



In the Beginning: A (Very) Brief History of Videogaming

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July 24, 2006

Introduction

Knowing something about the evolution of the games industry will help in your quest to become a professional in this business. It's just one of those things that you need in order to be taken seriously by other gamers.

This is a (very) brief history, beginning with the birth of SEGA, with particular emphasis on milestones in hardware development.

First There Was SEGA

Originally a U.S. company providing coin-operated (arcade) games primarily for military bases, SEGA began life as Services Games. After purchasing a Japan-based machine company in the early-'60s, the company transformed itself into SEGA. During that same time, an industry founding father, Nolan Bushnell, designed an arcade version of "Asteroids" to play on his newly developed dedicated game machine. Thus the first cartridge-based game system was born, introduced to the market as VCS and later known as the Atari 2600.

During this era, other companies created their own game systems, including Coleco and its Colecovision, Milton Bradley Electronics and its Microvision and Vectrex, Mattel Electronics and its Intellivision, and Commodore Computer and its Commodore 64, all of which had impact on, but eventually disappeared from the scene.

Although not a dominating force until the mid-'80s when it caught the attention of the U.S. gaming community with the introduction of the Nintendo Entertainment System (NES), Nintendo was actually founded in 1889. It is, in fact, the oldest game company still in existence. Atari and SEGA competed head to head with Nintendo, but the company proved a worthy opponent with the release of its Game Boy handheld device and the smashing success of the Super Nintendo (SNES) console.

Over the next few years, the unfolding battle witnessed SEGA's release of its Sega Master System to compete against NES, and Atari's release of the 7800. Commodore Computer also entered the fray with the CDTV. While the TurboGrafx-16, SEGA Genesis, and Atari Lynx machines tried to compete, Nintendo ultimately stole the bulk of the marketshare. Thanks to its portability and associated free games ("Tetris" and "Super Mario"), Game Boy sales were significant.

The Console Wars Heat Up

When Sony entered the scene, the 32-bit console wars began. Initially, Sony and Nintendo collaborated on the development of a CD player to work with the SNES. While this development project failed, it gave Sony an idea. The company chose to develop a 32-bit game machine known as PlayStation (PSX) to compete directly with Nintendo. Among other notable competitors who jumped on the 32-bit bandwagon was The 3DO Company, started by Electronic Arts founder Trip Hawkins, who announced his new 32-bit gaming console in association with Panasonic. However, Panasonic eventually acquired the 3DO technology for use in other devices.



Trying to reclaim lost marketshare, Atari then came out with its doomed 64-bit system known as Jaguar. By the late-'90s, the market was totally confused as evidenced by alarmingly sluggish sales. The SEGA 32X and Saturn came and went, and Nintendo bombed with a few platform releases as well. Eventually, Atari was forced out of the hardware business.

Currently, the industry's popular development platforms are the personal computer (PC), Sony's PlayStation 2, Microsoft's Xbox 360, and Nintendo's GameCube and Game Boy Advanced (GBA). The market for PDAs and mobile phones is also gaining momentum and promises to be the next growth focus.

Today we have Sony, Nintendo, and Microsoft competing for market share with their next-generation consoles; Microsoft's Xbox 360 was released in November while Sony's PlayStation 3 and Nintendo's Wii are due out this fall. SEGA is still creating games but has chosen to halt production of hardware. Atari chose this same path years ago.

How will *you* contribute to the continuation of this story?

The Birth of a Game

Some games start as one person's idea. Others are built because the owner of a license or intellectual property (IP) wants a game created. Some are sequels, expansions, or improvements on a previously successful game. Take a stroll through your local videogame store and notice the wide variety of game types that are on the market. Here are the most popular genres:

Action Games. Equally popular on PC as well as consoles, these games are generally fast-paced and require skill and reaction time to win.

Strategy Games. This type of game dominates the PC world and is not popular on consoles. Most of these games come from classic board games.

Role-Playing Games (RPGs). These are considered the most difficult type of game to design due to the number of characters required, the depth of plot, and necessary art assets. They have their roots in classic paper games like *Dungeons & Dragons*. RPGs are usually games about character-building, exploration, and adventure. The hottest trend right now with RPGs is online games that allow thousands of people to play simultaneously.

Adventure Games. This type of game dominates the PC world and is not popular on consoles. Typically, they require a player to navigate through a world, interact with people, explore, and solve puzzles. Adventure games are slow-paced and depend heavily on the skill level of the player for advancement or success.

Puzzle Games. This type of game dominates the PC, PDA, and mobile phone worlds, and is not popular on consoles. Most are short, simple "casual" games like *Tetris*.

Sports Games. This type of game—particularly football, baseball, and basketball—dominates the console platforms. It is interesting to note that while sports games are easier to design, they are also more complex to develop.

Simulations. There are two main kinds of simulation games—flight and driving. A subset of this genre is the so-called "God games" like *Sim City* which allows players to create an environment and then see how it behaves.



These Are the Players

Within the games industry, we find three different kinds of key businesses—the publishers, the developers, and the hardware manufacturers. These days, most publishers have their own in-house development teams. However, the majority of companies developing games are still small independent studios.

Each key business plays its part in bringing a game to retail:

The publisher. They are responsible for bringing games to the distribution channels by funding development of an original, licensed, or conversion title, then overseeing that development. They also handle marketing, sales, duplication, and packaging of the game. Publishers usually pay the development studios an advance against future royalties, based on achieved milestones to cover development costs. As the game is sold and the publisher recoups its investment, then the development studio begins to receive additional royalty payments.

The developer. Development studios create original content, licensed content, or conversions, also known as ports. Most original games are created by independent developers who then seek funding and/or distribution from a publisher. While publisher-owned development studios do create original games, most publishers prefer that original products, which are considered riskier because there is no built-in fan base, be developed by independent developers, also known as external third-party developers. A licensed product is a game based on an IP like a major movie, cartoon, toy, book, or TV show. A conversion or ported game is a game that has been created on one format and then copied to another. To sell as many games as possible, most games are ported to as many platforms as possible. Development studios can be small or large, and they may create products for a variety of publishers on a variety of platforms. Third-party developers may also specialize in specific genres or on a particular product line.

Hardware manufacturer. These are the companies that build and sell the game machines, also known as consoles or platforms. Currently, the PC enjoys a deep market share, but it presents some issues with compatibility and configuration because PCs are “open” systems—in other words, the owner of a PC can, and often does, alter the standard manufacturer’s configuration settings by simply installing new software, printer, graphics, or sound cards. This compounds the challenge of ensuring that the game will work correctly once loaded. Console systems offer a solution to this problem; they are closed systems that use proprietary technology with strict definitions. This means that the owner of the machine can’t do much to alter the system and, therefore, less compatibility and configuration issues arise for the developer. Unlike other industries, hardware manufacturers in the game industry take a very active role in software development and even the publishing process.

The Game Development Process

A game begins its life as an idea or concept which is then expanded into a full-fledged story by the game designer. The designer creates a detailed design document which describes all the games features. The document not only covers a description of the game play, but also the visual and audio style, including examples.

In some companies, the game designer also acts as producer, while in other companies, the game designer is focused solely on fleshing out new treatments or concepts. The project manager or producer is assigned to the project to produce a task list and schedule for the development of the game. This person manages budgets and ensures the creative intent of the game is maintained throughout the development process.



Once a design is complete, the development team usually prototypes the game before jumping immediately into full development in order to show that the design concepts are sound. This is also done so that the development studio has a demonstration or “demo” of its game idea to show publishers when seeking funding. If the idea is a flop, there will be no need to spend additional time and money.

Once the game concept gets purchased or funded, then the writing of the game’s programming code and creation of the game’s assets—such as art and sound effects—gets serious. This process takes several months to complete. During these months, the various groups work on their portions of the game which are ultimately combined or linked together to create the finished game.

Generally speaking, the producer oversees and manages this entire process. This person has a tough job making sure that all the highly creative artists, programmers, game designers, and other team members play nicely in the sandbox, while keeping the creative vision of the product consistent. Additionally, the producer communicates to the development studio’s management and to the publisher the progress and problems during the development cycle.

Once all of the game’s assets have been linked together, the game is tested for errors or “bugs.” The game’s playability is also reviewed and tweaked as needed to ensure that the end-user has a smooth experience when playing the game. This is known as the testing and tuning of the game. If the game is intended for one of the game consoles, the hardware manufacturer gets involved in the testing and approval of the game. The manufacturer knows its own closed proprietary operating systems and wants to ensure that the game performs flawlessly and consistently on the platform. This approval process takes place before being sent to the duplicator for manufacturing. Products developed for the PC do not need this type of approval as these computers are not proprietary.

Once the game is manufactured, the hardware manufacturer begins the marketing process to build awareness of the product so consumers are interested in purchase. Independent development studios may choose to only use a publisher for product distribution. In fact, many development studios can and do fund and market their own games. Obviously, in these kinds of agreements, the third-party developer gets a much higher cut of the profits as it took on more of the risk.

Months prior to the game’s actual street release, the sales and marketing folks employed by the publisher, the development studio, or an independent sales/marketing company focus on “selling” the retail community on the game. Sell sheets, screen shots, and product description information are created to highlight elements in the game and excite the retailer and consumer. When the game hits the market and is available for sale, you want a presence for it. It’s hard to generalize this process as there are several options available for getting the game on the store shelves. Basically, it costs a lot of money to have an internal marketing and sales staff, but, at some point, a company grows large enough that it makes financial sense for it to bring these functions in-house. Typically, smaller development studios prefer to utilize the hardware manufacturer’s distribution strength or the strength of an independent sales and marketing organization. It’s hard for a single, small company to get the attention of the major retailers, such as Wal-Mart, CompUSA, and Electronics Boutique, who are more accustomed to dealing with the industry’s larger companies.