

History of Advergames and In-Game Advertising
Ilya Vedrashko / MIT CMS
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Reciting the entire history of computer games in detail here would be redundant given how meticulously it has been documented elsewhere, but looking at the industry's firsts could provide perspective necessary in the age of media's short attention span. This brief retrospection highlights key technological developments that shaped the games both as the multi-billion industry and its product as well forces that influenced the composition of the medium's audience. The second part of the chapter examines the early points of collision between games and consumer and media brands that led to formation of the in-game advertising industry known today.

The roots of games

As any other invention, computer games did not come around overnight but instead were a product of what Brian Wilson, a historian of technology, calls “a concentration of generalized social forces which [...] have been determining the process of innovation.”ⁱ In other words, many stars had to be aligned just right; electricity, displays, transistors, computers and many other pieces had to be invented and have found their place in the society before the games could come into existence. Yet, when the games ultimately did happen, it was hardly a revolution. The inventor himself didn’t quite realize what he had just unleashed.

A scientist at the Department of Energy’s Brookhaven National Laboratory was looking for a way to spice up the lab’s static exhibits that were drawing numerous visitors. William Higinbotham, then a head of the instrumentation division at the laboratory, hooked up an oscilloscope to an analog computer with two brick-like controllers each equipped with a knob and a button. The screen simulated a tennis court from a side view – that is, it showed a horizontal line and a perpendicular dash that symbolized the edge of the net. The game was called *Tennis for Two* and the year was 1958.ⁱⁱ The oscilloscope and the computer were soon dismantled and used for the laboratory’s other needs, and Higinbotham has never patented the invention. In his own words, “If I had realized just how significant it was, I would have taken out a patent and the U.S. government would own it!”ⁱⁱⁱ

Four years later, three MIT students found themselves marveling at a newly arrived computer and thinking about all the fun things they could do with it. PDP-1 was more compact than its predecessor TX-0, had a CRT display, a keyboard, and in the words of one of these students, “It was the first computer that did not require one to have an E.E. degree and the patience of Buddha to start it up in the morning.”^{iv} The fun thing they thought up was *Spacewar!*, a game with two armed spaceships trying to shoot one another with an accurate representation of a night sky as the backdrop. Besides being fun, *Spacewar!* turned out to be a good diagnostic tool for the computer and the monitor, and the PDP-1 manufacturer decided to use it for factory testing and shipped the machine with the game already loaded into the memory putting it into the hands of curious if slightly bored experimenters in computer labs across America.^v

It was at this point when the future video game industry branched out in two directions, one leading to the emergence of personal computer games, the other -- to digitalization of arcades.

Some time after the *Spacewar!*, programmers around the country began writing text-based games. *Hamurabi*, a game simulator of economic processes, allowed players to type in tax rates and other parameters to control the kingdom’s health. *Hunt the Wumpus*, a predecessor of the Dungeons & Dragons genre, was a textual maze of tunnels and rooms inhabited by a mysterious monster.^{vi} These games, initially developed for mainframe machines, were later rewritten and distributed by hobbyists for the first home computers of the 1970s. In 1977, Apple began selling program cassettes with games for its increasingly popular Apple I computer; one of these games was *Hamurabi*.^{vii} The

market for home computer games was expanded with the introduction in 1977 of a competing PET system by Commodore. Just like Apple computers, Commodore's were compact, user-friendly and comparatively cheap but considered inferior in scientific circles and sold primarily to gamers public.^{viii}

One person influenced by *Spacewar!* was Nolan Bushnell, a student at the university of Utah, one of the few schools equipped with PDP computers at the time. In 1965, Bushnell got a job at a carnival arcade and wondered what it might take to create a computer-powered game, but the bulk and cost of the equipment would make any such attempts unfeasible. In 1970, when the components became cheap and small enough, he built *Computer Space*, an arcade game based on *Spacewar!*. Bushnell sold it to an arcade maker Nutting Associates that a year later manufactured the first 1,500 *Computer Space* machines.^{ix} The machine consisted of a dedicated computer that hooked up to a television set and was equipped with a coin collector and a set of controls.^x Bushnell can be credited with making computer games on profitable enterprise, especially after his next game, *Pong*, became a smashing hit. At the same time, by designing *Computer Space* as an arcade he made it part of the coin-op business that had been in existence for decades and that had acquired certain social baggage that would later influence popular perception of all computer games.

Amusement arcades have a long history that goes back to the 1880s, when "saloon owners began installing coin-operated machines for bar patrons to compete on, or place bets on, as well as vending machines."^{xi} Mutoscope, a coin-op hand-crank device that flipped through a reel of cards to create an illusion of a moving image, became a staple of the arcade parlors almost immediately after being patented in 1885 and for the good part of the century that followed. Much of the mutoscope content was a peep-show matter and is well described in a letter printed by *The Times* in 1899: "nude female figures represented as living and moving, going into and out of baths, sitting as artists' models."^{xii} Gambling and nudity earned penny arcades a reputation of places that were corrupting the society's morals in general and that were not suitable for women in particular. Public campaigns against the arcades culminated with a wrecking party and a photo-op by New York's mayor Fiorello La Guardia posing with a hammer next to a pile of wrecked machines. Video game arcades, argues Erkki Huhtamo, a media archeologist, were direct descendants of the game parlors and have inherited their negative reputation. He writes, "The widely publicized prejudices against arcade video games and the arcades themselves were probably one of the reasons for the breakthrough of home gaming: parents bought video game consoles for their children to keep them away from those diabolic places."^{xiii}

Computer games owe to arcades more than their bad reputation. Many of the concepts found in today's popular games were implemented in analog machines in the first half of the 20th century. For example, many modern arcade games (and later console and PC games) -- *Shooting Master* (Sega, 1984)^{xiv} or *Wing Shooting Championship* (Sammy, 2002)^{xv} -- employ a toy gun as a control device, an idea that can be traced as far back as 1894 to the *Automatic Game Shooter* coin-op machine^{xvi}. The more modern version of

the gun that relied on light emission for target detection appeared in the 1930s and was incorporated into the first arcade shooting game Seeburgh Ray-O-Lite in 1936.^{xvii}

Similarly, today's driving simulators bear striking resemblance to the early electro-mechanical driving games complete with a steering wheel and a gas pedal (*Drive Master* by Chicago Coin, 1969) that boasted a "revolutionary new realistic windshield view."^{xviii} Perhaps one of the most amusing early driving arcades was *Turnpike Tournament USA* (Unknown, 1950s). The machine had seats and steering wheels for two competing players sitting next to each other and the two screens showed film footage of a real road.^{xix}

Game consoles, the third pillar of the gaming industry, were developed simultaneously with arcades. Just as Bushnell was pursuing his vision, an engineer at a military electronics development company was pursuing his own old dream of making TV sets – of which there were over 40 million in the American homes at the time - capable of more than just showing broadcasts. The idea to add game functionality to a standard TV came to Ralph Baer in 1949, but it wasn't until 1966 that he put down on paper what he describes as "a small "game box" that would do neat things and cost, perhaps, twenty-five dollars at retail."^{xx} Initially, he had planned for a system that would combine the interactive functionality of a set-top box with the rich visual imagery delivered by cable companies into the living room TV sets:

“The idea was to have the cable company provide colorful backgrounds for our games. As can be appreciated now, the state of the art in the '60's simply did not allow us to generate good background graphics within a low-cost game box. However, I thought, any cable operation could transmit the top view of a tennis court complete with spectator stands, all in "living color" by simply pointing a studio camera at a graphic illustration tacked up on a wall. Our white player and paddle spots could then be superimposed on this colorful, complex background and the result would be a rich-looking screen presentation.”^{xxi}

Had the cable TV industry not experienced a downturn at that very time, the future of gaming and perhaps of TV advertising would have been different. Yet, the project between Baer and TelePrompTer, then the largest cable operator, fizzled out due to lack of funding. It would take the game industry more than a decade to develop graphical capabilities rich enough to allow for a visual representation of a simple logo.

Ultimately, Baer signed the deal with a TV set manufacturer Magnavox and in 1972 the company unveiled the first video game console Odyssey ITL200. The console came out with a set of game cartridges (that altered the circuitry of the machine but didn't carry any software), a light rifle, plastic overlays with pre-drawn pictures that stuck on the TV screen and provided the context for different games, and a wide range of accessories that included stick-on numbers, secret message cards, dice, and play money.^{xxii} One of the games for Odyssey was *Ping-Pong* that inspired Bushnell to create his wildly popular *Pong* version for the arcade. Magnavox sold 100,000 units of its console in the first season, and the home gaming industry kicked off. In the next 30 years, the world would

see seven generations of at least 50 different consoles along with their countless variations and clones.^{xxiii}

In 1979, Milton Bradley Electronics released Microvision, a portable gaming device with a built-in screen and swappable game cartridges that established the forth -- handheld -- pillar of gaming whose true popularity would come a decade later with Nintendo's release of the Gameboy console in 1989. In 1997, handheld gaming branched out into console and mobile gaming when Nokia began selling its 6100 series of phones with the game *Snake* already built in.^{xxiv}

Brand invasion

The late 1970s and the early 1980s were the formative times for the gaming industry defined by the same kind of artistic experimentation that marked the early years of film and television. Advances in computation and representation technology had allowed designers to experiment with spaces and characters, and much of this experimentation and progress "was due to the desire to measure up to the standards of visual realism set by film and television."^{xxv} The medium acquired and continued to perfect sound; designers were learning to program music to respond to in-game events. In 1979, *Major League Baseball* became the first game to feature commentary in a computer-generated voice.^{xxvi} It was this period when most of the genres that exist today were born.^{xxvii}

The ideas flowed freely from one platform another. Bally's Midway, a pinball manufacturer, went to become one of the leading producers of video game arcades. After a conflict with Nutting Associates that made his first game *Computer Space*, Bushnell founded Atari that quickly established a quasi-monopoly on the video game arcade market and then also became one of the biggest console producers. Prior to creating Apple, Steve Jobs had worked as a technician for Bushnell. It was a small world.

The exact moment when third-party brands become part of the games is hard to pinpoint. The Internet Pinball Machine database that lists 4,832 different units contains images of the *Mustang* (1964, Chicago Coin) machine. It is unclear whether the makers licensed the brand name of the Ford's new sports car that appeared in April of the same year but the website describes it as being about car culture, and the game's playing field and backglass art incorporate images of cars that look similar to those early Mustang models.^{xxviii}

One of the early games that appeared on mainframe computers together with *Hamurabi* and *Hunt the Wumpus* in the late 1960s was *Lunar Lander*. It was a text-based simulation where a player piloted a spacecraft by typing in acceleration values. In 1973, Digital Equipment Corporation (the same company that put *Spacewar!* on its PDP-1 machine) commissioned a graphical version of *Moonlander* to demonstrate the capabilities of their new GT40 graphics terminal. One of the game versions included a hidden feature:

If you landed at exactly the right spot, a McDonalds appeared. The astronaut would come out, walk over to the McDonalds and order a Big Mac to go, walk back and take off again. If you crashed ON the McDonalds, it would print out “You clod! You've destroyed the only McDonald's on the Moon!”^{xxxix}

While this cameo was most likely a joke of an anonymous programmer and wasn't sponsored by the fast food empire, the “only McDonald's on the Moon” was probably the first instance of a brand integrated into the gameplay. It is not clear whether this Easter egg (as hidden features are known) survived the subsequent commercial adaptations of *Lunar Lander* (the game was made an arcade by Atari and was also distributed on tapes for Apple I), but for McDonald's it marked the beginning of a long involvement with the medium. Arcade cabinets would become commonplace in its restaurants; the company recently initiated a trial of McImagination game kiosks shaped to resemble corporate characters.^{xxx} In 1982, McDonald's teamed up with Atari for a nationwide contest in which the restaurant gave away 12,000 video game consoles and home computers worth over \$4 million.^{xxxi} In 1983, Parker Brothers was working on a McDonald's-themed game with Ronald feeding hungry aliens with shakes, fries and hamburgers and with the aliens biting into the Golden Arches, but apparently the game failed to generate interest outside the 8-9 year-old demographic and the project already advertised in the catalog was scrapped.^{xxxii}

Regardless of whether the lunar McDonald's was authorized, by the early 1980s video games had become a large enough part of popular culture to attract at least a few marketing minds at mainstream companies. Around 1983, Coca-Cola approached Atari to produce a game to be given away as a gift to the participants of Coke's sales convention in Atlanta. Atari came up with a special version of *Space Invaders*, a blockbuster game that had sold millions of copies since its release a few years earlier. The rows of aliens were replaced by the letters P, E, P, S, I and the command ship above them was replaced with a Pepsi logo. The player controlled a ship whose goal was to shoot down as many enemy characters as possible within the three-minute limit, after which the game would end and the message Coke Wins would flash across the screen.^{xxxiii} Only 125 copies of *Pepsi Invaders* were made, but the game eventually trickled down into the broad gamer community.

At least three other promotional games were produced and offered to the general public through mail-order by consumer goods companies that year. One was *Tooth Protector* from Johnson & Johnson, a bizarre game in which the main character, the Tooth Protector, was armed with a toothbrush, floss and dental rinse to protect teeth from the cubes dropped by Snack Attackers. The manual read:

The game ends if 3 teeth disappear or if 3 T.P.s are carried away and eliminated by the Snack Attackers. When you are successful in protecting the teeth, valuable points will be accumulated, and there will be no end to the fun you can have!^{xxxiv}

The other game was by Ralston Purina whose commercials for Chuck Wagon dog food featured a tiny wagon rolling out from a bag of dog food and across the kitchen floor. The

commercials apparently were so popular that the company decided to turn it into a computer game with the wagon as its main character. The game was appropriately titled *Chase the Chuck Wagon*.^{xxxv}

Finally, there was *Kool-Aid Man* made by M Network for General Foods.^{xxxvi} It, too, was tied to a commercial in which a giant pitcher was breaking through a brick wall and served Kool-Aid to everyone in the vicinity; the concept was reiterated on the game's box art and in the opening sequence. In the game, the Kool-Aid Man fought evil Thirsties who were stealing water from a swimming pool.^{xxxvii}

Whether these three games were a marketing success is hard to tell. Distributed for free in exchange for proofs of purchase, they are now considered collectible rarities unlike many other Atari titles of that period, so the companies probably didn't send out too many units. One of the reasons why these games didn't do well is their bad fortune of being released during the unraveling of the game industry known as the Video Game Crash of 1983. In 1982, when these titles were probably commissioned, the industry was at the peak of its popularity and profitability; that year, the American public bought \$3 billion worth of games (over \$6 billion in today's money), tripling the previous year's amount.^{xxxviii} The news media sensationalized the boom and many companies rushed to open video games division to capitalize on the tidal wave; Quaker Oats, for instance, acquired US Games and presented eight titles, mostly clones of the existing hits, at Chicago's Summer Consumer Electronic Show of 1982.^{xxxix} The market became saturated with bad games and numerous variations of the same concepts, and the next year the sales dropped to \$2 billion, and then to \$800 million in 1984 and \$100 million in 1985. Quaker Oats' game division lasted one year.

The arcade industry was even bigger and it, too, attracted its share of marketers' attention. By 1982, Americans were spending 75,000 man-years and \$5 billion a year playing video game arcades. In its January 18 cover story, *Time* wrote: "For comparison, \$5 billion is exactly twice the reported take in the last fiscal year of all of the casinos in Nevada. It is almost twice the \$2.8 billion gross of the U.S. movie industry. And it is three times more than the combined television revenues and gate receipts last year of major league baseball, basketball and football."^{xl}

One of the hottest games was *Pac-Man* that alone swallowed four billion quarters in the first 15 months of existence.^{xli} Riding the wave of *Pac-Man*'s popularity, Midway released yet another sequel – its fourth – under the name *Pac-Man Plus*. The game differed little from the original but one of the power-up fruits was replaced with an item that looked conspicuously like a red can of Coke complete with the trademark wave. Incidentally, Pac-Man, the game's lead character, starred in a TV commercial for a rival product 7-Up the same year.

Around 1983, Midway released an arcade game *Tapper*, whose main character was a bartender who had to serve drinks to a crowd of thirsty patrons and pick up empty glasses sliding back his way. Budweiser's logo was prominently integrated into the *Tapper*'s artwork and appeared on beer mugs, the wall behind the bar, umbrellas, a blimp hovering

over a stadium in one of the game's levels, and was also made part of the artwork of the arcade machine itself.^{xliii} George Gomez, a Midway veteran, gives a rare insight into the making of the deal:

The *Tapper* concept was intended to leverage the strength of the Budweiser brand at Budweiser locations. The idea was to get Budweiser bars to put the product at their locations the same way that they install Budweiser icon art, point of purchase displays, and tap handles. If we could have installed one game at 1/3 of all Budweiser locations, the sheer numbers would have made the game a blockbuster game. The thought had been that we could capture the imagination of the Budweiser distributors and get their support. They were a fanatical group with tremendous influence on the brand. These are the guys that were painting Budweiser logos on the floors of their Olympic sized swimming pools and decorating their yachts with the logo.

The marketing idea was born at Bally-Midway which means that Bally-Midway approached Bud and not the other way around. Bud could have cared less; to them it was just another promotion. They liked the fact that it was a topical approach since vid games were a hip and growing element of youth culture at the time. To Bally-Midway it meant potentially taking a game that would have yielded 10k units through normal channels into PAC MAN style numbers approaching 100k units. The Bud guys approved every piece of art and the entire implementation as licensors typically do.^{xliiii}

Unfortunately, the beer-themed game that was supposed to be placed only in bars soon found its way into the mainstream arcades. Parents were not happy about having their kids exposed to alcohol advertising, a public outcry ensued, and soon the game was stripped of all Budweiser references and renamed into a more innocuous *Root Beer Tapper*.

While advertising was entering the new medium, the place occupied by games in the marketing plan was different from what it is today. The right third-party games that would lend themselves to seamless product integration were already on the market. Such games as *Burger Time* (M Network, 1982)^{xliiv} or *Pressure Cooker* (Activision, 1983)^{xliv} seem to have been a perfect fit for McDonald's, a company that was already actively targeting gamers. Yet, even games by Quaker Oats that included such cereal-friendly titles as *Piece O'Cake*, *Gopher*, and *Eggomania* didn't bear any brand mentions.

In 1983, British CRL Group released *Formula One* for the ZX Spectrum home computer; the game put the player in the role of a manager of a racing team. *Formula One* featured real-life automotive brands -- Ferrari, Renault, Lotus -- and the race tracks were surrounded by billboards for Marlboro (cigarettes), Dunlop (tires), Agip (gas stations) and Fiat (cars). A Goodyear blimp was hovering in the sky. The interface of the pit stop screen prominently featured Mobil's and Goodyear's names.^{xlvi} We don't know whether the brand placements were paid by the respective companies or whether game developers

used them as decorations, but other sports games -- a genre that is now hard to imagine without billboards and branded uniforms -- would remain ad-free for much of the decade.

It seems that the marketers who did publish promotional games regarded them as a bait to move their core product and overlooked whatever branding opportunities the medium had to offer, much like McDonald's that gave away Atari consoles to sell more burgers. Consider also the nature of the relationship between marketers and media producers in general. Product placement, a form of paid advertising that had been practiced since the media's dawn was largely neglected in the 1980s. Where marketers agreed to provide their goods to be used on the set, the initiative usually came from the studios looking to cut production costs. After all, 1982 was the year when Mars infamously declined an offer to have its chocolates featured in *E.T.* The same attitude was reserved for games and remained dominant for years. Timothy Price, an entrepreneur who attempted to broker in-game advertising in the late 1990s said that when he approached Pepsi about featuring its products in a video game, the company offered to pay with cases of their Mountain Dew soft drink. "We were at the point when we were seriously considering taking the cans and returning them for the deposit charge, one penny a can, to come up with some cash revenue," Price said.^{xlvi}

Yet, what the game industry lacked in its relationship with consumer brands it made up with its close Hollywood ties that go all the way back from the flippers to video arcades and ultimately to home console and computer games.

In October of 1978, D.Gottlieb, the company that had invented the coin-up pinball industry in the 1930s, launched *Close Encounters of the Third Kind* themed after Steven Spielberg's award winning sci-fi drama that had hit the screens a year earlier.^{xlvi} Columbia Pictures, which had acquired Gottlieb in 1977, was behind both the machine and the film. In 1979, a competing pinball manufacturer Bally produced a four-player *Star Trek* machine based on the popular franchise and featuring Mr. Spock, Captain Kirk and other characters. The backglass boasted that "immediate recognition of characters draws players directly to *Star Trek*."^{xlvi}

In 1980, the company launched *Rolling Stones*, a flashy flipper with an image of a bare-chested Mick Jagger behind the display glass. The game flyer promised that "Rolling Stones' hits, Satisfaction, Jumpin' Jack, Flash, Miss You and When The Whip Comes Down, echo throughout the game's play."¹ More machines built around licensed content followed. *Austin Powers*, *Batman*, *Star Wars*, *Terminator*, and their respective sequels were all "flipperized", and so were many popular TV shows, including *The Simpsons*, *The X Files*, and in 2005, *The Sopranos*.

Some other Hollywood companies with game divisions were 20th Century Fox that sold games based on its *Alien*, *Planet of the Apes*, and *M.A.S.H.* franchises, CBS Electronics, Universal Pictures' parent MCA, and of course Warner Communications that had bought Atari from Bushnell in 1976. Film makers' interest in the emerging game medium and game publishers' expectations for a healthy return on licensed content ensured a steady

supply of movie-themed games across all platforms, from arcades to the cassette-loading home computers.

In 1982, Midway published *Tron*, a game based on the Disney movie of the same name, and followed up with *Discs of Tron* sequel a year later. The same year, Sega produced *Star Trek: Strategic Operations Simulator* following the theatrical release of the *Star Trek: The Wrath of the Khan*^{li}, paving the way for the long series of the Star Trek games. A year later, Atari published a *Star Wars* video arcade, a 3-D vector game that put the player in the cockpit of an X-wing fighter and featured digitized voices of the *Star Wars* actors.^{lii}

One of the more interesting license-based games of that period was *Journey Escape* (Data Age, 1982) made both for arcades and Atari consoles where a player had to guide the five members of then-popular rock'n'roll group Journey past the crowds of groupies, promoters and photographers. Like the *Rolling Stones* flipper before it, *Journey Escape* featured digitized songs of the band.^{liii}

The second coming

Whatever plans advertisers might have had for games were put on hold after the crash of 1983-84. While games were becoming more complex and their more detailed graphics potentially allowed for richer brand integration, the titles of the immediate post-crash period are remarkably ad-free. The sports titles of that time provide a good illustration of the situation in mid-1980s.

Sports games traditionally have been considered one of the most suitable genres for in-game advertising, in part because of their wide appeal and in part because they were based on the real-world environments already saturated with brand messages. Even in the games of early 1980s one can find signposts alongside racing tracks and billboards that are either empty or advertise the game's publisher or developer; Midway's *Pole Position* (1983), for example, featured a blimp with Atari emblazoned on one side.^{liv} By 1985 these placeholders become a familiar sight. *Daley Thomson's Decathlon* (1984), a game licensed after the Olympic champion (and one of the earliest person-licensed games in general) prominently displays billboards for Ocean, the developer.^{lv} Nintendo's *Tennis* (1984) -- a billboard for Nintendo.^{lvi} US Gold's *World Cup Carnival* (1984), the first in the long, successful and subsequently very ad-rich series of FIFA-licensed soccer games -- billboards for US Gold.^{lvii}

By 1987, as the hardware further improved and graphic resolution allowed displaying finer images, the number of billboards grew and in many games house billboards were augmented with ads for imaginary products or humorous pop-culture references. The colorful *Skateboard or Die* (Electronic Arts, 1987) had ads for the fictional Joust Jive and Skate Straight,^{lviii} while its sequel that takes place on a city street with stores with such names as Wumpus World, Healthy Nutritious Food, and Waremouse Records, the last two, of course, being nods in the direction of Whole Foods and Warehouse Records.^{lix}

This was a turnaround year for the gaming industry with the Nintendo's NES console picking up market share and advertisers' interest in the medium rekindling. A racing game *F-1 Spirit: The Road to Formula 1* came out featuring billboards for Dunlop tire makers; however the game was not published in the US.^{lx}

More significantly, Ford Motor Company released *The Ford Simulator* (1987), a first-person driving simulator for DOS that came with detailed information on the company's current line-up, a buyer's guide and an order form.^{lxi} *The Ford Simulator* was more of an interactive demonstration than a game since it offered no racing competitors and kept no scores, but the idea caught on. The SoftAd group, the developer behind the original software and one of the companies that pioneered interactive marketing (it was founded in 1985) went on to produce a series of sequels.

The advergames were back. In 1988, Pepsi launched *Pepsi Challenge (Mad Mix* on some platforms, by Topo), a branded Pac-Man variation.^{lxii} A more original advergame was *Avoid the Noid* (ShareData, 1989), a game commissioned by Domino's Pizza to complement the ongoing advertising campaign that featured a pizza-destroying Noid who looked like a gremlin in a tight rabbit costume. The game's protagonist was a pizza delivery boy on duty who had to find his way through Noid-infested buildings. The box art featured Domino's boxes and offered a coupon for a free pizza topping.^{lxiii} A year later, Capcom redesigned its Japanese title *Masked Ninja Hanamaru* into a *Yo! Noid* sequel for the American market; the game featured pizza terrorist as the game's main character.^{lxiv}

Another game based on a popular advertising theme was *The California Raisins* (1988) published by Box Office. In the ingenious campaign for the California Raisin Advisory Board, the Raisins were a fictional music band of singing and dancing raisins that took on a life of their own and spawned TV specials, a board game and a cartoon series. In *The California Raisins*, the player controlled one of the band members trying to rescue his buddies locked up in a cereal factory.^{lxv} Apparently, a sequel was produced a few years later but was never published.^{lxvi}

Music tie-ins were beginning to appear as well. Sega's *Michael Jackson's Moonwalker* (1989) was based on the movie *Moonwalker* and featured the King of Pop saving kidnapped children and dancing to his own hits. In this ingenious piece of cross-media execution, Michael's moves were also his secret weapon -- he killed the baddies by making them dance along. The game was released both for consoles and arcades, and a variation with a different gameplay was produced for personal computers.^{lxvii}

Teenage Mutant Ninja Turtles 2 (Konami, 1989) had a similarly complex cross-media relationship. The turtles were born in 1984 in a comic book by Mirage Studios and three years later they became toys and a world-wide phenomenon. They went on TV in 1987, first as a cartoon series and later as a live-action show. In 1990, Turtles went on a real-life music "Coming Out of Their Shells" tour. The gig was sponsored by Pizza Hut and the company gave away posters, tapes, and tour guides as part of the promotion. Pizza Hut's posters were scattered throughout the entire *Teenage Mutant Ninja Turtles 2* game

and were often used as covers by the baddies; pizza slices were added as health power-ups to aid the protagonist.^{lxviii} (Also that year, Pizza Hut pizza's appeared in the microwaves of 2015 featured in the *Back to the Future II* movie.)

A decade after the crash that had all but buried the emerging medium under the rubble, the game industry was doing so well that it once again found itself on the cover of *Time*. Life was definitely good, the magazine wrote. "What once seemed like a passing fad for preteen boys has grown into a global moneymaking machine that is gobbling up some of the most creative talents in Hollywood and tapping the coffers of media and communications conglomerates eager to get in on the action. Video games rake in \$5.3 billion a year in the U.S. alone, about \$400 million more than Americans spend going to the movies." Hollywood was once again games' best friend, and in many cases this friendship would be cemented with wedding vows when "every major Hollywood studio either bought a video-game company or started its own in-house interactive department."^{lxix} This time, the licensing relationship was a two-way road. Jurassic Park, Aladdin, and Bart Simpson were made into games; on the other hand, Sega's Sonic the Hedgehog became a cartoon series and Nintendo's plumber brothers Mario and Luigi starred in a feature film. Mario first appeared in 1981 in Donkey Kong and became a celebrity who was largely responsible for the success of the Nintendo's NES in the late 1980s, who was more recognizable than Mickey Mouse and whose face smiled from the boxes of Ralston's cereal and after whom Kraft shaped its noodles.

By mid-1990s, in-game ads and games based on brands or advertising mascots have become ubiquitous. Colgate-Palmolive published *Harald Hardtooth and The Fight Of The Clean Teeth* (1992) reminiscent of Johnson & Johnson's *Tooth Protector* from a decade earlier. Harald, an anthropomorphic tooth, fought monstrous oral bacteria with, what else, Colgate toothpaste.^{lxx}

McDonald's had at least two games to its name. In 1992, Virgin Games published *M.C. Kids* that put players on a quest to find Ronald's bag of magic bricks stolen by Hamburglar.^{lxxi} A year later, kids would play Ronald himself in Sega's *Treasure Land Adventure*.^{lxxii}

The 7-up's mascot Spot rode the branded bottle to the rescue of his buddies in the 1993 title *Cool Spot*.^{lxxiii} Two years later he returned to star in *Spot Goes to Hollywood*, a game that showed him trapped in a movie projector jumping from one film to another.^{lxxiv}

Frito-Lay's Chester Chitah was the protagonist of *Too Cool to Fool* (1992)^{lxxv} and *Chester Cheetah: Wild Wild Quest* (1993).^{lxxvi} In the UK, Unilever took their award-winning ad campaign "Peperami: It's a Bit of an Animal" and made it into a 3-D puzzle adventure titled *Animal* (1996) where the "psychotic spicy sausage" Peperami investigated the sudden disappearance of the town's mayor Peperenstein.^{lxxvii}

Marketers began to embrace and experiment with different formats of brand integration and developed new ways to make and distribute games to achieve a wider variety of objectives.

The UK version of the *James Pond 2* game (1991) featured penguins of the McVitie's biscuit company's Penguin Biscuits.^{lxxviii} *Zool* (1992), a platformer game about an ant-looking ninja, was lavishly studded with Chupa Chups lollipops and logos.^{lxxix} Model kit maker Revell-Monogram put its toy cars on the virtual racing tracks in *European Racers* (1993). Germany's Dresdner Bank published *Captain Zins* (1994), an adventure game about a geek kid charged with guarding Dresdner Service Cards.^{lxxx}

A German department store Karstadt created a futuristic *Space Job* game (1993) whose world was set in the Karstadt interplanetary empire of 2350 and whose main character had to work his way up to the management level by performing menial tasks and gaining reputation points. The game was designed both as an interactive ad for the company and a recruiting tool.^{lxxxi}

Ralston Purina, a company that had pioneered the advergaming genre a decade earlier with *Chase the Chuck Wagon*, modified the popular Doom game to create its own *Chex Quest* (1996) that promoted the company's Chex cereal. The anthropomorphic piece of cereal – the Chex Warrior – replaced the original space marine to liberate a distant Bazoik planet from the Flemoid invasion. The power-ups were naturally Chex-branded – a Supercharged Chex Breakfast replenished the warrior's health and the Super Chex Armor provided protection against Flemoid's firepower. The game was distributed for free as a prize hidden in the cereal boxes and has since spawned an official sequel and a large number of fan-made variations.^{lxxxii,lxxxiii}

Some brands had a more covert in-game presence. One of the secret sparring partners in Sega's *Fighting Vipers* (1996) was Pepsi-Man, a character from Pepsi's advertising campaign in Japan. Pepsi-Man appeared when a player was killed by game's first antagonist.^{lxxxiv} Pepsi-Man later scored an entire game of his own (*Pepsiman*, 1999) with a mission to run around providing Pepsi relief to thirsty citizens.^{lxxxv}

Coca-Cola, of course, had its own share of game presence. The most openly "Coke" game of early period was probably *Coca-Cola Kid* (1994), a platformer released in Japan that came with the red Coke-branded GameGear handheld console.^{lxxxvi} Coca-Cola made numerous in-game cameos throughout the decade, from the red street signs that featured the familiar white wave but didn't actually say Coke in *Ninja Gaiden* (Tamco, 1988)^{lxxxvii} to the full-fledged billboards in the *Top Skater* arcade (Sega, 1997), a game that also featured real-brand shoes from Airwalks and Vans.^{lxxxviii}

In 1998, BrandGames, working on an order from Coca-Cola, launched the 3-D *Interactive Mr. Pibb Game* as part of the company's back-to-school campaign. The game was sold at participating stores and fast-food restaurants at a cost of between \$0.99 and \$1.99 with a purchase of a meal and a cup of Mr. Pibb drink. The advertising industry's *Brandweek* later would write: "The ramifications of this are staggering: consumers were actually being asked to pay hard earned cash to play a game that starred a major brand character. In two months, Coca-Cola sold 750,000 copies of the game."^{lxxxix}

BrandGames was among the companies cropping up in response to marketers' newly-found interest in games:

"BrandGames is a New York-based marketing company that pioneered the use of branded games (now called advergaming) as a media platform in 1995," [company's VP Jim] Wexler explained. "Early on, we developed the idea that custom videogames featuring integrated brand messages do double duty -- as promotional incentives that drive sales and as media that deliver hours of brand-building awareness. The first branded games in the pre-web era were issued on floppy disk, for Chef Boyardee, Coca-Cola and Samsung. We created the first-ever advergaming for clients including General Mills, Taco Bell, GAP and Reebok."^{xc}

Self-promotion aside (the company that began developing branded game experiences a decade ahead of BrandGames was the SoftAd Group, founded in 1985)^{xci}, this quote reveals an important shift in marketers' attitude toward the games that happened in the 1990s: games could be a viable advertising medium whose power stretched beyond the toy baits of Happy Meals.

In 1999, a Pittsburgh company Adaboy filed a patent with the USPTO for a method for "advertising within the virtual environments of games. Default images of games are replaced by alternative textures having advertisements implemented therein. An ad server coordinates the matching of ads to demographic data of the game player and properly accommodates ads in formats from game information provided by game sources. The game player is visually influenced by advertisements as he or she views the virtual world of the game, as plug-in software replaces the default images with virtual pictures and figures utilizing an advertisement. View statistics are retrieved from the game player's computer or console to rate viewing effectiveness for ad placement confirmation and billing purposes."^{xcii} Adaboy and many other companies – Conducent and Radiate, for example -- that carried the light of advertising into the darkness of virtual worlds were soon buried under the rubbles of the dotcom bust and the collapsed advertising market. Their innovative plans were to put ads on splash and loading screens and into freely downloadable game demos, to enable, as a *Salon* article of that time put it, "hot product placement within games -- so that a click on a bag of M&Ms in a game, for example, could take you to an M&Ms Web site."^{xciii}

They, it turns out, were ahead of their time.

ⁱ Brian Wilson, *Media, Technology and Society. A History: From the Telegraph to the Internet.*, Routledge, 1998. p 6

ⁱⁱ The very first game to run on a computer was probably *OXO* or *Noughts and Crosses*, developed by a PhD student at the University of Cambridge in 1952 as an illustration for a doctoral thesis. Because the computer the game was running was proprietary to the university, the game never spreads outside its walls.

ⁱⁱⁱ <http://www.osti.gov/accomplishments/videogame.html>

^{iv} <http://www.elfqrin.com/docs/SpaceWar/spacewar.html>

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