supply of games, managing their quality and releases. Developers were required to follow strict rules for the creation and release of games for the NES console. Cartridges incorporated a "security chip" that ensured that only cartridges manufactured by Nintendo could run on the NES. Nintendo charged games publishers a 20% royalty and a manufacturing fee of \$14 per cartridge (the manufacturing cost was \$7). The minimum order—10,000 cartridges for the Japanese market and 50,000 for the US market—had to be paid in advance. Any game developed for the NES could not be released on a competing system for two years.

By 1991, Nintendo's sales exceeded \$4.4 billion, its stock market value exceeded that of Sony, and about one-third of US and Japanese households owned an NES.

The Fourth Generation, 1991–1995: Sega vs. Nintendo

Sega, like Atari and Nintendo, began in arcade games. In October 1988, it launched its 16-bit Genesis home video system in Japan, and in the US in September 1989. With the introduction of *Sonic the Hedgehog* in June 1991 and with strong support from independent games developers, sales of the Genesis took off.

Nintendo launched its 16-bit Super-NES, in September 1991. Its huge strength in its home market allowed it to maintain its leadership in Japan, but in the US and Europe, Sega's bigger library of 16-bit titles (by January 1993 it offered 320 games, compared to 130 for Nintendo) allowed it to rival Nintendo for market leadership.

The Fifth Generation, 1995–1998: Sony PlayStation

With the launch of its 32-bit Saturn console in November 1994, Sega sought to build on the success of its Genesis console. However, a month later Sony introduced its PlayStation console, the result of a six-year development effort led by Ken Kutaragi, Sony's video games guru. Both PlayStation and Saturn used CD-ROMs rather than cartridges. However, PlayStation was launched with an impressive number of new game titles: the result of courting top games developers, financing game development, and providing comprehensive software development tools. Sony also entered with a powerful array of resources: a strong brand reputation, global distribution capability, and content from its movie division. Compared to Sega's ill-coordinated Saturn launch (few game titles and haphazard distribution), the launch of PlayStation was well orchestrated and supported by massive advertising, including cryptic

prelaunch advertisements that fueled a buzz of anticipation within the gamer community. Meanwhile, Nintendo attempted to recapture market leadership by leapfrogging Sony in technology. Its 64-bit N-64 console was released in June 1996 at a low price (\$199 compared to \$299 for PlayStation), but retaining its cartridge system, which involved higher manufacturing costs and less flexibility in meeting unexpected demand for hit games. The lower fixed costs of producing and distributing CDs allowed Sony to compete by offering a much bigger library of games than Nintendo could, many of which targeted niche markets and minority interests.² By 1998, PlayStation was leader in most of the world's major markets.

The Sixth Generation, 1999–2005: Sony vs. Microsoft

With the launch of its Dreamcast console in November 1998, Sega once again led the new generation of video game consoles. Fifteen months later, Sony launched PlayStation 2 (PS2). Kutaragi's brief had been to design a games machine with performance that exceeded any PC and with graphics processing power ten times that of the original PlayStation. With cinematic-style graphics, a DVD player, and the potential for internet connectivity, PS2 aspired to be a multifunctional entertainment device. However, the technical complexity of PS2 created problems both for the supply of key components and the availability of new games, resulting in a hesitant launch.

In 2001, the industry's competitive landscape was transformed by the exit of Sega, which announced its intention to focus exclusively on games software, and the entry of Microsoft. Despite just 19 games and a poor reception in Japan, Xbox combined three key strengths: its technological advances (an internal hard disk, a 733MHz processor, 64MB of memory, a DVD player, and an ethernet port), the hit game *Halo*, and Microsoft's online capabilities. In November 2002, Microsoft launched its Xbox Live, which allowed online interactive gaming and the direct downloading of games.

Nintendo, with its GameCube console, was the last to join the new generation of video game consoles.

By 2004, Sony had emerged as the clear market leader, with Microsoft a strong second in the US and Europe, and Nintendo a strong second in Japan.

The Seventh Generation, 2006–2012: Nintendo's Renaissance

Microsoft Xbox 360 Building on the momentum from its successful launch of Xbox, Microsoft led the new generation of consoles with its Xbox 360 released on November 25, 2005, the first ever console with a near-simultaneous global launch as opposed to a phased rollout. Xbox 360 represented a shift in market positioning by Microsoft. While the original Xbox emphasized processing power and focused on hardcore gamers, Xbox 360 emphasized versatility, design, and coolness with a particular focus on its multiplicity of entertainment and online capabilities, including viewing high-definition TV shows.

Sony PS3 PS3 was launched on November 11, 2006 after many months of delay, caused by Sony's technological ambitiousness—notably its decision to make PS3 the flagship for the Blu-ray DVD drive and its adoption of an advanced multicore-cell processor developed jointly with IBM and Toshiba. PS3 imposed large losses on

Sony: in addition to massive development and launch costs, the component cost of each PS3 exceeded \$800, while its retail price was \$499.³ In addition, the complexity and high cost of developing games for the PS3 meant that there were few games that fully exploited its technical capabilities; Sony was obliged to cut its royalty rate to encourage developers to write for PS3. After a slow start PS3 sales gained momentum during 2008–2010.

Nintendo Wii Nintendo's launch of its Wii console in November 2006 was overshadowed by attention given to the PS3. Nintendo had been largely written off by most industry observers: it had neither the financial nor the technological resources to match those of Sony and Microsoft. Yet, the Wii proved to be a sensation. Technologically, the Wii was backward—compared to the PS3 and Xbox 360, it was seriously underpowered in terms of both speed and graphics, and it lacked a hard drive, DVD player, and ethernet port. Its **innovative feature** was its remote wand-like controller that was sensitive to a range of hand movements. This allowed Wii to be used for a variety of new sport and exercise applications—*Wii Fit* was one of the biggest selling titles of 2008–2010. Wii was also more accessible and easy to use than other consoles. This attribute was exploited by a marketing strategy that targeted a very broad demographic, including older people. During 2007–2008, Wii established a clear market lead over the PS3 and Xbox 360, which it maintained during 2009 and 2010—though only in unit sales—in terms of revenue it was overtaken by both Sony and Microsoft.

The success of the Wii challenged the conventional wisdom of the industry that the primary market was males aged between 13 and 30 and that the key to accessing this demographic group was to court hardcore gamers when developing and launching new models. This required a combination of hardware with immense processing power and brilliant graphics and games with cinematic quality, graphic realism, strong characters, and complex storylines.

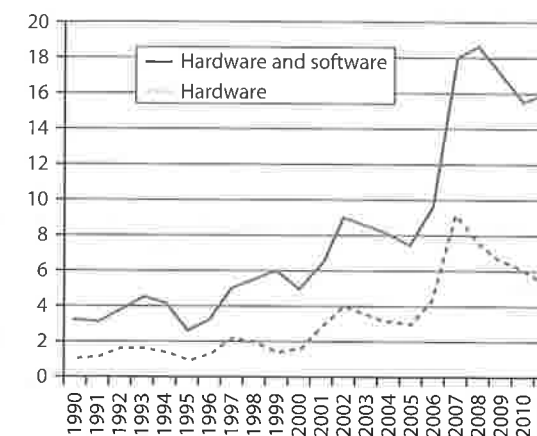
The Video Games Industry in 2012

The Market for Video Games

At the beginning of 2012, video games continued to be a growth industry. Worldwide sales of video game software and dedicated hardware (both consoles and handheld game players) was estimated by DFC Intelligence at \$66 billion worldwide in 2010 and expected to grow to \$81 billion by 2016.⁴ Most of this growth would be outside the mature markets of North America, Europe, and Japan; indeed, US consumer expenditures on video games had been in decline for several years (Figure 1).

Nevertheless, even within the US, games playing remained a major leisure pursuit. Over 40% of households owned video game consoles and 67% of households played video games. Worldwide, the user base of video game players was broadening. Once the preserve of teenage boys, by 2011 the majority of the age group 18–44 played video games, and even among 55- to 64-year-olds 26% played video games. Female participation had also increased strongly. However, in terms of intensity of game playing, teenage boys remained clear leaders: US males between 12 and 17 with a video game console in their home spent an average of 14 hours a week playing video games.

FIGURE 1 US consumer expenditure on video games and consoles, 1990–2011 (\$billion)



The composition of the market was changing rapidly in terms of both hardware and software. Video games were shifting from home-based devices such as consoles and PCs to mobile devices, while the distribution of games was shifting from packaged software sold by retail stores to direct downloads, subscriptions, and cloud access.

Software

Each video game console supplier ("platform provider") licensed third-party software companies to develop and distribute games for its system. Two types of company were involved in video games software: **video game publishers**, which were responsible for financing, manufacturing, marketing, and distributing video games; and **video game developers**, which developed the software. Publishing was increasingly dominated by a few large companies (Table 2). Typically, the software publisher submitted a proposal or a prototype to the console maker for evaluation and approval. The licensing agreement between the software company and the hardware provider gave the console maker the right to approve game content and control over release timing, and provided for a royalty payment from the software company. Game developers were paid a royalty, typically between 5 and 15%, based on the publisher's revenues from the game. The console makers were also major developers and publishers responsible for some of the most popular video games (Table 3).

Escalating game development costs were a result of the demand for multifeatured, 3-D, cinematic-quality games that could utilize the potential of increasingly powerful consoles. Atari's *Pac-Man* released in 1982 was created by a single developer and cost about \$100,000. Activision's *Call of Duty: Black Ops* involved over 100 software engineers, about three years' development, about \$28 million in development cost, and about the same in launch promotion. Released in November 2010, it generated \$650 million of sales in its first five days. Its sequel, *Call of Duty: Modern Warfare 3*, which was released a year later, realized revenues of \$775 million within five days.

TABLE 2 Leading publishers of video games, 2011

Publisher	Ranking ^a	Total games published ^b	Total games developed ^b
Nintendo	1	960	225
Electronic Arts	2	864	150
Activision Blizzard	3	544	135
Ubisoft	4	636	81
Take Two	5	93	7
Sony	6	375	38
ZeniMax Media	7	78	68
THQ	8	476	36
Square Enix	9	206	96
Microsoft	10	414	66
Konami	11	880	430
Sega	12	1,080	333
Capcom	13	460	317
Nexon	14	10	6
Namco Bandai Games	15	382	153

Notes:

^aThe rankings are by *Game Developer* magazine. They are based on multiple criteria which include quality as well as size.

^bData from Giant Bomb; they show games published and developed over the life of the company, <http://www.giantbomb.com/company>.

TABLE 3 Top-12 console games in the US (units sold January–October 2011)

Title/platform	Publisher	Units sold
<i>Call of Duty: Black Ops</i> (PS3 and X360)	Activision	4.6m
<i>FIFA Soccer 12</i> (PS3 and X360)	ElectronicArts	4.5m
<i>Wii Sports Resort</i> (Wii)	Nintendo	4.3m
<i>Wii Sports</i> (Wii)	Nintendo	4.3m
<i>Gears of War 3</i> (X360)	Microsoft	4.2m
<i>L.A. Noire</i> (PS3 and X360)	TakeTwo	3.7m
<i>Just Dance 2</i> (Wii)	Ubisoft	3.5m
<i>Kinect Adventures!</i> (X360)	Microsoft	3.4m
<i>Mario Kart Wii</i> (Wii)	Nintendo	2.8m
<i>Zumba Fitness</i> (Wii)	Majesco	2.7m
<i>Wii Fit Plus</i> (Wii)	Nintendo	2.7m
<i>Mortal Kombat</i> (PS3 and X360)	WarnerBros.	2.3m

Source: VGChartz Worldwide Yearly Chart, <http://www.vgchartz.com/yearly.php>. Reproduced with permission from VGChartz Ltd.

In terms of cost and revenue patterns, video games closely resembled movies: they incurred substantial upfront costs and a mere few became money-spinning blockbusters. Most successful new releases were sequels to earlier games—this created valuable brand franchises (such as *Super Mario Brothers*, *Grand Theft Auto*, *Call of Duty*, and *Halo*).

The past generation of consoles had seen a major shift in the balance of power between console makers and the games publishers. In earlier generations, the console makers were dominant, enforcing exclusivity and imposing heavy royalty payments on the publishers. Consolidation among publishers (caused by rising development costs) and increased competition from different types of hardware platform had changed all that. Exclusivity ties had disappeared from most licensing contracts; most leading games titles were cross-platform. The only popular games exclusive to a single platform were typically those developed in-house by the console makers.

At the same time, the games publishers were also facing new pressures. The licensing fees paid by software publishers for exclusive rights to the intellectual property of media companies and sports organizations grew substantially between 1998 and 2002. The rights to a game based on a hit movie (e.g., *Harry Potter*) could cost several million dollars. For sports games, the major leagues (NFL, NHL, MLB, NBA, and FIFA) required an upfront payment, plus a royalty of 5 to 15% of the publisher's revenue from the game. They were also facing increased competitive pressure from software companies offering free games over the internet. Bigpoint, with some 150 million subscribers, offers games free but earns about \$20 monthly per subscriber from the sale of add-ons and special features.

Not only did software sales exceed hardware sales; software was responsible for virtually all of the industry's profit. The console makers followed a "razors and blades" business model: the consoles were sold at a loss; profits were recouped on software sales (both games developed internally and royalties received from third-party games publishers). The result was strongly cyclical earnings for the platform providers: the launch of a new console would result in massive cash outflows; only with a substantial installed base would the platform provider begin to recoup the investment made.

The Console Makers

For the console suppliers, the period 2006–2011 had been a difficult one. Sony's experience with its PS3 demonstrated how the deteriorating economics of the console business meant that it was increasingly difficult to recoup the massive expenditures needed to launch a technologically ambitious new model. While Sony's original PlayStation and its PS2 had been highly profitable, since the launch of PS3, Sony's video games business had incurred substantial losses. While Microsoft had the satisfaction of achieving its goal of establishing itself as a major force within the video games business, the costs were high: it had incurred substantial losses since entering the video games business in 2001. As for Nintendo, despite winning the current round of competition in terms of unit sales, it had failed to achieve either the market dominance or the financial returns that market leaders had achieved during earlier generations.

Reluctance to incur the costs of developing new models was the major motivation behind Sony and Microsoft's desire to extend the lives of their current models. In 2011, both followed Nintendo in releasing motion-sensitive controllers for their consoles. The release of Microsoft's Kinect and Sony's Move coincided with a steep decline in Wii sales.

One bright spot was the growth in online, interactive game playing, which offered an additional revenue source for the console makers. Microsoft's Xbox Live and Sony's PlayStation Network earned revenues from subscriptions and third-party

royalties. However, the risks in this business became apparent when Sony was forced to shut down its PlayStation Network during April 2011 following a cyber-attack in which the credit card details of subscribers were stolen.

Looking to the Future

As the three leading console providers planned for the next generation of consoles, they realized that their strategies needed to take careful account of the changing dynamics of competition in the industry. The weakening of the console makers relative to the games publishers, in particular their inability to force exclusivity upon the publishers, implied that video games would no longer be a winner-take-all industry as they had been in the 1980s and 1990s. Moreover, the expanding number and variety of video game players suggested that the market was segmenting, for example the Wii appealed to different users than the Xbox and PlayStation.

The future role of the games console as a home entertainment device was also unclear. Sony and Microsoft had envisaged their video game consoles as multifunctional home entertainment devices. The willingness of Sony and Microsoft to devote so many resources to their video games businesses was because they viewed the video game console not just as an important product in its own right but also as a basis for building their strategic positions within the home entertainment market. Yet, the Wii was essentially a dedicated games console. To what extent would video consoles become devices for playing movies, downloading and storing entertainment content, and interacting remotely as opposed to specialized gaming machines?

Appendix Financial Data for the Leading Console Makers

NINTENDO (YEAR ENDING MARCH 31) IN BILLIONS OF YEN

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total sales	463	554	504	514	515	509	966	1,672	-1,838	1,434	1,014	648
Operating income	85	119	100	110	113	91	226	487	555	357	171	(37)
Net income	97	106	67	33	87	98	174	257	279	229	78	(43)
Op. income/ Av. total assets (%)	9.7	9.5	8.9	10.5	9.7	7.9	19.5	27.0	31.7	21.0	10.1	(2.4)
Return on av. equity (%)	12.2	12.0	7.4	3.7	9.6	10.4	16.8	11.0	19.9	16.8	5.7	(4.2)

Note:

Figures in parentheses denote a loss.

SONY (YEAR ENDING MARCH 31) IN BILLIONS OF YEN

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sales	7,315	7,578	7,474	7,496	7,160	7,475	8,296	8,871	7,729	7,214	7,181	6,403
Of which:												
Games	661	1,004	936	754	703	918	974	1,219	1,685 ^a	1,512 ^a	1,493 ^a	3,137 ^b
Operating income	225	135	185	99	114	191	150	475	(227)	32	200	(67)
Of which:												
Games	(51)	84	113	68	43	9	(232)	(124)	(87) ^a	(83) ^a	36 ^a	(230) ^b
Net income (loss)	17	15	116	89	164	124	126	369	(98)	(41)	(259)	(457)
Op. income/ Av. total assets (%)	3.1	1.7	2.2	1.1	1.2	1.9	0.6	2.9	(1.8)	0.3	1.6	(0.5)
ROE (%)	0.1	0.1	4.8	3.6	6.3	4.1	3.9	10.8	(3.1)	(1.4)	(9.4)	(15.6)

Notes:

Figures in parentheses denote a loss.

^aFor 2009–2011, the segment data for Sony are for “Networked Products and Services.” This includes both games consoles and PCs.

^bFor 2012, Games are included within the Consumer Products and Services segment.

MICROSOFT (YEAR ENDING JUNE 3) IN \$MILLION

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sales	28,365	32,187	36,835	39,788	44,282	51,122	60,420	58,437	62,484	69,943	75,000 ^e
Of which:											
Entertainment and devices	2,453	2,748	2,731	3,110	4,292	6,069	8,140	6,416	6,224	8,716	9,200 ^e
Operating income	11,910	13,217	9,034	14,561	16,472	18,524	22,492	20,363	24,098	27,161	28,000 ^e
Of which:											
Entertainment and devices	(847)	(924)	(1,011)	(451)	(1,283)	426	(1,969)	288	573	1,135	600 ^e
Net income	7,829	9,993	8,168	12,254	12,599	14,065	17,681	14,569	18,760	23,150	23,000 ^e
ROA (%)	18.8	17.9	10.3	17.6	23.6	29.3	30.9	27.2	27.8	27.9	26.0 ^e
ROE (%)	15.7	17.6	11.7	19.9	28.6	16.45	42.47	38.5	43.7	44.8	40.0 ^e

Notes:

Figures in parentheses denote a loss.

^eEstimated.

Notes

1. The success of *Angry Birds*, a video game played primarily on mobile phones, was especially salutary to the console makers. Launched in 2009 for the Apple iPhone, 300 million copies of *Angry Birds* had been downloaded by the end of 2011.
2. In 1997, the average PlayStation game sold 69,000 copies; the average N-64 title sold over 400,000 copies.
3. "Delays likely for Sony's PlayStation 3," *Financial Times*, February 20, 2006.
4. "With online sales growing, video game market to hit \$81B by 2016 (exclusive)," VentureBeat, September 7, 2011, <http://venturebeat.com/2011/09/07/with-online-sales-growing-video-game-market-to-hit-81b-by-2016-exclusive/>, accessed September 21, 2012.



A video clip relating to this case is available in your interactive e-book at www.wileyopenpage.com