

The Game Boy's Advance: A look at the staying power of Nintendo's best-selling console

In an age when computers are obsolete out of the box and faster, smarter gadgets are being released every day, the best-selling video game console would almost certainly have to be able to keep up with these changing times. But the Game Boy is 15 years old.

With 40 percent of American households owning a Nintendo game system, it is unsurprising that it is Nintendo who brings us the successful handheld, which has sold over 150 million units in its lifetime. True, the little console has gone through many reincarnations, but even this regeneration strategy has not always been able to ensure the technical superiority of the GB over its competition. However, Nintendo's business practices and character tie-ins have managed to keep the GB ahead of the game. This case history will detail the GB's 15-year history, and most of its different forms. These incarnations of Nintendo's handheld have uniquely contributed to the GB legacy in some way, but the "Practice Makes Perfect" section details some of the business and cultural factors that were more generally applicable to the entire GB line (as well as Nintendo's other systems).

Life before the Game Boy

Nintendo's roots go back to 1889, when Fusajiro Yamauchi started manufacturing Japanese playing cards. His was the first corporation to successfully mass-produce and sell playing cards in Japan. After adding Disney and other children's cards, Yamauchi broke open the children's card market in 1959.¹ 1963 brought the name Nintendo Co. Ltd. and games were manufactured,

in addition to cards. Nintendo's first portable games, those of the "Game & Watch" series designed by Gunpei Yokoi, were released in 1980.²

Small and lightweight, these handheld games were simple, usually only with one objective, and limited sound effects—beeps of different pitches. 59 titles were released in all, including *Donkey Kong* and *Super Mario Bros.* Though simple, the games were popular, and Nintendo still remembers them today in the *Game & Watch Gallery 2* cartridge released for the Game Boy Color in 1998,³ which includes original Game & Watch games, as well as new versions updated with color and Nintendo icons like Princess Toadstool and Yoshi.⁴ Those classic games remain nostalgically popular with those who really remember the small handhelds, and there have been adaptations made for Palm technology.⁵ *Super Smash Bros. Melee* even includes a character called "Mr. Game & Watch," a tribute to the beginnings of what would turn out to be an extremely lucrative handheld market for Nintendo.

The OGB

Nintendo went on to release the Nintendo Entertainment System (NES)⁶ in 1985 before the original GB appeared on the market in 1989 for \$169.⁷ The GB would play interchangeable cartridges, like the NES and other consoles on the market did. The 8-bit machine displayed only 4 colors, had a gray exterior, and was a little too large to be pocket-sized, but it was a way to achieve cheap, portable game play—the only way on the market then. With a similar button configuration to that of the NES (directional pad on the left, A and B buttons on the right, Start and Select buttons in the lower middle), the GB endeavored to combine the gaming goodness of the NES with the economy and portability of the Game & Watch systems. Both designer Yokoi and Nintendo president Horoshi Yamauchi were convinced that the GB would be a hit, but were

still searching for the right game with which the new system should be packaged. A year earlier, Russian programmer Alex Pajitnov developed *Tetris*, an addictive block puzzle game for personal computers. Tengen bought the rights from Microsoft, but after it began distribution, it was discovered Microsoft had never owned the rights in the first place.⁸ Nintendo acquired the rights and released *Tetris*⁹ with its new black-and-white handheld, effectively creating and controlling the handheld market. *Tetris*, along with the GB's promise of portability, generated millions of sales for Nintendo, and at 32 million copies sold,¹⁰ *Tetris* for the GB remains one of the best-selling games of all time.

Wildly successful, the GB sold 32 million units over the next three years,¹¹ but sales would eventually start dropping. In an effort to help boost sales, Nintendo released its Play it Loud! series in 1995, which consisted of brightly-colored GBs. Though the new colors did little to improve sales, they did kick off Nintendo's tradition of giving their consoles a variety of colors.

Enter the Hedgehog

Determined to compete with Nintendo for a piece of the handheld hardware market, Sega released a portable version of its Master System, the Game Gear, in 1990.¹² With a backlit, full-color screen, and the capability to be turned into a portable television, the horizontally laid-out system (d-pad on the left, screen in the middle, A and B buttons on the right) seemed technically superior to the Nintendo GB. Also on the market during this time was the Atari Lynx, which shared the Game Gear's high-quality color, but also its bulk and short battery life. Six AA batteries in the Game Gear would last only three to five hours and the additional batteries only added to Sega's already bulky system. "The market was looking more for light weight and battery life, which the Game Boy excelled in [but the Game Gear] did better than any other

portables that tried to compete with Game Boy.”¹³ Nintendo would continue to outsell Sega, and while the GB still lives,¹⁴ Sega dropped the Game Gear in 1997.¹⁵

A fresh look for the GB arrived in 1996 in the smaller form of the GB Pocket, 30 percent smaller,¹⁶ and weighing only half of its predecessor’s bulk. True to its name, the GBP was pocket-sized and came with an LCD screen of better resolution. Still, it kept its vertical layout (screen on top, buttons on bottom), the same screen size, and the same button configuration, for a slimmer version of its successful ancestor. However, with the release of the Sony PlayStation, Nintendo now had more competitors, and had to fight even harder to retain its share of the market. Though the GBP was mildly successful, it did not actually provide very many significant improvements over the original GB, but renewed success for the GB would come soon, due to one of Nintendo’s most successful franchises.

“Gotta Catch ‘Em All!”

Japanese designer Satoshi Tajiri developed a Pokemon game for Nintendo’s GB in 1996. Based on his childhood experiences of collecting bugs, the RPG-style game, originally titled “Pocket Monster,” did well in Japan, but its popularity did not catch on in the United States until the newly-created Japanese television series was brought overseas.¹⁷ Pokemon fever caught, and a franchise was born—a franchise that would grow to include over 23 video games and over 16 different series of Pokemon trading cards. By February 2000, more than 74 million Pokemon games would be sold worldwide, 27 million of those in the United States.¹⁸ With *Pokemon Red* and *Pokemon Blue* on the shelves in 1998, sales of Nintendo’s newly released GB Color (1998) quickly shot up.

New full-color cartridges were developed and released for the new console, but in the GB spirit of backwards compatibility, the GBC could play games designed for the older systems, but gave the option of “tinting” the games a certain color. Though the GBC was not the 32-bit system Nintendo had hoped it would be, Nintendo’s newest unit was the first GB with a color screen, able to display up to 56 colors at once. Slightly larger and heavier than the GBP, the GBC’s resolution was not near what that of Sega’s Game Gear or Atari’s Lynx were. The 1998 Nintendo console was technologically behind systems of 1990, but Nintendo’s software carried the GBC through. As mentioned above, Nintendo had battery life, less bulk, and the Nintendo label, which included plenty of pocket monsters.

See the Light

The GBC was an improvement over the original and pocket systems, but the color technology was not even close to other consoles on the market. With no backlight, the GBC was difficult to play if lighting conditions were not just right. But only three years later, in 2001, Nintendo’s Game Boy Advance debuted at \$99.95,¹⁹ putting Nintendo’s first 32-bit handheld on the market. The machine was quite a change from the traditional GB, and the freshness of its new features greatly contributed to revitalized sales. By January 2004, 20 million GBA units had been sold worldwide, and GBA sales accounted for 50 percent of the 14 million game consoles sold in 2003.²⁰ With a horizontal layout, it looked like a much slimmer version of the Game Gear,²¹ and had two new shoulder buttons to add complexity to game play. It could display 511 colors, a huge step up from the now-primitive looking GBC. The new cartridges were smaller,²² the screen grew, and the battery life doubled.²³ The GBA was praised for its sound, which was fairly high quality for such a small machine. However, the GBA was still not backlit, as this

would quickly drain batteries. However, with good sunlight, or a \$10 light accessory, the problem of poor lighting was easily solved.

The lighting was fixed with the release of the front-lit GBA SP in 2003. Almost technologically identical to the original GBA, the SP added only a front-lit screen,²⁴ a rechargeable lithium-ion battery, and a complete different layout. Returning to its roots, the SP looked more like a GB Pocket, but in a clamshell design. Its new design was aimed to attract a larger, and perhaps older, audience with its sophisticated look and more efficient power consumption.²⁵ The buttons returned to their normal positions “below” the screen, and shoulder buttons rested on the lower half of the console for ergonomic comfort. The SP, however, did take away the standard headphone jack, and required a special adapter to be able to plug in headphones. Other than this relatively minor issue, the GBA SP won high praise all around. “There's no denying that Nintendo's Game Boy Advance SP is a sleek, gorgeous, functionally proficient handheld gaming platform that no self-respecting gamer should be without.”²⁶

Practice Makes Perfect

Looking at Nintendo’s history and business decisions, it is obvious that Nintendo is a company that learns from its past. After finding something that works, Nintendo continues to stick with it, but is not afraid to abandon ideas that simply did not work out as planned:

Accessories: Though Nintendo hoped to boost sales with its colorful Play it Loud! series, colors have not been proven to significantly increase console sales. However, customization has its appeal, and Nintendo delivered, not only with different colors, but with myriad accessories as well. The strangest GB accessory released by Nintendo was

probably the GB Camera and Printer, which were only loosely gaming-related.²⁷ Selling for around \$50,²⁸ the GB Camera was a low-end digital camera, conveniently priced at a time when digital cameras were either for professionals, or just plain expensive. With the Printer accessory, photos could be printed out onto sticker paper, for easy, customizable, sticker pictures. At a time when sticker pictures were the latest fad, Nintendo had no problem meeting even that demand. Unfortunately, the GB Camera and Printer also marked Nintendo's failure to turn the GB into more than a gaming machine.²⁹

Nintendo also released numerous other accessories, including all sorts of cables and adapters that would allow GB games to be played on a television. Other accessories tend to be directly gaming-related, and few, if any, further notable attempts have been made to extend the GB into the world outside gaming.

Backward Compatibility: When the Super Nintendo Entertainment System (SNES) was released in 1991, parents who did not want to shell out money for a new system *and* a completely new set of games, were angry that the SNES could not play any of the old NES games.³⁰ Nintendo did not let that happen with its money-making GB. GBA cartridges shrank to provide maximum portability, but the system could still play GB games designed for any other system. Those loyal to the GB can continue to upgrade their systems for added functionality and better features, while maintaining access to a library of thousands of games because of the GB's backward compatibility. Thus, Nintendo can keep releasing better versions of its handheld without having to reengineer an entire library of games for each new system.

Old Favorites: Bundling popular games with systems is a well-known strategy used by many companies, but Nintendo has the added advantage of exclusive ownership of popular, recognizable characters, in addition to three very successful franchises: Mario,³¹ Zelda,³² and Pokemon.³³ These three series are family-oriented, and so often appeal to a wider audience of gamers; their popularity drives consumers to buy the only hardware that supports these Nintendo games. Mario, Zelda, and Pokemon are all extremely iconic and recognizable outside of their “natural element” (Mario’s princess-saving, Zelda’s crystal collecting, Pikachu’s Pokemon battles, etc.), which allows Nintendo to develop games in several different genres, but with character favorites who promote sales. An ordinary tennis game become a smash hit with the Mario players,³⁴ and a children’s voice-recognition game was saved only by the cuddly Pikachu³⁵; with a newly developed character, kids might have been even more hesitant to pick this one up.

Simply put, Nintendo has always made great games, putting them above the competition. “The first Genesis games, even the knock-offs of the arcade hits, were not as much fun as the best Nintendo games. In many cases, the Sega programmers were so intent on exploiting the possibilities of detailed graphics and exciting sound that they forgot what made great video games.”³⁶

The Next Generation

It is clear that Nintendo’s little GB has come a long way, from its bulky gray to sleek silver clamshell, and its extraordinary dominance of the handheld market was not due to chance, but to solid marketing strategies and high-quality products. While new devices³⁷ like the Nokia N-Gage³⁸ are struggling, Nintendo has a long, if not continuously successful, history to study and

learn from. If the longevity of the GB is any indication, Nintendo's DS (to be released late in 2004)³⁹ could prove to be the next star in handheld hardware, even though it will be marketed alongside the GBA, not in place of it. And though this might mean the retirement of the beloved little console, remember: you *can* take it with you.

¹ "Company History," Nintendo, <<http://www.nintendo.com/corp/history.jsp>> (2 March 2004).

² Musashi, "The Little Console That Could: The History of the Nintendo Gameboy," Destroy All Monsters, <<http://www.destroy-all-monsters.com/gameboy1.shtml>> (2 March 2004), par. 4.

³ "Game and Watch Gallery 2," GameSpot, <<http://www.gamespot.com/gbc/action/gameandwatchgallery2/index.html>> (17 March 2004).

⁴ Nintendo went on to release *Game & Watch Gallery 3* in 1999 and *Game & Watch 4* for the Game Boy Advance in 2002, which included different classic games along with their modernized counterparts.

⁵ See <http://www.ardiri.com/>.

⁶ Nintendo's non-portable systems are not analyzed in this paper. See the Nintendo "Company History" for more information on the other consoles.

⁷ Musashi, Destroy All Monsters, par. 8. However, conflicting sources give prices as low as \$99 to \$109. Disparity in console prices is usually attributed to different software/hardware bundles.

⁸ Leonar Herman, Jer Horwitz, Steve Kent, and Skyler Miller, "The Home Market Expands 1989-1992," The History of Video Games, <<http://gamespot.com/gamespot/features/video/hov/index.html>> (14 March 2004), pg. 1.

⁹ Other versions of *Tetris* that were on the market, including the one from Tengen, were removed from shelves, and only the version under the Nintendo label was sold.

¹⁰ Jason Della Rocca, "The Numbers Don't Lie," Reality Panic, 6 June 2003, <<http://www.igda.org/blogs/realitypanic/archives/000008.html>> (10 Feb 2004).

¹¹ Marcus Liedholm and Mattias Liedholm, "The history of the most successful handheld console ever!" NintendoLand, <<http://www.nintendoland.com/home2.htm?gameboy/history.htm>> (17 March 2004).

¹² "Sega Game Gear, Console Information," Console Database, <<http://consoledatabase.retrofaction.com/consoleinfo/segagamegear/>> (2 March 2004), par. 1.

¹³ "Sega Game Gear," par. 2-4.

¹⁴ Sega and Nintendo finally came together in 2002 when Sega's blue mascot was ported over to Nintendo's powerful and popular GBA in *Sonic Advance*. *Sonic Advance 2* was released a year later, and *Sonic Advance 3* is in development.

¹⁵ Majesco Sales brought back the Game Gear in 2000, producing the Game Gear Core system.

¹⁶ Musashi, Destroy All Monsters, par. 15.

¹⁷ "Short History of Pokemon," Pokemon Headquarters, 3 May 2002, <<http://madcow3k1home.net/firms.com/history.shtml>> (2 March 2004), par. 1.

¹⁸ Pokemon Headquarters, par. 4.

¹⁹ "Game Boy Advance – Hardware Info," Game-Hunter, <http://www.game-hunter.com/mp/hw/info.html?hw_id=19> (17 March 2004).

²⁰ Joseph Moran, "Game Boy Advance Hits 20 Million in Sales," Game Market Watch, 12 February 2004, <<http://www.gamemarketwatch.com/news/item.asp?nid=2861>> (2 March 2004).

²¹ The pocket-sized GBA was about the same size as the GBC, but held horizontally.

²² Older cartridges were still compatible with the GBA. For more on backwards compatibility, visit the "Practice Makes Perfect" section.

²³ "System," Game Boy Advance, <<http://www.gameboy.com/system.jsp>> (17 March 2004).

²⁴ As a battery-saving measure, the light could be turned off and the anti-glare screen would still be perfectly visible with good lighting conditions.

²⁵ Joseph Moran, "Nintendo Releasing Updated Game Boy Advance Model," Game Market Watch, 9 January 2003, <<http://www.gamemarketwatch.com/news/item.asp?nid=2623>> (10 March 2004), par. 3.

²⁶ Bryn Williams, "Game Boy Advance SP," GameSpy, 22 March 2003, <<http://www.gamespy.com/articles/march03/gbasp/>> (2 March 2004), pg 2.

²⁷ The camera cartridge included a few simple games. It could store 30 low-resolution black-and-white photos, as well as take time-lapse photographs. Photos could be stretched and flipped, then arranged into a slideshow with musical accompaniment, and Mario could be stamped into any photo.

²⁸ Musashi, Destroy All Monsters, par. 18.

²⁹ “Game Boy,” Wikipedia: The Free Encyclopedia, <http://en.wikipedia.org/wiki/Game_Boy> (17 March 2004), par. 6.

³⁰ David Sheff and Andy Eddy, “Sonic Boom,” in Game Over: Press Start to Continue, (Wilton, Ct: GamePress 1999), 362.

³¹ Of the top five best-selling video games, four star Mario; the other one is *Tetris*. Rocca, Reality Panic.

³² The first five Zelda games sold over 26.4 million copies. Andrew Vestal, Cliff O’ Neill, and Brad Shoemaker, “The History of Zelda,” <http://www.gamespot.com/gamespot/features/video/hist_zelda/> (10 March 2004).

³³ “Seven Pokemon titles were responsible for 10 percent of all software units sold in year 2000.” Pokemon Headquarters, par. 4.

³⁴ *Mario Tennis* was released for the Nintendo64 in 2000. Gamers could choose different Mario characters and play singles or doubles tournaments, as well as multiplayer matches. The game also included non-match related games (hitting balls through rings) and a “Bowser Stage,” that included the special items from *Super Mario Kart*.

³⁵ *Hey You! Pikachu!* required a microphone for play. The on-screen Pikachu responded to various commands, but this game was less than successful.

³⁶ Sheff, David, and Eddy, Game Over, 353.

³⁷ “The product capabilities as outlined by Sony illustrate a multi-function device in which gaming is but one feature among many, indicating a product more akin to the Nokia N-Gage than Nintendo’s GameBoy.” Joseph Moran, “Sony Outlines PSP Capabilities; Shows Concept,” Game Market Watch, 6 November 2003, <<http://www.gamemarketwatch.com/news/item.asp?nid=2805>> (10 March 2004), par. 2.

³⁸ Mathew D. Sarrel, “Nokia Does Not N-Gage,” PC Magazine, 8 October 2003, <<http://www.pcmag.com/article2/0,4149,1322274,00.asp>>, (2 March 2004).

³⁹ Joseph Moran, “Nintendo Unveils New Portable Game System,” Game Market Watch, 21 January 2004, <<http://www.gamemarketwatch.com/news/item.asp?nid=2848>> (10 March 2004).

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