

# [How kinect gave a competitive advantage to microsoft media essay](https://assignbuster.com/how-kinect-gave-a-competitive-advantage-to-microsoft-media-essay/)

We choose to analyze Microsoft-Kinect as a topic for our group project because we wanted to analyze that how Kinect gave a competitive advantage to the Microsoft in the gaming industry. Our analysis will focus on the technology Microsoft used in Kinect and the reasons of Kinect becoming the fastest selling tech-gadget, even though it was just launched in November 2010. We will also discuss the strategies Microsoft used while developing and launching the Kinect and the various factors that helped Microsoft to become leader by selling 10 million gadgets in a very short span of time, beating Apple’s iPad and iPhone previous record. Microsoft Kinect made into the Guinness book of records as the fastest selling electronics device. [1]

## Introduction:

Kinect is a controller free gaming experience for the Xbox 360 video game platform to stir up great hype in the gaming industry since its launch. It has a great impact on the approach to gaming and changed the meaning of game industry and the Entertainment World. Microsoft came with a complete entertainment solution for the whole family with the launch of Kinect. With the selling of 10 million gadgets, Microsoft’s Kinect became the fastest selling tech gadget. By beating Apple’s iPad and iPhone’s previous record it made into the Guinness book of records as the fastest selling gadget and wrote the new chapters in the Microsoft success story. In 2006, when Nintendo introduced a new game console called Nintendo Wii, Nintendo revolutionized the whole game industry, instead of competing with the mainstream players like Sony PlayStation and Xbox 360. Nintendo Wii targeted a broader demographic than its competitors and tried to incorporate both refreshing gaming experience and user friendly interfaces to target the previously untapped portion of the demographic. Gamers of all ages, including the female players and the elderly are getting into the action of Nintendo Wii. Nintendo started a new chapter in the gaming industry with the launch of its Nintendo Wii MotionPlus. Kinect was Microsoft’s delayed reaction to the massive success of the Nintendo Wii but the launch of Kinect gave a all new dimension to the gamers about how games are played. Even thought Xbox 360 was leading in the market before Kinect came into the market but Xbox 360 sales become double since Kinect launch.

## Analysis for Game Industry: Using 5 Forces model of Porter

To understand well about the performance of the firms we should first try to analyze the industry and it’s factors which influence the firms’ performance. We apply the 5 force approach on the gaming industry. Game industry is a highly dynamic industry. We can see 7 generation of console within 30 years. Technology changes rapidly in the game industry as well as customer requirements & expectations are really high in this industry. Hard core gamers love new challenges and improved graphics and games. Product life cycle is very short in the game industry. So companies need to innovative in this industry for a sustainable competitive advantage and invest more in the R & D and come up with new products.

Threats of New Entrants are very low because this is capital intensive business and brand image is very important in this industry.

Bargaining Power of Customers is fairly high. There are lots of substitutes available in the market so customers have high bargaining power. Switching cost from one product to another is also not too much high.

Bargaining Power of Suppliers is low. There are only very few big brand players in the gaming consol industry so game providers do not have much choices. If they want to sell their games they have to work with these brands.

Threats of Substitute Product is high. There are lot of players in the industry also there is a threat from the movie industry, Sports industry which can be a possible substitution for entertainment.

Competitive Rivalry is very high. Big players like Microsoft, Nintendo and Sony is already in the market. Every firm tries to differentiate their products and try to come up with something innovative.

For a sustainable competitive advantage Microsoft wanted to come up with something which can be sustainable for their leadership position in the gaming industry and they came up with Kinect for Xbox 360.

## Technology evolution

To understand the Kinect development it is important for us to understand the history of Microsoft, it’s positioning and challenges faced in the gaming industry.

Microsoft Corporation is a software company and well known for the Windows operating system. In 2000, by seeing the growth opportunity and lucrativeness of the game industry, Microsoft decided to enter in gaming and entertainment industry. There were mainly 2 reasons for Microsoft to move into gaming industry. First reason as already mentioned above that Microsoft was seeing a rapid growth in the gaming market. Microsoft saw huge opportunities in the game industry and found it a very lucrative market to have a presence there. Second, the game industry has a huge dependence on the Software and high technology. Microsoft as one of the leader in the Software industry thought to leverage this capability to get success in the game industry.

Sony and Nintendo were well established players in the gaming industry with well known brands in the game industry. Microsoft launched Xbox in the year 2001, after more than a year Sony lunched its Playstation2. By that time Sony was having a large and loyal customer base and Microsoft’s Xbox was unable to outperform PlayStation2 of Sony. There were many reasons of underperformance of the Xbox. One of the reasons was Xbox’s incompatibility with many of the existing games in the market at that time. Microsoft entered in the game industry first time in 2001, so most of the games available at that time were for either PlayStation or Nintendo. Although, Microsoft launched Xbox with many compatible games developed in-house and by third party developers, it was not an easy task to induce gamers to buy Xbox over the already successful PlayStation2.

The other reasons were Microsoft’s lack of experience in the gaming market and the absence of USB port in Xbox. There was also a late mover disadvantage to the Microsoft. The price of X-Box was higher compared to that of its competitor Sony PS2. Also Microsoft’s poor marketing strategy added on all these factors. X-Box and PS2 were both considered at the same level but due to an early launch of PS2 it had captured the market share despite X-Box having advantage over the hardware components.

In August 2003, Sony was a leader with 54% Market share compared to 27% of Xbox. There were few challenges for Microsoft. Microsoft was a new entrant in the gaming industry and lacked experience of working with retailers and game developers. To boost the sales of Xbox, Microsoft cut its price after the six month of its launch and this step boosted the sales of Xbox.

To overcome this problem Microsoft planned to launch its seventh generation console much ahead of all its competitors. In 2005, Microsoft launched the first seventh generation console Xbox 360. Microsoft gathered the inputs and emphasized on design and features of Xbox 360. Microsoft invested in a huge advertising campaign for launch of Xbox 360 and spent over US $ 100 million. Xbox 360 came up with new features: built in windows media centre & Wi-Fi enabled, guide button, wireless binding button and Xbox live etc. Microsoft kept the design simple and decided not to manufacture chips in-house.

They planned to go for semi-custom chip and hardware and alter them according to their need and mainly focus on the assembling hardware as it will reduce costs and allow them to closely monitor vendor network. Microsoft also decided to go for intellectual property rights, which was one of the most important decisions Microsoft took. They launched new games, which became popular in the market and provided new service enabling users to download and view films on Xbox 360. Results for Xbox 360 turned out well and Microsoft became leader in gaming console market. Microsoft sold more than 10. 4 million consoles by Dec 2006. Xbox 360 was a hit in Europe & US. But still there were some drawbacks with Xbox 360. There was a backward incompatibility issue with Xbox 360 and biggest problem was manufacturing cost for Xbox 360 was still higher than its selling price. But Microsoft’s long term price strategy was to gain a greater share of the console market which was dominated by Sony’s PS2. Microsoft decided to gave benefits to the gamers from drastic price cuts. When Sony and Microsoft were focusing on pursuing faster processing speed and better graphics in their game consoles, in 2006, Nintendo introduced a new game console called Nintendo Wii, which used existing technologies and focused on developing unique user interface. Wii lead to better gaming experience for a wider audience. The industry recognizes that games should not be limited just to the interactions using the game controller. Microsoft wanted a sustainable competitive advantage in the gaming industry. They launched Kinect in November 2010. Kinect is a controller free gaming experience for the Xbox 360 video game platform. It was big success for Microsoft. It wrote the new chapters in the Microsoft success story. It will bring game-changing impact to the Microsoft.

## Competitive Advantage

Three are only 3 major players left in the industry today -Sony, Microsoft, and Nintendo. Microsoft’s Xbox 360 kick-started the console war of the seventh generation in 2005, a year ahead of Sony and Nintendo. This move gave the first mover advantage to Microsoft. Instead of competing in terms of performance with its competitors, in 2006, Nintendo launched Nintendo Wii which brought the concept of motion-gaming and defined a new set of rules for the industry by keeping its price low.

Microsoft brought Kinect in response to Wii and went beyond the motion gaming. It interacts with the game using a camera which tracks the player’s entire body without holding anything in the hand. In fact, Microsoft’s made a strategy to charge only $150 to penetrate the market and get the casual market to take notice of this new product. Also they spent almost 500 million USD on the launch of Kinect aiming to reach new audiences, including advertisements on Kellogg’s cereal boxes and Pepsi bottles, commercials during shows such as dancing with the Stars and Glee as well as print ads in various magazines such as People and InStyle etc. They also organized a show on November 3 in Times Square, where singer Ne-Yo performed with hundreds of dancers in anticipation of Kinect’s midnight launch. It is clear that Kinect has defined its targeted niche as the casual gamers. Microsoft made the product highly appealing to new customers, rather than current customers – hardcore gamers. In addition to this, ‘ Kinect’ differs to the ‘ Move’ in that it won’t be backwards-compatible with current games – meaning ‘ Kinect’ will feature new games, for new customers.

Kinect compatible games are not designed for the gamers who want to sit on the couch and relaxed while playing. The games and experiences are designed to be as fun to watch as they are to play-the games are designed to get the people off the couch and that is the real controller free gaming experience. Also when one wants to enjoy movies, music, and ESPN on Xbox 360, one can control the entertainment hands free from the comfort of the couch. So Kinect defy the trend that playing video game is the job of couch potatoes. Now people can play the video game with real time experience while doing a lot of physical exercise.

“ It’s not going to be easy to compete with Project Natal. The companies are doing a lot of great work with the cameras. But the magic is in the software. It’s a combination of partners and our own software”, Shane Kim- corporate vice president for strategy and business development at Microsoft’s game division. [12]

## The Disruptive Innovation Model

According to Joseph Schumpeter, creative destruction is a “ process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.”

In simple words it can be explained as the process of destroying an old well established technology and replacing it with an innovative new technology.

Kinect is a “ controller-free gaming and entertainment experience” by Microsoft for the Xbox 360 video game platform. Kinect offers a revolutionary new way to play games. In Kinect, you are the controller of the game. Before Kinect every game console came with a controller which was a barrier that stops people playing games. Microsoft wanted to come up something which can break down this barrier and can appeal to both mainstream and casual gamers. Kinect is one complete package for the whole family. It is a complete and affordable way for everyone to enjoy controller-free fun and entertainment. Even though Kinect response in the market is tremendous but still people using consol games with the controller, but seeing the response of the customers it looks like this innovation will change the meaning of game industry and soon it will replace the controller gaming with controller-free gaming. In future this is a disruptive innovation that will change gaming world.

## The position of Kinect on Normal Distribution of Adopters

The normal distribution curve for adopters (Figure 1) represents the groups of people who adopt the new technology at different times. It comprises of the innovators, early adopters, early majority, late majority and the laggards.

The Microsoft targeted directly the early majority of the market, instead of targeting the innovators and early adopters first and moving ahead. This is because Xbox 360 was already in the market and performing very good in terms of sales as well as quality. Kinect is a complementary product for Xbox 360 and through Kinect, Microsoft targeted to the casual gamers as well as for the hardcore gamers. Launch of Kinect rejuvenates the sales of Xbox 360 as well. Microsoft was doing everything for breaking down barriers and getting to the mass market, where controllers are barriers and awkward for some people to learn to use a controller.

“ There are different segments of customers. There are the fans of Halo, Forza, and other titles that command a premium price. They deliver an amazing, professionally developed, full-blown experience that customers are willing to pay for. There are some customers who want more casual, bite-size experiences. They want a free-to-play model. You need the downloadable episode in Grand Theft Auto to extend the console game experience or a song you can download for Rock Band. You have a lot of different kinds of options. We enable all the business models”, Shane Kim- corporate vice president for strategy and business development at Microsoft’s game division. [12]

## Figure 1: Normal distribution Curve for Kinect Adopters

Moreover the extraordinary features of Kinect such as low price (approximately $150), attractive and slim look of the console and mass marketing support, all positioned Kinect to fit for the early majority section of adopters. Kinect with Xbox 360 provided a whole entertainment solution to the entire family. Microsoft Kinect clearly goes beyond gaming. Xbox Live gave a new meaning to the social networking. Kinect targeted a whole new range of customers. Besides the existing supporters, Microsoft targeted to open a mass market of first-time game players, like women, younger children and teenagers, who were not typically drawn to this form of interactive entertainment. Since Xbox 360, Xbox live all were very much popular already, Microsoft avoided the hurdle of crossing the chasm.

## S Curve Diffusion Pattern of Kinect

Kinect was launched in November 2010 and became the fastest selling electronics device. Although it sold more than 10 million devices by the end of February 2011, still on the S-Curve, Kinect is positioned in the accelerated part of market growth. Market growth of Kinect has not yet reached its diminishing return on sales & its limits. Diffusion pattern is with successive groups of consumers adopting the new technology; its market share will eventually reach the saturation level.

## Kinect – A Radical or an Incremental Innovation?

Kinect uses an RGB camera (image sensor), a 3-D depth camera (which determines how far away an object is from the camera), and a multi-array microphone. These were already existing technologies. Kinect is an Incremental Innovation rather than Radical Innovation since it is not based on a completely new technology, but an application of previously available technologies.

## Technology Strategy

## Do it differently

According to Microsoft, Xbox Live and Kinect will be fundamental parts of their identity going forward and will lead them into online and natural user interfaces. Microsoft has a competitive advantage over its competitors in the form of Kinect. Launch of Kinect shows the leadership of the Microsoft in the technology field whether it is software development or the games.

Along with good hardware of console which supports high processing power and graphics Microsoft tried entirely new concept in the game industry with the introduction of Kinect. This was about unleashing a new category of controller-free gaming and entertainment.

“ We didn’t want to do something that would be derivative of what Nintendo did with the Wii. That’s been a nice innovation for them but this goes much farther. We’re talking about full-body recognition. It can tell when someone is standing or sitting down. It can tell when something moves in front of you or behind you”, Shane Kim- corporate vice president for strategy and business development at Microsoft’s game division. [12]

## Open Innovation

Even though Microsoft filed lot of patents for Kinect in order to get more casual players Microsoft director of incubation for Xbox, Alex Kipman announced that Kinect was left open “ By Design” on the November 19 broadcast of National Public Radio’s Science Daily program. According to him Microsoft will not allow someone to use the algorithms that Xbox uses and to avoid the illegal uses, they put lot of efforts and make sure that this will not happen. But simultaneously Microsoft kept the design flexible so that if anyone want to write an open source driver for PC, which opens the USB connection for Kinect, take the inputs from the sensor. Microsoft wanted to break down the barriers that prevent people from enjoying what Microsoft is offering so that Xbox can attract more casual players. This will help Microsoft to get more participants and will make a bigger install base for Microsoft Xbox 360.[14]. By definition Installed base is a measure of the number of units of a particular type of system actually in use, as opposed to market share, which only reflects sales over a particular period.[15]

## New Product Development for Kienct:

Introduction of product life cycle of Kinect: There are 6 stages in any product life cycle: Product Development, Introduction, Growth, Maturity, Saturation and Decline. Firm spend a lot of money on research and development in the beginning, and if the research is successful, then on advertisement. If the introduction of the product is successful then the product goes to the growth stage of product life cycle. In growth stage, firm try to recover its development cost as much as possible. In maturity stage, other firms will also come in the market and increases the competition. In the declining stage customer may change their need or the product becomes obsolete and people are not interested in firm’s product anymore.

In the case of Kinect it is in the growth stage as Kinect was introduced successfully in the market and became an instant hit. Now, Microsoft has reduced the expenses on advertising of the Kinect as well as Xbox 360.

As discussed above, through Kinect Microsoft was targeting to the casual gamers and to bring them in the market Microsoft had to remove the barriers, which were mainly the game controllers. Controllers, whether wired or wireless, are barriers for a lot of people and it is awkward for many people to learn the use of a controller. So Microsoft decided to come up something which gives casual gamers a controller free experience and this need gave birth to the “ Project Natal”. Kinect was first announced on June 1, 2009 under the code name “ Project Natal”, named on the name of Brazilian city Natal.

Kinect uses a sensor to track body movement and recognizes face and listen to the voice. It provided a new way to play the video games where gamer uses full body to play the game. It provides gamers to play personalize games in which the player’s face and voice are recognized by the device. Kinect uses an RGB camera (image sensor), a 3-D depth camera (which determines how far away an object is from the camera), and a multi-array microphone. [2][11]

## Motion Sensor Voice Recognition

## Facial Recognition Skeletal Tracking

## Microsoft Patents for Kinect

When a company files for a patent, government gives monopoly and protection for the innovation for a specific period of time. In return the inventor has to disclose the information details of the invention. Microsoft also filed multiple patents in an effort to protect the software and technology behind its motion-sensing gaming system ‘ Kinect’, from other rivals. It was very important that Microsoft did not want to allow any loopholes that would allow others to copy its technology. Microsoft has filed at least 12 patents to protect the intellectual property of its motion sensor controller technology surrounding Kinect. The company aggressively aims to patent every aspect especially the software that enables a gaming experience that is based on gestures and motion tracking. The patent applications are based on Extending Standard Gestures, Gestures Beyond Skeletal, Gesture Shortcuts, Gesture Tool, Gesture Coach, Avatar Integrated Shared Media Selection, Localized Gesture Aggregation, Systems And Methods For Tracking A Model , Real Time Retargeting of Skeletal Data To Game Avatar , Systems and Methods For Applying Animations or Motions to a Character , Avatar Integrated Shared Media Experience , User Movement Feedback via On-Screen Avatars.[13]

“ We want to ensure that we have great intellectual property protection. You have to have a strong legal approach, and this is not easy stuff. It has to be all buttoned up, legally. We have had a very concerted focus on this “, Shane Kim- corporate vice president for strategy and business development at Microsoft’s game division. [12]

## Market Strategy for Kinect

Game industry is currently expanding but it divided into many segments after Nintendo launched its Wii MotionPlus. Microsoft and Sony were seeing a huge potential and wanted to quickly react. Microsoft saw a huge potential market for casual gamers. Microsoft was able to identify that this newly developed market had massive potential and can worth millions to Microsoft. Microsoft Identified that every game console came with a controller which was a barrier that stops many people from playing games. So, Microsoft decided to come up something which can break down this barrier and can appeal to both mainstream and casual gamers. Microsoft adopted a Market Pull strategy for Kinect by identifying the latent needs of the casual gamers. Microsoft came up with the idea of Kinect, a controller free gaming experience. Microsoft through new Xbox 360 with Kinect took a disruptive approach: focus on fun and expand the market by appealing to non-gamers. Microsoft decided to keep the price low for Kinect so that they can attract casual gamers as well. They kept Kinect retail price as $149 or if a gamer wants to purchase with Xbox 360, price of the bundle is $299.

An analyst indicated that Microsoft losing a big amount for each box. The company’s goal is to make a profit on software titles, royalties, and Xbox Live subscriptions. Selling more Xbox 360 consoles attracts more developers interested in developing games compatible to Kinect and Xbox 360, which in turn encourages more demand for consoles and generates licensing revenue for Microsoft. This is called snow-ball effect and Microsoft used it very well.

Along with the good design and low price Microsoft heavily spent on the marketing campaign of Kinect. They spent almost 500 Million Dollars on the launch campaign of Kinect. Campaign for Kinect was “ You Are the Controller”. They aimed to reach to new customer and to reach them, they advertized Kinect on Pepsi Bottles and Kellogg’s Cereal boxes, commercials during shows such as dancing with the Stars and Glee as well as print ads in various magazines such as People and InStyle. They distributed free Xbox 360 consoles and Kinect to the audience in The Oprah Winfrey Show. Between November 1 and November 28, Burger King gave away a free Kinect bundle “ every 15 minutes”. A major event was organized on November 3 in Times Square, where singer Ne-Yo performed with hundreds of dancers in anticipation of Kinect’s midnight launch. [9][11]

Microsoft strategy worked well for Kinect as well as for the sale of the Xbox 360. The first advantage Microsoft had that they were able to capture a significant portion of the rapidly growing video gaming market from the sale of Kinect. Kinect also made a significant impact on the sale of Xbox 360. This shows a very good example of Network externalities. By definition Network externalities is that the value of a technology product/service to a user increases with the number of other users of the same or similar product/service. Xbox value increased when Kinect was launched. Marketing efforts of Kinect not only impacted Kinect Sale but it also contributed to Xbox 360 sale. Network externalities comes because of the snowball effect, which means a large installed base of a product attracts producers of complementary products/services and if there is a availability of complementary products/services it attracts users, increasing the installed base. So that means both occurs because of each other. The same thing happens in the case of Xbox 360 and Kinect. Kinect is a complementary good for Xbox 360. Xbox 360 was having a large install base which helped the sales of Kinect but because of the Kinect, Xbox 360 installed base also increased. Microsoft reported that it sold more than 10 million Kinect devices till the end of February 2011.

Microsoft’s core PC software businesses reached on the saturation point and it was looking for some new areas to sustain its success. Microsoft entered in the game industry by launching Xbox but Kinect made Microsoft the leader in the game industry by giving a technological edge over Sony and Nintendo. In past, company’s reputation has suffered as a result of the litigation surrounding its Windows monopoly and other antitrust lawsuits. Kinect and Xbox 360 brought back the innovative image of the Microsoft and established the company as a technology leader in the game industry as well and built its brand.[17]. The below charts show the Xbox market share before and after the Kinect launch.

The following graphs try to show the market share of Xbox 360, Wii and PS3. As we can see Xbox 360 stole the market share of Sony and Nintendo both, but Nintendo sales were more impacted than that of Sony.

## Value Ecosystem

## To understand value chain for Microsoft it is important first to understand the value chain for the game industry. Game industry value chain is made up of six parties mainly:

Game Publishing: involved in paying for development of new titles and seeking returns through licensing of the titles.

Game Developers: includes developers and designers, who may be working under individual contracts or as part of in-house development teams.

Console Manufactures: generates game development middleware, customizable game engines, and production management tools.

Distributers: involved in marketing catalogs of games for retail and online distribution.

Hardware Suppliers: or the providers of the underlying platform, which may be console-based.

End-users layer: or the users/players of the games.

Marketer: Advertise the games.

## Figure # -Video Game Software Value Chain

The game development value chain explains that first, the game developers create games for the game publishers, who amalgamate games from various developers. The game publishers are like the pools where many game developers pooled their developed games. The game publishers then select the games suitable for the market and send those games to distributers /retailers and finally to customers. The game publishers may also send the games to marketing agencies which may help to advertise the games to the customers. In some cases, game publishers can sell their games to the console maker itself. While selling games to the console makers the digital rights management (DRM) providers provide DR to game developers to protect their copyrights. In case of Microsoft, the DRM provider is the console maker itself, as the DRM is integrated into the hardware of the console.

## Creating New Value Chains with Kinect

Microsoft’s Shane Kim has put forward a belief that Kinect provided a value addition to Xbox 360. Microsoft believed that the Xbox 360 has an approximate life of 10 years so Xbox 360 has a life cycle through 2015. Microsoft was having a vision that Project Natal will be a great innovation. Kinect will be a big value addition for a person who thinks that controller is a barrier in playing games.

Microsoft wanted to come up with complete system which can create a value for whole family to take the leadership position. To come up with a good product companies do integrated business with third parties. Kinect is a combination of partners and Microsoft’s own software. Kinect is based on software technology developed internally by Rare, a subsidiary of Microsoft Game Studios owned by Microsoft, and ‘ on range’ camera technology by Israeli developer PrimeSense. Microsoft also acquired ‘ Big Park’ to develop its game for Xbox Live. Microsoft consoles can now play music CDs, and DVDs directly and the DRM is proprietary to the individual publishers. Microsoft allowed publishers and game developers to develop games which can be played on Kinect. In addition to games, you can use Kinect to make video phone calls via Xbox Live. [20]

Microsoft has also made internet connected game play available with a subscription-based service, Windows Live, its own application service provider. It allows customers to link play across the internet. Microsoft has managed to channel yet another revenue stream via the connectivity value chain. Microsoft is best positioned to exploit the value ecosystem. Microsoft also fully utilizes its other value chains to create network effects to draw the customers. As a gauge for the amount of licensing revenue that a console maker earns, an analysis of one of Microsoft’s own console games indicates that the game development value chain itself would bring in 11. 5% of the sales price of the console game.

Price for games for Kinect from Microsoft was $49 each. Microsoft started selling 4-gigabyte Xbox 360 with Kinect and the Kinect Adventures game in a bundle for $299. Microsoft provided Kinectimals, Kinect Sports and Kinect Joy Ride, each available for $49. 99 in Kinect Adventures. It also prices Dance Central game for Kinect at $49. 99. This is a very significant part of Microsoft marketing strategy, since games have been priced at $59. 99 since the Xbox 360 and PS3 launched in 2005. It’s smarter to price games cheaper. The entire pricing strategy is thus