PURCHASE RELUCTANCE OF FEMALE CONSUMERS IN VIDEO GAMES MARKET: A CASE STUDY

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
ÇANKAYA UNIVERSITY

BY

S. TUBA BİRDAL

IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF MANAGEMENT

JULY 2010

Title of the Thesis: **Purchase Reluctance of Female Consumers in Video Games Market: A Case Study**

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ABSTRACT

PURCHASE RELUCTANCE OF FEMALE CONSUMERS IN VIDEO GAMES MARKET: A CASE STUDY

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M.Sc., Management

Supervisor: Prof. Dr. Hasan Işın Dener

July 2010, 204 pages

Today, video games market is one of the biggest and fast growing entertainment industry. The market is projected to be worth of $ 68 trillion in 2012. However, this market is unable to attract the attention of female consumers who generally spend much more than male consumers. The purpose of this study is to examine the reluctance of female customers to spend money on video games in terms of consumer behaviour and marketing. The empirical study was carried out at Çankaya, Atılım and Ankara Universities in Ankara with the participation of 334 female college students. The data were obtained by means of a survey. In the survey, the marketing mix as product, place, promotion and price was examined in its relationships with respect to factors such as income, life style, residence, experience with similar products, product purchase and use, information channels of technological products for knowledge and purchasing, priorities of spending, price perception, market place and past experience. The results are used for providing a market profile of young women in Turkey, suggestions on market structure and marketing efforts.

Keywords: Video Games Market, Female Consumer, Consumer Behaviour, Marketing, Purchase

ÖZ

VİDEO OYUN PAZARINDA KADIN TÜKETİCİLERİN SATIN ALMA İSTEKSİZLİĞİ: DURUM ÇALIŞMASI

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Tez Yöneticisi: Prof. Dr. Hasan Işın Dener

Temmuz 2010, 204 sayfa

Günümüzde video oyun pazarı eğlence sektörünün en büyük ve büyümeye hızla devam eden pazarlarından biridir. Video oyun pazarının 2012 yılında 68 trilyon dolar olması öngörülmektedir. Fakat bu pazar, erkek tüketicilere göregenellikle çok daha fazla para harcayan kadın tüketicilerin ilgisini çekememektedir. Bu çalışmanın amacı, kadın tüketicilerin video oyun satın alma konusundaki isteksizliklerini tüketici davranışı ve pazarlama açısından incelemektir. Ampirik olan bu çalışma, 334 kadın üniversite öğrencisinin katılımıyla, Ankara'da bulunan Çankaya, Atılım ve Ankara üniversitelerinde gerçekleştirilmiştir. Veriler anket yoluyla elde edilmiştir. Ankette ürün, yer, promosyon ve fiyat olarak ele alınan pazarlama karması; gelir, yaşam biçimi, yerleşim, benzer ürünlerle ilgili deneyim, ürün satın alma ve kullanma, teknolojik ürünler hakkında bilgi toplarken ve satın alırken başvurulan bilgi kaynakları, harcama öncelikleri, fiyat algısı, pazar yeri, geçmişteki deneyimler gibi etmenlerle olan ilişkileri bakımından incelenmiştir. Ortaya çıkan sonuçlar, Türkiyedeki genç kadın pazar profilinin çıkarılması, pazar yapısı ve pazarlama çalışmaları üzerine öneriler getirilmesi için kullanılmıştır.

Anahtar Kelimeler: Video Oyun Pazarı, Kadın Tüketici, Tüketici Davranışı, Pazarlama, Satın Alma

ACKNOWLEDGEMENTS

A thesis study requires time, support and encouragement. I would like to thank people who have taken a part in this process. First of all, I would like to express my gratitude to my supervisor, Prof. Dr. Hasan Işın Dener for his time and efforts.

334 young women from numerous departments at Çankaya, Atılım and Ankara Universities offered their time and experiences for this study. I would not collect information without their attendance. I appreciate that they allow me complete my project with their participation.

My academic study has been greatly supported by my family whom I thank for their understanding and tolerance. Throughout writing my thesis, I owe much to my dearest cousins: İlayda Kılıç, Yağmur Evin and Tolga Güzeloğlu for their assistance.

Finally, I would like to dedicate this dissertation to my husband, Ahmet Birdal who has the greatest share in my life. This piece of work would not be completed without countless hours of his support, encouragement and concern. Thank you for your inspiration and accompany in every phase of my life.

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CHAPTER 1

INTRODUCTION

1.1. Problem Definition

Video games market manifests itself as the fastest growing sector in entertainment area. The recent research on video game market indicates that the exponential growth will continue. (Juhl, 2006) It is estimated that the market will have a value of 68 trillion in 2012 thanks to its consumer base. The revenue of the video games market is predominantly generated from male consumers. The largest group among other consumers is the young men segment aged between the ages 18 and 34. Therefore, the market seems to be predominantly focused on the male consumer until recent years.

On the other side, the research on consumer spending have shown a new opportunity for the market: female segment. Today, they embody around $20 trillion annual consumer spending. They control a considerable part of consumer spending. In spite of their buying power, great many companies have maintained their strategy of focusing matured existing consumer segments until recent years. However, over the last few years, they become aware of the largest market opportunity in the world, which is the female segment. (Silverstein, Sayre, 2009)

However, today, they have a difficulty in reaching and addressing female consumers.

This study focuses on the grounds of why the largest market of entertainment industry and the most dominant consumer segment in spending are not brought together. Throughout the process, the study examines university women's reluctance on the side of video game purchase in terms of consumer behaviour, and deals with marketing applications and suggestions.

1.2. Organization Of The Thesis

Women and video games market form the core of the study. Therefore, the structure of the study is constructed on the two components. It comprises of an introductory part for video games concept and market, women and video games market, academic literature related to video games and women, the research and results.

In introduction part, the problem of the gap between video games market and female potential consumers are mentioned as the motivation of the study. The aims of identifying the reasons lying behind the suggested problems are clarified.

Literature review section is composed of five parts. The first part gives general information on video games. It includes an overview of the video games, concepts related to video games, video game genres, video games history, video games industry and also some issues discussed in connection with video games such as addiction, violence and the role of ESRB. The second part informs about video game products. Consoles and PC are examined. In terms of consoles, the products, target markets and marketing strategies generated for each of the video game consoles like Nintendo Wii, Sony PlayStation III and Microsoft Xbox360 are handled. In the third part, software part of video games is mentioned. Video game developers who are responsible for the software part of video games are referred via delving into their place in the video games industry. The fourth part includes the role and importance of the publishers with an evaluation of the situation in relation to the publishers in the market. Finally, a general overview of video games market is portrayed.

The part on women and video games is about the characteristics of the population which selected as the target market. The profile of the consumer population is depicted with the information collected from academic and institutional research as secondary resources. After giving a profile of the consumers and potential consumers, a theoretical background for understating consumer is composed by specifying consumer behaviour and models of buying.

Relevant studies are composed of academic studies and books on video games and women. Among academic research, certain studies made in Turkey and other countries are provided.

Afterwards, the parts consist of study, structure of the study and data analysis, the survey being conducted. As for the survey part, it encompasses explanations of the survey design details, general survey structure, the points that are investigated, sampling, survey application and the problems encountered in the application. In data analysis, the tools used for entering, coding and analysing the results of the survey are mentioned. Hereby, the results are given and interpreted in terms of the following categories: consumer profile and consumer behaviour, product, place, promotion and price.

CHAPTER 2

LITERATURE REVIEW ON VIDEO GAMES

2.1. Towards the Question of the Problem

The news report on Arab Saturday Times mentioned about a young woman travelling from her home to Virginia. According to the report, she decides to take the journey to spend her birthday at the Nintendo World Store. Her story attracts attention of video game professionals in that, as Gina Sutton reminds them, video games are for everyone, are not just for men and calls their attention to the crucial dilemma: Why are the female consumers less than male consumers? What other women, not consuming video games, want? What do women want? (Arab Times, 2009)

Handling such a subject matter is hard for a researcher when women are considered, since it is evident that they have an interesting way of thinking, perceiving, expressing, and the capacity for tasting the novelties of trends when they are compared with men. Studies show that women are the primary purchasers of goods for the home (Foucault, 2007) including entertainment technologies: women are responsible directly or indirectly for buying approximately 80% of all the consumer products today. (Pradip, Prashant, 2004) In terms of video game market, the general idea is that a small portion of women play and purchase video games. However, the consuming capacity of women has been unappreciated by firms and marketers. They have a kind of approach to make women feel invisible, and prevent them from questioning the reasons lying behind their purchase reluctance in comparison with male video game consumers.

Today, with the studies and research carried out on women segment with the need of enlarging consumer portfolio and maximizing profits with the undiscovered source of income, marketers and firms in the technology market look at ways for ways to attract the attraction for the available huge segment: women.

Women are accepted not only as a precious segment in the market, but also a unique segment participating in leisure with their distinctive preferences and trends. Therefore, there is an increasing need for a proper analysis prepared via an in-depth study to understand them and marketing technological products for them.

Surely, the essential question lying behind such research attempts is “what do women want?” Actually, this is the question which becomes an inspiration for the films, books, even lyrics. Nowadays, this is the question techno markets try to answer. The same question is asked for their products and in this respect, various studies have been carried out in academic and non academic platforms.

2.2. On the Treatment of Research Task

In the presented study, purchase reluctance of young women in video games industry and its reasons are questioned by means of analysis of female consumer behaviour and respective marketing area. For that reason, background information on video games sector, together with important definitions used in the sector will initially be stated. Then, the present consumer profile and the available consumers will be considered by taking their profile and expected behaviour into account. Furthermore, other research and studies carried out in academic platform, reports and articles which give information on the women's purchase reluctance in the area of consumer behaviour and marketing practises are mentioned. Further information is gathered from official reports published by firms in video game and console industry, and various associations for video game developers, academic and non-academic research, articles and dissertations on women.

General idea resulted in the relevant research were proclaimed as women were not interested in entertainment technology. However, recent studies brought forth adequate evidence to refute this assumption. (Foucault, 2007) Therefore, the present research tries to understand needs and wants of the young women about video games and try to make suggestions on marketing of video games and consoles to women not playing and women playing but not purchasing them in a correct and accurate way in the light of environmental, psychological, behavioural and demographic variables by taking applied marketing efforts into account.

2.3. Definitions of the Terms Related with Video Games

In the explanation of the subject matter of video games and related issues, some terms are used that are not found to be familiar in daily use of language. Therefore, in order to help for an easy and clear understanding of context by means of explaining and clarifying definitions of the terms that will be used in the study.

The concept, video games is the first ambiguity that attracts the attention. The confusion emanates from the fact that the terms of computer games, electronic games, games and video games are frequently used interchangeably. In fact, the terms are interrelated. Video game is the general term used to refer electronic games and computer games. (Encyclopedia Britannica, 2009) There are various definitions made for video games in literature. Video game is defined as an interactive multimedia form of entertainment powered by computer electronics controlled with a keyboard or a mouse[1] and displayed on some kind of screen. Merino (Merino, 2006) mentions the specific means used in the game play of video games, however video games sector is open to novelties and advancements in keeping pace with the evolving technology. Thus, a general definition of video game should aid in having a clear understanding of the concept even if advancements and novelties take place in the area of video games.

[1] or various peripherals such as controllers, steering wheels

Esposito (Esposito, 2005) explains video game as a game which is played thanks to an audiovisual apparatus, and which can be based on a story. When delving the games play of video games, there are several observations that give the idea about the meaning of the term. Video games are played on platforms, PCs and mobile phones that are composed of technical hardware running the computed codes of games, in order to provide players to enjoy the game by means of using the senses of vision, audition and sometimes tactition[2].[3]

Moreover, some video games are formed in different type; there are several video games based on story, however, some of video games such as puzzle games are not story based.

Wikipedia describes an electronic game as a type of game that involves interaction with a user interface to generate visual feedback on a video device. The definition consists of many technical terms that have the possibility to lead uncertainty. First of all, the definition puts the stress on the nature of video game such that, it is a game which employs electronics to create an interactive system of a play. Second of all, the user of the video game or a player is exposed to an interaction with particular device and computer program made up of a system during the playing activity. While playing video games, users manipulate the system by activating a process with a game controller or a wheel: sending input and allows the system to respond with output: visual feedback, the scene on the

[2] Some of the platforms provide vibration in game play such as PlayStation 2, Playstation3, Xbox 360.

[3]Tactition word is used in Wikipedia; it means the sense of touch.

screen. Third of all, in order to actualize such a process a video device is needed: a platform, video game console, PC, mobile phone

Some terms are used while describing video game such as electronic game, computer game, game user interface, input, output, controller, platform, video game console, PC, mobile phone. Encyclopaedia Britannica takes electronic game, computer game and video games as the same terms. As a matter of fact video game is an electronic game in that it runs by means of electronic media, however, computer game manifests itself as a more specific kind of video game which also works via electronics, it stresses on the system with which it is played: computer or PC. (Merino, 2006) Moreover the same point holds true for console game and mobile game, in that they suggest the platform on which these games run on. Console games are the games that run on video game consoles such as Wii, PlayStation, Dreamcast, and mobile games are the games that run on mobile phones. Nevertheless there is an important fact that is to be taken into consideration: a game launched for a particular platform has the possibility to be put on the market for other platforms. Platform is used interchangeable with system. In fact, a platform provides particular combinations of the physical artefact, device on which video games are run (Dictionary.com, 2009)

Video game consoles are considered one of the hardware platforms for playing video games. Video game console is a machine designed specifically to allow users to play certain games on their televisions. (Schwartz, 2004) Video game consoles use television screens for transmitting visual output to user. However, video game consoles have the capability to be played on computers with TV cards that are externally used. Therefore, a more general definition made by Wikipedia will be appropriate to meet the clear understanding need of the readers. According to Wikipedia, a video game console is an interactive entertainment computer or modified computer system that produces a video display signal which can be used with a display device[4] to display a video game. It is explained that console is a kind of computer system that turns codes of a game in to an interactive visual scene and displays it on a device that functions as a screen.

In the game play of a platform, controllers are the means for players used to send commands for controlling the character played or objects to the console to get a feedback from it. Joystick, wheel, paddle, trackball, yoke, keyboard, mouse, touch screen, motion sensing, light guns, key pads are some types of controllers. Controller is the main tool for controlling and manipulating platforms to send command or messages. The entrance to a platform made by the user is called “input”. The feedback that exits from a system and start a process is the “output”. For instance, pressing on x button on a game pad to make the character jump is the input and the jumping of the character displayed on the screen is the output. All the pieces like that are used as a means in the process of playing by the user is the user interface such as controller, screen, console, PC.

[4] For instance: a television or a monitor

As for the term game, in popular sense, game is used to refer video game on account of the popularity and manipulation of media for ten years and over. (Merino, 2006) Referring video game or game in technical terms software is used.

2.4. Video Game Genres

There are various types of games developed for consumers found in the market. The general name used for the types of games in this sense is called genre. It is used to group video games according to the similarities observed in the type of interaction between the player and the game played. (Myers, 1990) In the reviewed literature, there are different categorizations of video game genres; however, they do not assist in providing any standard scheme grouping of video game genres. (Peterson et. al., 2008) Aitkin defines video game genre as a conventional way to classify interactive entertainment software.

(Aitkin, 2004) By bringing together the classifications of other authors, he categorizes video game genres via comparing commonalities and differences of the genres, as shown in the following table.

Table 1: List of Video Game Genres with Their Common and Different Sides Given by Aitkin (Aitkin, 2004)

Crawford, 1982	**Herz, 1997**	**Rollings & Morris, 2000**	**BECTA, 2000**
Commonalities			
Skill and action	Action	Action	Action/adventure
Strategy	Strategy.	Strategy	Real-time strategy
Adventure	Adventure	Adventure	
	Simulation	Simulation	Simulation
Role-playing	Role-playing		Role-playing
Educational and children's		Educational	
	Fighting		Fighting
	Puzzle	Puzzle	
Sports	Sports		
Race			Racing
Differences			
Maze		Toys	First-person-shooter
Paddle			Management
Combat			Platform
Wargames			God-games
Games of chance			
Interpersonal games			

As a matter of fact, video game genre categorization is a controversial issue, so it will be more useful to deal with different perspectives on genre classification. Arsenault, (Arsenault, 2009) mentions about genres grouping under the titles of basic genres, perspectives and viewpoints, sports themes, non-sport themes, educational categories and other attributes. Such a classification might also be important from marketing point of view. Basic genres cover action, adventure, educational, racing/driving, role playing, simulation, sports and strategy. Action games include the elements that are related with action: movement, quick thinking, reflexes etc. and it suggests the main point in game play. Adventure games emphasize player's experience with a story through manipulation of game characters and the environment given in the game. Decision over action forms the main point in adventure games. Educational games, included in basic genres, are designed to educate the players who are generally younger children, to make them indirectly practice subjects such as math and history while entertaining. Role playing games consist of a process in which players create and shape their characters, and they will direct and progress predetermined story line. During the game players in the role of characters they create specialize in specific skill set. (Mobygames, 2009)

Simulation games are highly realistic games that present players a complex system. They can play in the way they choose. Therefore, Aitkin points out that all video games are simulation games. (Aitkin, 2004) Sports games suggest any sports activity. The game is established on sports such as basketball, football, baseball, and hockey. Finally, by strategy games players are identified with a deity that controls and directs the game, which requires being careful, skilful, rational with a problem solving approach.

The second category is based on perspectives and viewpoints being composed of 1st person perspective, 3rd person perspective, isometric, platform, side- scrolling, top-down. In 1st person perspective the game is displayed from 1st person's perspective. 3rd person perspective is constructed on the same principle of that the game is displayed from a 3rd person perspective. Isometric is to display the two dimensional area in the game of three dimensional form. The movement is arranged in a way that matches with players' orientation. Platform game is an action game, where setting is made up with floors, levels, platforms for players to navigate. Side-scroll refers to any game that suggests player navigating from one side of the setting to the other at a length of time. In fact the character stays still, but the field scrolls to the left or right to accommodate the player movement on the screen. In top- down perspective, the main setting of the game is manifested from a top-down.

In the third category, sports themes consist of simulations of baseball, basketball, football, golf, hockey, derby, hunting, motorcycle, monster track, Olympiad, paintball, table tennis, pool, rugby, sailing, skateboarding, snowboarding, soccer, surfing, tennis, stunts, volleyball, wakeboarding, wrestling.

Non sports themes in the fourth category such as: adult, anime, arcade, battle match, board, cards, casino, chess, comics, cyber park, detective, fighting, flight, helicopter, historical battle, horror, interactive fiction, interactive fiction with graphics, interactive movie, managerial, martial arts, medieval/ fantasy, meditative/ zen, mental training, naval, paddle, persistent universe, pinball, post-apocalyptic, puzzle-solving, real-time, rhythm/music, sci-fi / futuristic, shooter, spy/ espionage, stealth, survival horror, tank, train, turn-based, video back-drop, visual novel games are included. Party games are appropriate for entertaining in social gatherings. (Wikipedia, Video game genres, 2009)They suggest cooperation and interaction; they are mostly team based games. In real time games, players perform considering the fact that an opponent is working against them, furthermore; time progresses continuously according to game clock. (Wikipedia, Video game genres, 2009) Survival horror games are inspired from horror fiction. In the survival horror games, the player is in a combat and exposes to enemies with less ammunition and fewer heavy weapons. The game involves puzzle solving, finding new items and paths and leads the player to confront with evading enemies. (Wikipedia, 2009) Turn based games comprise two or more players and their progress is shown in different actions that each player takes sequentially or in parallel. (Heliotis, Schreiner, 2006)

There are also subgenres that are to be mentioned. Arsenault observes the grouping genres of AllGameGuide and he presents basic four genres under which subgenres take place as shown is the following table.

Table 2: Genres grouped by AllGameGuide

GENRES	STYLES
ACTION	2D Action, 3D Action, 3D Platform, Action Adventure, Ball and Paddle, Combat, First-Person Action, Fixed Screen Platform, Interactive Screen Saver, Maze, etc.
ADVENTURE	Action/RPG Adventure, First-Person Adventure, First-Person Graphic Adventure, Interactive Movie, Survival Horror, Text-Based Adventure, Third-Person Graphic Adventure
FIGHTING	2D Fighting, 3D Fighting
RACING	Aircraft Racing, Bicycling, Boat/Watercraft Racing, Demolition/Combat, Drag Racing, Extreme Racing, Formula-1/Indy Racing, Futuristic Racing, Go-Kart Racing, etc.
SHOOTER	First-Person Shooter, Fixed Screen Shooter, Overhead Free-Roaming Shooter, Platform Shooter, Shooter with Weapon Peripheral, Side-Scrolling Shooter, Squad-Based Shooter, Third-Person 3D Shooter, Vehicle Shooter, Vertical Scrolling Shooter

2.5. History of Video Games

For a number of reasons that will also be clarified in the following exposition, video games industry and video games market were not subjected to thorough analysis as it is seen in the food industry, automobile industry and the like. Since it is nor a prominent area of investigation of research, it is less well known.

Therefore, a short exploration into the history of video games might be useful in comprehending and reasoning today's market development and marketing problems of video games. In that sense, a specific historical overview will be needed at the start. It should be rather an industry defining, marketing and competition history with special reliance on product development and innovative aspects. In that sense, a bit of historical exploration will also supply introducing information for the presentation of thoughts, descriptions and analysis of the following chapters of market overview and consumer behaviour, with special reference to the situation of female consumers.

2.5.1. The Starting Efforts

Video games has a colourful history, however, the nourishing ground that makes its past meaningful is not only the visual pleasure taken via observing graphical or technological development of these games, but also its evolution from a simple entertainment tool for spending time to a form of industry that corresponds to $16 billion dollar global business. (Ngai, 2005) Therefore, the history of video games has importance in the understanding of the advancement of the industry by means of development of games thanks to creative and talented software developers and expansion of games from single market segment, covering especially boys, to various segments; comprising, adolescents and adults, and hence differentiating marketing strategies.

The story of video games begins with the foundations of William Higginbotham at Brookhaven National Laboratory in 1958. The game, *Tennis for Two*, is designed as a simple tennis game displayed with an oscilloscope. (Sabadello, 2006) He designed the game for the aim of providing a tool that people participating the open house day at the US Government's Brookhaven National Laboratory can interact. The game became a great success at the open house day; however, Higginbotham did not keep making any further research about video gaming.

The following attempt was performed in 1962 by a Massachusetts Institute of Technology student: Steve Russell tinkering to fix campus computer. However, he wasn't trying only to fix the computer, but also he was exploring the capabilities of the room sized machine. With the room sized machine Russell and a group of his friends developed "*SpaceWar!*" game, the game known to be the true beginning of the modern video games. Although the game was welcomed by universities, it failed to preserve its success on account of its complex way of playing for people not accustomed to playing video games. At the same time Ralph Baer was working on various uses of television sets and in following years, Baer developed first home gaming console connected to a television on which tennis games can be played. With his tennis console game, Baer obtained the first patent for video gaming.

2.5.2. 1970's

1970s has a crucial place for video games history on account of the fact that video games and consoles was not a part of popular cultures until these years. (Sabadello, 2006) Especially the years between 1970 and 1974 are the times of variations of the tennis game play in video games. As mentioned before, in 1967 *Pong* was designed by Ralph Baer and he filed the first patent for the game. However, due to economic reasons, his games were sold to the company Magnavox and they continued the project. (Sabadello, 2006) In 1972 an American company, Magnavox released "Odyssey" as one of the video game console that provides 12 games in cartridges, one of which was a variation of tennis[5]. Among other game consoles, "Odyssey" attracted attention with its mythological name and its reputation of being the first video game console for home use. It works with cartridges to unlock games that are already loaded in the system. Despite Odysseys' high price and marketing problems [6], the console was sold 80.000 units.

1970s were also the years of arcade games, coin operated machines that were found in public places. In 1971, Nolan Bushnell developed first arcade game, "*Computer Space*" which was released by Nutting Associates. The game was a variation of "*SpaceWar"!* designed by Steve Russell in 1962. The game is composed of a spaceship that must fight with enemy flying saucers. However, "*Computer Space*" failed to become a success for the same reason as "*SpaceWar!*" failed: the game was so hard to play without reading pages of instructions and further experience of game play. Nevertheless, Nolan Bushnell persisted in working on video games. He established a new company Atari with some of his colleagues in 1972. At the same year, Atari developed a new game which was as easy to play as possible, "*PONG*", accompanying with a simple instruction "Avoid missing a ball for high score." With a few differences, simplicity in game play and a short, understandable instruction made for *Computer Space*, *PONG* achieved a great success that urged many competing companies to race for arcade market and to develop games similar to "*PONG*" like *Pin Pong*, *Dr. Pong*, *Pong Doubles* and *QuadraPong.* The other successful

[5] ping pong
[6] Because of its principle of functioning only with Magnavox televisions

attempt Atari made in 70s was releasing a home console: Atari 2600. The 8 bit simple electronic Atari 2600 was used with cartridges to play various games which were developed by Atari and also other companies such as Activision. With cartridge idea and having the support of the third parties, Atari made a great success: they sold 26 million units worldwide.

Between 1970s and the early times of 1980s, Atari became the fastest growing company in the history of the United States, however; the presented picture did not last a long time on account of the fact that there are newcomers into the video game industry which is worth to mention. On the other hand, the new companies brought along new video games and novelties in games within the existing conditions of the market segments in that, 1970s were the times for people to get accustomed to games and gain experience about them. Therefore the familiarity with games prepared a convenient condition for introducing new games to the public. Such a variety and creativity, which was ignited by fierce competition and variety in the market, tempted people to try out new products other than the variations of the same game.

2.5.3. 1980's

The first influential game mentioned with video games of 80s was *Space Invaders* which was developed in Japan by Taito and later produced and distributed in US by Midway-Bally. Since the game was mentioned not to gain expected attention in arcades, the concept used in the game differentiated from the previous ones. The game was about a space station that was to be defended by players from alien attacks through destroying the fires coming from laser canon in motion. The factors made *Space Invaders* different from the previous ones were that a player could lose a life if she / he failed, the time limit, the display of the score made in the game, and the motivation in psychological pressure the player experienced in game play via sudden attack arranged for the station, that the player had to defend. The success gained by the game proved itself such that more than 100.000 units sold in Japan.

The popularity of *Space Invaders* dispersed in a manner that the companies producing and releasing arcades assessed the existing conditions as inconvenient. However, after a short span of time, *Pac-man* was defined as a new hit among the video games market releases. *Pac-man* did not resemble to other games. It did not have a violent content which did actually not appeal to boys and girls. In the game, player involved game as packman that needed to be in motion to escape from the enemy ghosts in labyrinth made of dots.

After Pac-man, similar games were produced as variations that used labyrinths in context. In following games, one of them was recognized as new. The suggested new game *Donkey Kong* opened a new era for video games sector with its producer Nintendo. With the breakthroughs resulted in the development of genre and superior graphic in games, Nintendo became undisputed champion in the video game industry of 1980s.

However, with respect to technology, there were other arcade games needed to be mentioned in that, as the time passes, the studies caused progress on technological developments. *Battle Zone* was one of the distinctive examples for the progresses in suggested area. According to Sabadello (Sabadello, 2006) the early games in video games history were failed to provide different alternatives on account of the incapability relied on technology used in that time. Therefore they needed to find a solution which had to rely on attractive and simple ideas for providing entertaining games. However, with *Battle Zone* game players were introduced to the three dimensional video games world through destroying tanks and UFOs in motion.

In home console area, new products were developed to take a part in the video games market in 80s. In 1982, Atari released an upgraded version of Atari 2600, and Atari 5200 and Atari 7800 in 1986. Although new alternatives created a colourful scene for consumers, both new consoles confronted some problems about their incompatibility with earlier systems, their high price and scarcity of games offered. Therefore, they failed to achieve the success of the earliest Atari home console: Atari 2600. Atari 2600 was not alone in the market as a home console; there were other challenging competitors in the market like Intellivision released by Mattel Company. 16 bit consol, Intellivision developed graphics with more details compared with Atari 2600 with more powerful technology. 6 million units of the console were sold and it was a respectable success even if it fell behind the sales of Atari. Another tough competitor in home console market worth to be mentioned was ColecoVision. The important features of ColecoVision was that it displayed games similar to they were seen on arcades and the games had the capability to be played with the games developed for other home consoles like Atari 2600. ColecoVision was also sold about 6 million units similar to Intellivision. ColecoVision had actually different features that made it to be distinct from home consoles, but fierce competition did not have time to take a rest that other companies kept up working on providing attractive novelties for consumers. With its own screen, Vectrex resolved the problem of TV requirement for home console game play. Arcade games like *Asteroids* and *Lunar Lander* were played with vector technology in vectorex, which made it more appealing

1980s are interesting years with respect to video games market for a researcher in that various opportunities for consumers were provided as for consoles. Arcades and homes consoles were accompanied by the rise of new genres. Wider range of games compared with previous years aroused and arcade and home consoles lost their attraction. However, it is needless to say that there existed some reasons for that. First of all, the games[7] played on arcades could already be played with home consoles which evidently started the decline of arcades. However, they did not cease to exist: only stopped growing and confronted with a slow decline. As for home consoles, the games released for them were replications of arcade games: no innovative ideas were developed for home console games. However, the heaviest blow to arcade and home console market came from an unpredictable option: Home computers.

Home computers seemed to people a more useful tool for different uses in that, it had the capability to serve both for entertainment, game play, and working, word processing. Apple II, Commodore, Atari 800, ZX 80, ZX 81, ZX Spectrum, Commodore 64 and Amiga were examples for home computers that appeared in the market.

During the times after home computers erode the home console market, one company insisted on holding on their plans about creating a game console of their own company by releasing 8 bit console Famicom in Japan in 1983. Differing from the earlier controllers, they developed a plus shaped gamepad with two simple buttons which made the console unique with the artsy design; Nintendo sold more than 500.000 units. Famicom marked a new epoch with the game: *Super Mario Bros*, which was considered as “revolutionary” whereby the player experiences the moving capabilities like running and jumping on platforms. It aroused sympathy and humour in players during game play, which made Mario,

[7] also the popular games of arcades like Pacman

the main fictional character in that game, the protagonist, the hero as the most famous avatar in the world. The game was superior and more innovative compared with both earlier games developed by Atari and the games released for another console NES developed by Nintendo at the same year. However, Nintendo did not lose much market power with that attack. Other eminent games played in NES were: *Metroid*, *The Legend of Zelda*, *Castlevania* and *Mega Man.*

On the other edge of the fierce competition, another rival had some attempts to take a respectable place in the video game and console market: Sega. They designed Sega Master System to compete with Nintendo NES. Even if Sega Master System achieved success in few countries, it did not achieve the expected success in competition with NES. In 1988 Sega made a second attempt by releasing Sega Mega Drive which was superior from NES in graphic and complexity of game. Some important games were developed with *Mega Drive: Altered Beast, Golden Axe, Sonic Hedgehog* which had the protagonist Sonic as one of the most eminent avatars in the video games history and *Phantasy Star IV* which was a role playing game. Meanwhile Mega Drive sold 30 millions. That "the decline of video games" story should have come to an end in 1983.

In the mean time, Nintendo decided not to observe those advancements passively, they gave their response by designing Super NES in 1990. As a matter of fact, the console did not have an advanced technology; they made a difference only with the sound chip developed by Sony. However, the marketing strategy of Nintendo revealed its dominance as it was the case also in the past. First of all, they designed a game that would satisfy consumers: *Super Mario World.* Second point is that Nintendo succeeded to design unique characters so that the consumers go onwards to play with them through video game series constructed on them like *Zelda, Metroid, Donkey Kong*. Furthermore, the timing for releasing the product was arranged in a way that people having been accustomed the earlier consoles, felt the readiness to buy the second and the third console.

2.5.4. The Developments Until 1990's Revisited

In fact, the process starting from early 80s to early 90s[8] led video games to be exposed to a different kind of development. The characteristics observed in games had no similarity with previous types. The point that made video games different in these years was that the ideas actualized with these games were more attractive, powerful and creative. Furthermore, a more advanced technology allowed a more qualified graphics and sounds in video games of that period. Indeed, technological advancements in 90s had an important place in video games history.

From 1970 to 1980 all video games consoles were 8 bit, which means that the system can process eight binary digit of unit information and it is delivered to the screen from the source[9]. In early 90s, 16 bit systems were released, and amazed the consumers by its function of processing more information with a higher speed. Therefore, the firms adapted their plans to respond to new advancements in the

[8] 1994

[9] Platforms

market via releasing their new products. The first 16 bit console was introduced by NEC as TurboGrafx-16. Even though it was not a complete success for the firm, they have accomplished a different success by means of providing a CD player in the console; therefore they could ensure a more qualified sound and detail in games. Shortly after, a response to TuroGrafx-16 was come from Sega by launching their new console Genesis to New York and Los Angeles. Generally, they took positive answers from consumers of Genesis, in that consumers compared Genesis with TurboGrafx-16, and the comparison led them to generally decide on finding Genesis superior in speed although TurboGrafx-16 was more successful in graphics.

2.5.5. 1990's

As expected, Nintendo also took its place on stage with its new 16 bit console Super Nintendo Entertainment System in 1991. Thanks to SNES, Nintendo created a challenging competitor for home console market. However, Nintendo started to lose its superiority with its popular console SNES in the market during 1991 in Christmas with the increasing popularity of 16 bit Sega's console Genesis which captured the control of 55 percent of the 16-bit market. In fact, the most delicate part of the matter is that Sega defeated his rival Nintendo by using the same tactics Nintendo practiced previously. Sega captured about half of the video game market share by introducing popular games such as *Sonic the Hedgehog, Super Shinobi, Herzog Zewei,* and *Rambo*. However, among these games one of them had a different importance: *Sonic the Hedgehog* which reminded Super Mario in terms of genre and game play. Furthermore, the main character of the game became the mascot of the firm[10] which was seen in the Mario character developed by Nintendo.

Application of a process that is practiced before could be considered as safer, which became in fact a deception created for a temporary period of success. The matter noteworthy is to be noted is that a different result is quite hard to obtain with the similar method used as it is seen in the case of Sega Genesis. Since 32 bit consoles took their part in the market, Sega Genesis lost its popularity. (Wolf, 2008)

1992 can be considered as a year which is rich in development of new genres and new games. As for computer games releases in 1992, *Dune II* is worth to be mentioned as the first real time strategy genre which suggests computer war games consisting controlling an army in terms of economic and military aspects with a display of a mini-map, in video games history. (Wikipedia, 2009) *Dune II* provided basis for some important video games such as *Warcraft: Orcs and Humans*, *Command and Conquer* and *Startcraft*. After the presentation real time strategy games, 1992 year also witnessed the presentation of the first survival horror game: *Alone in the dark* developed by Infogames. *Alone in the dark* had a crucial part in the history of its own genre in that, it set the criteria guiding the development of the future survival horror games : *Resident Evil* and *Silent Hill*.

[10] Sega

Furthermore, 90s were also years for adventure games to develop gaming began to rise and showed itself by means of computer games such as *Monkey Island* developed by LucasArts and *King's Quest* by Sierra Entertainment. Another novelty in terms of genre was puzzle based adventure games like *Myst*, which used CD-ROM storage instead of cartridges. Moreover, the game was suitably designed for playing it with different consoles such as Sega Genesis, Sony PlayStation, Atari Jaguar and compatible computers: Macintosh and IBM. Despite the fact that the game *Myst* made debut in 1993 and succeeded to capture considerable attention of consumers by selling 100.000 copies till the end of the year. At the end of the year *Myst* handed over its crown to *The 7th Guest*, the best-selling home computer game of all times. (Wolf, 2008) (Wikipedia, 2009)

The other hit of 90s were the line of *Sims* games released by Maxis. Beginning with *Simcity*, variety of *Sim* games: *SimEarth, SimCity2000, SimAnt, SimTower* and the best selling computer game of 2000, *The Sims*, were welcomed with an intense interest in the markets by a wide spectrum of consumers.

In 1992, various technical studies that actually extended back to 1980, were carried out on how to enable players to engage in more detailed and unexplored worlds along through a variety of advanced game plays, game genres, audio and visual quality. Conclusively, in order to provide more detailed three dimensional graphics and qualified game logic, first affordable 3D accelerator cards for PC were released. Thanks to the advanced technology in three dimensional view, game genres such as the first person game genre, used the advantage to ensure more sophisticated examples of their own type such as *Marathon 2*: *Durendal*, and *Marathon Infinity* , *System Shock* , *System Shock 2*, *Duke Nuke'em 3*, *Shadow Warrior*, *Dark Forces*, *Jedi Knight*, *Elite Force*, *Elite Force 2*, *Quake*, *Half life*, *Thief: The Dark Project* , *Medal of Honor*, *Battlefield 1942*, *Serious Sam*, *Painkiller*, *F.E.A.R.*. (Wolf, 2008) (Wikipedia, 2009)

Along with the development of first person shooter games played over internet, other genres like real time strategy games, such as *Age of Empires*, *Warcraft*, *Starcraft* and massively multiplayer online role-playing games, such as *Ultima Online* and *EverQuest* started to offer online game playing.

After the emergence of real time strategy and first person shooter game, limited number of genres was offered. Third person shooter using third person camera perspective but having similarity in game play of first person shooter offered some of the popular games like *Grand Theft Auto III, Tom Clancy's Splinter Cell, Enter the Matrix* and *Hitman.*

In 1993, Panasonic released its first 32 bit console 3DO with high hardware potential, CD-ROM drive and 3D graphics. However, Panasonic failed to provide a price that would be found appropriate: $699. Limited quantity of games for the console was released. At the same year, Atari made the last attempt with moving one step forward: they proclaimed to release of their 64 bit new console: Jaguar which actually runs two 32-bit processors. (Sabadello, 2006) Although, the system was superior to the gaming consoles on the market at the time, the system was found to be hard to program by software developers which leaded to shortage of games for the console.

A year later, 1994, Nintendo decided to retake the control of 16 bit market with the SNES console and released mainstream games: *Super Metroid* and *Donkey Kong Country*. *Donkey Kong Country* became the bestselling video game of the year. By means of its strategy, Nintendo depictured the success in competing with the high speed processing 3DO and Jaguar.

At the same year Nintendo released Super Game Boy which was sold for $59. Super Game Boy was an adapter cartridge which was connected to SNES to enable Game Boy to be played on TV and with extra features.

However, on the other side of the spectrum, video games market was still continuing to boil by means of the releases of Sega and Sony. After Nintendo decided for a separation from Sony regarding hardware support, they made an agreement with Philips to develop their own video game console: PlayStation.

On September 9th 1995 (Wolf, 2008) nothing was the same for video games market after the entrance of a leading electronics company, Sony. A new age for video games and consoles began with the company’s first home console, PlayStation. (Wikipedia, 2009) With the release of PlayStation, one of the significant success stories in the video games history had set out which led a radical change in the market especially for its competitors.

In fact Sony PlayStation had a very interesting story. An end turned out to be a beginning for Sony PlayStation, when Nintendo announced their separation from Sony in favour of Philips in 1991 Consumer Electronics Show. In the first instance, Sony wanted to cancel all its plans for Play Station[11]; however, then Sony changed its plans and continued with its project of Play Station development which had been already started and remained on hand.

On the other hand, the wind of change was felt in the market by Nintendo at the first place in that, at the time when PlayStation was released the market was dominated by Nintendo. It was an unusual success which belonged to Nintendo since it was evident that the technology of SNES was old which promoted Sony PlayStation to be a standalone console in the market, and indicated that SNES and PlayStation could not be in comparison and competition. 32 bit PlayStation offered an advanced three dimensional graphics which had the capacity to be compared with workstations costing thousands of dollars with CPU capable of geometry calculations for three dimensional graphics which any console of that time failed to provide. Furthermore, for the first time in the video game console history, a video console was providing a CD-ROM by which video games could run completely by CD and had external memory cards for saving information. (Wolf, 2008)

[11] At first the original name for the console was Play Station which is written separately.

Turning a disadvantage to an advantage is not an easy process to achieve especially in hard conditions like in a fiercely competitive market of video games. By finishing an uncompleted project, developing processors used in playback of sound and music for Super SNES, Sony turned the existed situation by gaining experience about hardware and inspired from existing devices developed by Nintendo. Sony sold more than 100 million PlayStations up to date which depicts Sony's conquering of gaming world and the end of Nintendo's dominance over the market. (Sabadello, 2006)

In general, every competition involves responses of the sides in that they begin to strive putting forward the difference that threaten the status quo created by the leading competitors. The games run on cartridges other than magnetic disks was the different strategy used by Nintendo. Even if it seemed to be old fashioned and was criticized for its high cost to produce and the long time it took for manufacturing, which impaired the console's market competitiveness, Nintendo remained still with its decision of using cartridge and released N64 with the promise of releasing magnetic disc drive (Wolf, 2008), called the 64DD to satisfy its customers.

However, the suggested promise and releasing of the disk drive was not satisfying enough for the market which made Nintendo the victim of its own decision which was using cartridge. The CD-ROM was rapidly becoming the favoured format for consoles, mainly due to the increased storage space and lower production costs, nevertheless; Nintendo decided to stick with costly cartridges.

On the other hand, N64 made also important contributions as it was evaluated within the history of video games via the creative and pleasurable games. The console was presented with a number of great games; most notably *GoldenEye* and the classic launch title *Super Mario 64* and *Pilotwings*. By the successful games, variants with different colours and sizes and limited edition controllers, Nintendo 64 sold 32.93 million units worldwide. (Nintendo, 2010) After the rise in popularity of PlayStation, N64 began to lose ground with third party publishers' interest heading towards to PlayStation.

In 1998 Sega offered a console, Dreamcast, with a surprising characteristic: online gaming which enabled games to be played over the computer network and allow gamers to play against or together with others over internet connection. It was the first video game console offering online gaming experience which within a short time became mainstream among hard core gamers. *ChuChu Rocket*, *NFL 2K1* and *Phantasy Star Online* are the online games that came with Sega Dreamcast available.

As distinct from other video game consoles, Dreamcast games run with the disks Sega called Gigadisks. The console had CD-ROMs that was superior in store capacity, and they were only appropriate for CDs. Dream cast was Sega's last video game console. Thenceforth, Sega continued its name in the market by the software productions.

At the beginning, sales for the Dreamcast were of considerable amount; however, sales of the console began to decelerate with announcement of the release of PlayStation 2, which proved to have an unbelievable success in the life story of video games. The specification of the consoles involved: reading audio and running movie CDs and DVDs, compatibility with PlayStation memory cards, controllers, USB and IEEE 1394 which was used for high speed data transfer especially used by personal computer.

At the same year on the 22 November, Nintendo released *Donkey Kong 64* which was the trilogy of *Donkey Kong Country* on Super Nintendo Entertainment System and known as the first game as an expansion pack. A few months later, a skateboarding video game *Tony Hawk's Pro Skater* met the video game customers in the markets.

2.5.6. The Recent Period of 2000's

In 2000 Sony decided to give a response to the early success of Dreamcast by putting forward the merits of their new console. Sony's PlayStation 2 which brought about the games like *Sonic Adventure* and *Shenmue* appeared. PlayStation 2 was convincing for consumers when it was compared with other competing consoles in that, it allowed gamers to still play their original PlayStation games on PlayStation 2. It provided playing DVDs without any additional hardware. Sega's sales were effected from the suggested intensive marketing campaign by losing excess of $398 million in 2000. In 2001 Sega stopped producing Dreamcast and tried to clear its inventory by deciding on cut in price. The retreat of Sega allowed Sony preserve its dominance on the console market, and Sony extended the successful situation by making investment in the new console manufacture. (Finn, 2002)

The legendary computer game; *Sims*, a strategic life simulation game met gamers in the markets at the same year. Being the best selling PC game in the history, *Sims* sold 6.3 million copies worldwide.

On the Nintendo side, after the sale of 100 million GameBoy, they began to work on their next generation console "GameCube" during the period when Microsoft was preparing for entering video game console market. Previously, Microsoft produced games for home computer, but in 2000 they officially announced that they would release their first video game console: Xbox. It had the advantages over the other video game consoles in that, it was built with robust software ground of Microsoft. With the Microsoft's software background, the console was structured in the same fashion as the personal computers are handled in that many computer parts were used in the console and provided gamers to enjoy the fastest processor, Ethernet port for connectivity. DVD-rom was used as DVD player, audio CD player, and high performance in graphics. The most successful games remembered with Xbox console were: *Halo: Combat Evolved, Halo 2, NLF Fever 2002, Project Gotham Racing* and *Dead or Alive*. (Finn, 2002)

In the meantime Nintendo released GameCube in 2001. GameCube bore importance in that, it was the first Nintendo console that has an optical discs instead of cartridges used for primary storage medium. Nintendo used mini DVD based discs which were incapable of playing DVDs. For GameCube, Nintendo maintained the same strategy as it applied before: relying on the video games developed for the Nintendo console in the market waiting to be sold, and by the games using familiar characters like Mario, Zelda, Pokemon. In spite of the efforts made by Nintendo, GameCube was unsuccessful to regain its place in the market that was once lost with the previous console; Nintendo 64.

In 2002 Entertainment Arts published *Sims Online* which was massively multiplayer online game variation of the game *Sims* for Microsoft Windows. In the preceding year, another important massively multiplayer online role playing game was released: *Star Wars Galaxies* developed by Sony Online Entertainment and published by LucasArts. 2003 was a crucial year also for Nintendo. They took radical decisions as a result of an evaluation of their consoles situation in the market. Nintendo had ceased to produce Nintendo Entertainment System and Super Nintendo Entertainment System. In the meantime, video game and console market witnessed a situation that the mobile phone company Nokia offered a mobile phone, N-Gage which provided hand-held console features.

In 2004 "the most successful non-Nintendo handheld game system ever sold” was released by Sony. (Mathews, 2008) Sony PlayStation Portable attracted consumers by its features like the largest ever available colour screen, MP3 playback, with screen off, internet, robust multimedia features, connectivity with PS3 and other PSPs, optical discs which is used as primary storage medium, playing, videos and movies in UMD format. (Wolf, 2008)

Even though, PlayStation Portable was a challenging handheld console in the market with advanced specifications it provided; sales of the console fell behind the sales of Nintendo's DS. (Chen, 2007) PlayStation Portable was sold 24.7 million worldwide which fell behind DS's[12] global sales of 35 million units sold at the same time, by 2006. (Wolf, 2008) Nintendo DS had several functions for gamer in that its double screen served as a desktop system, and motion detection of one of the screens has been accepted as the system's most distinct feature for inspiring and motivating gaming experience. (Guttenbrunner, 2007) At the same year Sony came to the decision that involved the entrance of PlayStation 2 in China's market and PlayStation Portable in Japanese market. On the side of the software, some eminent video games took their part in the markets such as *Halo 2*, which was developed by Bungie Studios for Xbox video game console. The game was a sequel of the *Halo: Combat Evolved* run on Windows Vista.

In 2005 North America met with PlayStation Portable. Another attempt in handheld consoles was made by Nintendo through releasing Game Boy Micro which failed to meet the expectations of Nintendo (Nintendo, 2010) by taking a place in the ten worst selling handhelds of all times. (Snow, 2007)

[12] Nintendo DS with dual screen

In the home console market, Microsoft offered their new console Xbox 360 as the successor of the previous console Xbox. Xbox 360 was a successful console; it was sold out completely when it was launched in 22 November 2005. There were two types of Xbox 360 in the markets. One type priced $399.99, featured 30 GB hard drive, ethernet cable, Xbox Live Headset, a remote and wireless control. The other type of Xbox 360 with core system did not have any of the presented features. Microsoft marketed four types of Xbox 360: Xbox 360 Core, Xbox 360 Arcade, Xbox 360 Pro and Xbox 360 Elite. Arcade type of Xbox was the entry level of Xbox 360 of which Xbox core took its place in the markets. The console included a hybrid composite, a component cable with optional optical out. On the consumer side, the console was expected with different thoughts in minds; in fact it had some shortcomings observed. First of all, the console embodied features enough for rich visual experience and pleasure in gaming, but high definition graphics could only be displayed in HDTV. Secondly, the games developed for Xbox could not be played on Xbox 360. The incompatibility of the console displeased the loyal customers of Xbox. (Wolf, 2008) Important titles: *Lego Indiana Jones: The Original Adventures* and *Kung Fu Panda* were included in Xbox Elite box in 2008. (Wikipedia, 2008)

In 2006 two giants appeared in the video game console market: The Nintendo Wii and Sony's PlayStation 3. The consoles had different characteristics, different type of consumers and served for different pleasures and purposes for consumer. However, at first place Wii has an important story to deal with. In fact the company, Nintendo, could not make the great leap forward with the video game consoles they produced. Generally, they tried to put forward the eminent game characters that were developed before and used their existing familiarity and sympathy while marketing a new console. However, the missing parts of the puzzle seemed to be quite apparent year by year. Meanwhile time was acting counter Nintendo in that the competition in the video game console market gained a considerable ground on the technological arena and there had already been significant advancements and novelties in competing game consoles so that Nintendo's console was in serious need to catch up with. After a detailed market research, a radical change in the strategy they handle with the video game consoles, and a period of hard work blended with creativity and innovative technological study, Nintendo's new video game console Wii broke into the market in 2006. The console had very unique features by which gaming pleasure it provides to its consumers became higher. Nintendo's innovative approach to video game technology manifested itself through the Wii's controller system, which marked a new epoch in video games history. The Wii Remote, often called the Wii-mote, is a small, wireless wand with motion sensing ability. It allows users to control the video game simply by moving the Wii-mote via motion sensor placed in front of the controller and the sensor bar placed on or near the screen, monitor or television. On account of the nature of the remote controller, playing with Wii required a great deal of activity and motion which yielded to physical and social experience and set the gamers free from the criticisms of fat, obese, unsocial profiled people. By means of the innovative and motivating system, Nintendo had attained its purpose of appealing people of all ages with little or no gaming experience, and promoting social and physical activity. On March 25, 2009, worldwide shipments of Wii reached 50 million units as it was announced by Nintendo at the Game Developers Conference. (Thorsen, 2009) *Wii Sports, Wii Play, Wii Fit, Mario Kart, Super Smash Bros. Brawl, Super Mario Galaxy, Mario Party 8, The Legend of Zelda, Link's Crossbow Training, Mario & Sonic at the Olympic Games* became the successful games in terms of game sales.

On the other side, there was the giant of technology both in hardware and software: Sony PlayStation. Important features of the PS3 were its capability of playing Blue-ray disc without additional accessory and backward compatibility with PS2 and the original PlayStation, online gaming service, various multimedia capabilities like connectivity with PlayStation Portable. The pricing strategy was similar with Xbox 360, in that Sony presented different types of the product to market: hard disks with 20 GB, 40 GB, 60 GB, 80 GB, 160 GB types of PlayStation 3 were offered to the consumers. They were different from each other in appearance[13] and USB ports. The new and credited titles brought about with the console are *Gran Turismo, God of War, Metal Gear Solid, Resistance: Fall of Man from Insominiac Games, F.E.A.R, The Elder Scrolls IV: Oblivion, MotorStorm, Heavenly Sword, Lair, Ratchet & Clank Future: Tools of Destruction, Warhawk , Uncharted, Drake's Fortune, Killzone2, Gran Turismo 5 Prologue, Metal Gear Solid 4: Guns of the Patriots,Grand Theft Auto 4, Call of Duty 4: Modern Warfare, Assassin's Creed, Devil May Cry 4* and *Resident Evil 5*.

[13] Colour

2.6. Video Games Industry

The presented historical overview reveals clues for the following general picture of video game industry. It is evident that the history of video games is composed by hardware providers as console manufacturers and software providers as video game publishers and developers. On account of the general overview, two main elements in the industry draw attention at first sight: hardware and software.

The hardware part implies the platform, the machine, the technology with which software is functioned. Video game consoles, PCs are the main platforms suggested in the framework of hardware. On the other hand, software part embodies the games themselves. They are generated by the efforts of game developers, publishers, platform holders, distributors, retailers in the area of video games industry.

There are some different approaches to the structure of the industry. According to Cadin and Guerin the industry of video games is composed of four major players: developers, publishers, console manufacturers and retailers. (Zackariasson, 2008) On the other hand, Chow (Chow, 2007) addresses the system of the industry such as content providers, game developers and game publishers are referred in the software side, whereas hardware suppliers, console manufacturers are involved in hardware side. Chow manifests the suggested structure of the video games industry as the value chain of the video game console industry as shown in the figure. (Chow, 2007)

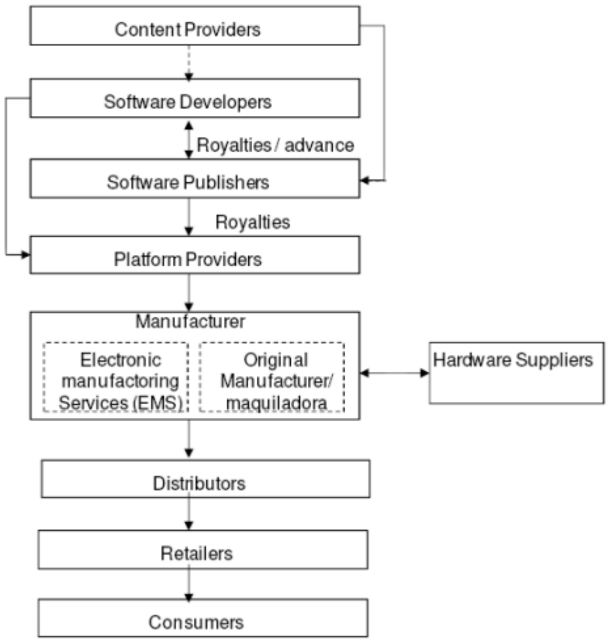

Figure 1: Value Chain of Home Video Game Console According to Chow (Chow, 2007)

It is clearly depicted that hardware and software parts are important contributors of the industry, but there are good many elements forming the details in the suggested snapshot of the video games industry. They interact with each other by creating a value in the transformation process of the inputs into piece of art and create an artefact, the video game itself. For example, by the process followed in the creation of a piece of jewellery, the artefact presented for the public interest is subjected to composition of different but interrelated operations. Similarly, at the beginning, Laramee (Laramee, 2003) sees a game project as a pure and simple gem that is handled by video game developers. They give shape and colour via creating the experiences of the fantasy as the soul and the body of a game with an artistic and technical approach. In the development process, technical disciplines of programming, including code optimization for target hardware, physics applications and artificial intelligence simulations, camera and interface development, and creation of tools are the main operations applied in the actualization of a lifeless project being actually composed of a list of codes. As for the artistic essence, game designers present their effort, skills and inspiration in planning every visual detail including environment, characters, staff and the universe that the game provides. As a result, from a single idea by means of cooperation of all the suggested disciplines with the superintendence of the video game development section, a multitude of game codes are transformed into alluring video game itself. (Laramee, 2003)

Video game developers are distinguished in the business relationships they have established, which in turn determines the ownership of the games they create. Generally video game developers are in direct contact with video game publishers, who assist in providing the financial resources for the development of the video game and get royalty from the games per unit sold. However, there are some occasions that they interact with platform providers[14], who assist them technically for the target platform, or alternatively they develop games and act independently without having any financial support from publishers and console manufacturers. On account of the high cost of developing video games, video game developers generally make special agreements with the publishers.

[14] console manufacturers

(Tomaselli et. al., 2008) Therefore, the code of the game written by the developers generally becomes the property of the publishers according to the agreement made between the two parties in advance. Moreover, some companies both develop and publish games. Let us count some of the developers for a market view: 1st Playable Productions, 2Kczech, 2K Boston / 2K Australia, 5th Cell, 7 Studios, Acheron Design, Agetec, Aki Corporation, Anino Games, Arenanet, Artificial Mind and Movement, Artoon, Atomic Planet Entertainment, Avalanche Studios, Avalanche Software, Barbaroga, Backbone Entertainment, BattleGoat Studios, Banpresto, Beenox, Behemoth, Big Huge Games, Big Rooster, Binary Hammer, Bioware, The Bitmap Brothers, Bizarre creations, Black Isle Studios, Blue Byte Software, Blue Gang Games, Broderbund, BSure Interactive, Bulfrog productions, Bugbear Entertainment, BungieStudios, Climax Entertainment, Climax Studios, Coded Illusions, Core Design, Creat Studios, Criterion Games, Cryptic Games, Crystal Dynamics, Crytek, Cyberlore Studios, Cyanide, D3 Publisher, Day 1 Studios[15]. (Wikipedia, 2008)

The other important component of the presented network is the publishers. As a matter of fact, publishers are considered as the ones reaping most of the profit from the games sold. However, publishers have wide range of responsibilities and line of works in the areas of financing, managing, marketing and intellectual property of video games. (Tomaselli et. al., 2008) Development of video games requires investment, time and connections which are provided to developers by publishers. The process of developing a game approximately takes two years

[15] Video game developers who do not publish games

together with setting adequate technical and financial assistance. In order to get back the amount invested in development costs covered by publishers in advance, the publisher promotes games to a console manufacturer. Therefore, they obtain and adapt the games for a new video game console, by which they have chance to publish more than one game and compensate the development costs (OECD, 2005) or sell the games to a distributor. As it is clearly to observe, many parties get involved in the process followed in the video game industry, however; in software part, developers and publishers are the dominant components. Considering the suggested fact, some publishers also develop games such as Activision Blizzard, EA Games, Capcom, Disney Interactive Studios, Konami, Microsoft Game Studios, Midway Games, Namco Bandai, Ubisoft.

The other component of the chain in the whole composition of video game industry is the platform providers or console manufacturers[16] Console manufacturers are still forming the largest segment in that video game industry in collecting video games consumer revenues as shown in Figure 2. On the other hand, other than manufacturing of the platforms, they have the capacity to develop and publish video games for the console they have produced, and collect royalties from games which are promoted by publishers to them. (OECD, 2005) The primary source of the revenue for hardware producers is acquired from licensing of software. (Clements, Ohashi, 2004)

[16]In this present study the main focus in the area of platforms is video game consoles; therefore console manufacturers and platform providers are used interchangeably

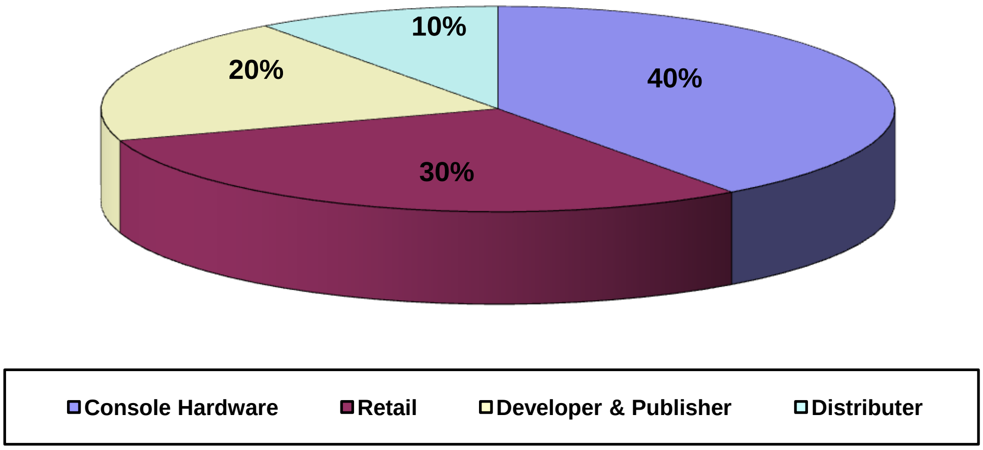

Figure 2: Share of Video Games Consumer Revenues (OECD, 2005)

Nintendo, Sony and Microsoft are the main video game console manufacturers in the market. Nintendo Wii, Sony PlayStation 3 and Microsoft Xbox 360 are the foremost selling home consoles in the market. Their specifications and importance will be examined in the following parts of the present study.

The other network, that publishers are involved is that of distributors. It would be an underestimation not to deal with the backbone function of the distributors, since these games and consoles are manufactured and developed for one ultimate aim: to access consumers who will buy them. Hence, the distributors are the first key to reach to customers; they have a special place in the video games industry. (Laramee, 2003) They approximately buy all the games that publishers release, therefore their significance lies in the availability of wide range of games in their stocks. In terms of resale of games and marketing, publishers have contacts with distributors. Publishers, arranging games for console manufacturers, have a chance to sell games to distributors who can earn money by selling the suggested games to retailers which have stores in respectable size. Obviously, the component parts of the video game industry value chain are presented with their crucial characteristics of functioning in the industry.

The phrase “the value chain” emerges in the presentation of video games industry as a whole. Regarding the literature on video games industry, chain systematically depicts the elements and the process of the industry by addressing their functions in the formation of the final product of video games and consoles. The value chain embodies three main processes namely being, software process, hardware process, selling and marketing process. Software part covers content providers, animation providers, QA providers, developer and publisher. Platform providers compose of hardware unit of the chain. Thirdly, publishers, distributors and retailers constitute marketing and selling part of the value chain.

2.7. Video Game Products

2.7.1. Video Game Consoles and Console Manufacturers

One of the significant characteristics of the video game market is the almost steady growth. It manifests video games 40% consoles comprise of consumer spending in comparison to other participant products of the market. (OECD, 2005) The market is composed of three main console manufacturers: Nintendo, Sony, and Microsoft. They have constructed a robust ground for consumer preference and brand name in the market. Generally, they dominantly effect and hence shape the market with respectable sales and demand of consumers.

However, in last the months of 2009, console hardware sales slow down due to the fact that life cycle of the consoles had reached to the stage of maturation. Therefore the leading companies shift their strategies in order to deal with the new situation, for instance Sony and Microsoft cut the prices of their consoles PlayStation3 and Xbox 360. Moreover; Sony launched PlayStation Slim, which is revised version of PlayStation 3. The size was smaller,[17] cooling system is redesigned, and 34% less power consumption is provided. On the other hand, Nintendo decides to follow the robust strategy of launching new and attractive video games for the console Wii in order to make its revenue stream secure.

2.7.1.1. Nintendo

The people, communities and firms that differentiate in their approaches from the expected common and usual are remembered as “innovating”, “challenging” and “creative”. How Nintendo follows such a line of action with its aim, strategies, products and consumer oriented approaches in the industry, were previously exemplified. Nintendo manifests its predominance in the video games industry with the sales figures of its home video game console Wii and its differentiating marketing strategies. In 2009, 52.62 million units of Wii are sold. (Nintendo Consolidated Financial Highlights, 2009)

[17]33% smaller, 36% lighter

Nintendo takes its place in the video game console industry with its products such as NES, SNES, Gamecube and maintains a sustainable revenue stream by selling its consoles and the video games. Nintendo designs video games by giving importance to ensure easy, entertaining game play, lovely characters and motivating game contents which in turn brings the success of diversifying its customer base. However, with Wii, Nintendo achieves the idea which was put forward by Miyamoto[18] in creating a console that would make people want to pick it up and try to use it. (Nintendo, 2010) Therefore the story of Nintendo begins with a simple idea that will address to billions of people regardless of their age, gender, ethnicity, gamer and non-gamer. In this manner, Nintendo ensures a long term relationship with available actual consumers: it maintains consumers considering the possibility of shifting to other consoles and hence attracts the non-traditional consumers of video games and consoles: women and young women, elder men.

There are various reasons for comprising colourful demographics of Wii consumers. One of the apparent features of the Nintendo console is that the console provides a unique way of game play when compared with other competing consoles: Xbox 360 and PlayStation 3. The console is designed with the aim of creating a different portrait of gamers, who are let physically involve in game play via a wireless controller with motion sensibility. Nintendo wants to change the previous impression of video gamers who were seen as generally male, overweight, unsocial, alone people and developed Wii home console with

[18]General Manager of Nintendo Entertainment

decisions taken on these issues in advance. Wii engages people both in game play and sports activities by means of the structure of the console. The games entail physical movement with motion sense controllers that support the system of the console and let the gamers move in game play. Therefore, the distinct nature of the games and festive game play experience would create enjoyable moments that can be shared with friends and family.

As a matter of fact, Wii is generally to compare with the contemporary consoles on account of the fact that they are at the market at the same time period and they are involved in the same product line. Nintendo chooses to offer a console technically inferior but attractive, easy, playable and for different console and game play. The costly elements that are found in competitor consoles such as DVD/HD-DVD playback, qualified processor and graphics are reduced and eliminated. Therefore, the console will be yielded at a lower price. On the other hand, hardware accessories, wireless controller, social gaming, fitness and sports, backward compatibility, online play and web download are put forward with innovative offerings: motion sense controller and character customization. (O'Gorman, 2008) Figure 4 subsumes all of these characteristics.

Eliminate	Raise
DVD/HD-DVD Playback	Hardware Accessories Wireless Controller Social Gaming Fitness & Sports Backward Compatibility Web Downloads & Online play
Reduce	**Create**
Processor Quality and Graphics Price	Motion-sense controller Character customization

Figure 3: O'Gorman's Eliminate-Raise-Reduce-Create Grid for Wii (O'Gorman, 2008)

Taking all the factors into account, Nintendo presents a product displaying distinct and unique characteristics as it embraces of people belonging to different demographics and reinforces intercreativity and social relations by offering entertainment for different purposes. Therefore, it is observed that Nintendo turns out to be one of the prominent examples for the application of Blue Ocean strategy applications.

On the other hand, Nintendo's efforts on promotion activities are worth to deal with. In 2006 Nintendo became a point at issue with which activities Wii is presented. The examples are the south park episode centred on Wii, and the articles about Wii published in Style Watch gift guide issue in People's Magazine part of Wall Street Journal. As a matter of fact the promotion activities for Wii are observed to be divided into three parts: hands on sampling, feeding buzz, brand partnerships.

Reaching consumers and especially non-consumers requires a respectable effort, time, capital and a well designed plan. Nintendo comes up with a creative solution for the problem. In 2006, Nintendo began to deal with the problem by identifying three different segments to address: multigenerational families, hardcore gamers and modern mothers. All of them have different needs, wants, likes, dislikes and expect different strategies to approach. Therefore, Nintendo organizes an ambassador program. It includes identifying ambassadors throughout the country. Nintendo invites these ambassadors with their 30 closest friends and relatives to the events hosted by Nintendo, to give them an opportunity to experience playing with Wii to change their point of view about video games and consoles.

Since consumer’s trial of the console is important, Nintendo sets up areas in malls in U.S., where people go and have the chance to see what Wii is about, and play and test the games. “Wii mall Experience” is designed for the aim of engaging people shopping in the malls in playing with the console regardless of their age and gender. Moreover, Nintendo arranges cross country tours under the name “Nintendo Fusion Tour” where the console Wii is playable. The Fusion Tour includes nationwide concert series and presentation of Nintendo console games for attendants to enjoy.

People can be influenced from pioneers of several branches such as music, fashion and media. Nintendo realized the suggested point, and facilitates gatherings hosting urban influencers of music, media, and fashion.

2.7.1.2. Sony

Among the three manufacturers we deal with, Sony has a different place to evaluate in that, it serves in various differentiating branches in technology market: electronics, communications technology, televisions, computer monitors, video games, video game consoles, movies and music. The story of Sony begins in Japan. Starting as a manufacturer of tape, tape recording products and radios in 1950s, Sony follows the giants' path with presenting Betamax video cassettes and portable tape player Walkman in 1970s, portable CD player Discman, Video8 format, digital audio tape in 1980s and Minidisc in 1990s. (Wolf, 2008)

Sony presents video games consoles beginning with PlayStation in 1994 followed by PlayStation 2 in 2000, PlayStation Portable in 2005, PlayStation 3 in 2006, and finally in 2009 PlayStation 3 Slim and PlayStation Go. (Wikipedia, 2009)

PlayStation 3 is an advanced video game console, rich especially in graphics and computing. It is superior in technology when compared with other competing home consoles, especially Nintendo Wii. Four types of PlayStation are manufactured and marketed. The main difference identified in the types is the disc capacity: 20 GB, 40 GB, 60 GB and 80 GB. The importance of the disc capacity lies in the advantage of saving more data in that extra capacity is useful in providing storage for the download of extra patches, armours and extras from internet. Furthermore, the PS 3 model with 80 GB capacity has the service of Wi-

Fi wireless internet connection. PlayStation 3 with 20 GB is drawn back from the markets of various countries. Furthermore, PlayStation 3 is compatible with some of the games developed for PlayStation 2.

With PlayStation 3, Sony takes an important step and presents blue-ray technology disc drive. Thanks to blue-ray technology, Sony plans to gain the acceptance of video game consumers by adopting it as a new standard of encoding format and obtain future profit via new format within the life cycle of the console. Blue-ray disc drive allows PlayStation consumers to enjoy high definition display of games and movies with twice faster drive slot loading than the types provided before. Blue-ray Disc drive allows running games, movies, DVDs, CDs basically. The advanced graphics from 480i/576i SD up to 1080p HD in the console is obtained with NVIDIA ASX 'Reality Synthesizer'. In PlayStation 3: Cell microprocessor designed by Sony, Toshiba, IBM as CPU composed of 3.2 GHz Power processing element and eight Synergistic Processing Elements, Bluetooth 2.0, USb 2.0, HDMI1.3, gigabit Ethernet components are used.

Sony applies various strategies in the presentation of PlayStation 3. First of all, Sony is aware of the advanced technology of its console, and is determined to use the suggested characteristics of the console in marketing process. The technology used in the console ensures the quality of display of the games and movies through high resolution feature via graphical support. Moreover, its blu-ray disc drive and its compatibility with HDTVs allow the gamers play real-like games, which is hard to get a similar pleasure in PCs and other competing consoles such as Nintendo Wii. It provides the experience of the audio quality in music, game and movie sound. At the second place, the blue-ray technology was used in a video game console for the first time. Actually, such an introduction means new opportunities for Sony on account of the fact that Sony incorporates various branches of different technological products' manufacture such as HDTV. By promoting a new compatible high definition standard product: blue-ray technology, Sony achieves - having an extra revenue stream through triggering the sales of new blu-ray movie discs, DVDs, CDs and music.

PlayStation 3 can be assessed as a technologically advanced product. Nonetheless, the beginning years for Sony needed some extra effort to resist against some difficulties. The console is rich in technology, therefore; manufacture cost of a such product with its components exceeds its extent for a firm to get profit from the sale of it. At this point, Sony concluded in a strategic decision and sold PlayStation 3 for a price not meeting the production cost. Sony plans to balance the suggested loss by means of the sales of video games they launch for the console, by which Sony applies razor blade strategy by accepting the loss at the beginning in the sales of PlayStation 3 and secures large base of PlayStation 3 consumers with a consistent and continuous revenue stream over games sales.

Another strategy used by Sony is offering console specific new video games such as *God of War III*, *Final Fantasy Versus XIII*, *Metal Gear Solid 4: Guns of the*

Patriots, *EyeToy*, *Gran Turismo 5*, *Killzone 2*, *SingStar*. (Wikipedia, Playstation, 2009)

2.7.1.3. Microsoft

Microsoft is one of the leading companies in history of software by generating its revenue by means of developing, manufacturing, licensing, supporting variety of software services and products compatible with many different types of computing devices. The wide range of software products and services Microsoft offers comprise operating systems for personal computers, servers, and intelligent devices; server applications for distributed computing environments, information worker productivity applications, business solutions applications, high-performance computing applications, software development tools and video games. Video games has now a fast growing and sizable market. Moreover, Microsoft designs and sells hardware for video games market since 2001 starting with Xbox and following with Xbox 360 video game console in 2005.

Even though the majority of Microsoft's revenue in company fiscal year 2009 is derived from the sales of Windows Vista, Microsoft competes with challenging, well established companies attracting the consumers in the market with their different viewpoints. They contribute in the market of commercial software products such as Apple Canonical, Redhat. As for the products, Linux operating system, available without payment, is a critical rival that challenges Microsoft and creates a need to take it into consideration. (Microsoft, 2009)

It is seen that Microsoft addresses the basic technological products area: the PC market. It diverts Microsoft to follow the secure road for the services and products in video games area including video game consoles Xbox, Xbox 360 and video games. Therefore the primary segment targeted by Microsoft is hard core male gamers, who have knowledge and experience about computers and video games.

The second segment Microsoft tries to attract is non-traditional consumers: women. In the strategy followed for broadening the appeal of Xbox 360 for women, Microsoft holds up Nintendo's approach to capture the interest of different consumers especially women. Therefore, Microsoft gets in to action and targets women who especially live with male gamers. They will be a means for women to engage in the game play, experience games with Xbox 360, and introduce multimedia features with the console which they can socialize on the sofa with Twitter and Facebook.

The year 2007 can be accepted as the year that the success of the Nintendo's efforts on Wii was distinctively observed. Thus, Nintendo became one of the best brands in 2007 (Fletcher, 2009) with its achievement of addressing demographics being composed of people of all ages and gender. Observing the same situation, Microsoft, which developed games and consoles for hard core male gamers until 2007, took a radical decision about including women and families in target segments of Xbox 360.

Nowadays, while planning, Microsoft takes the applications of some eminent firms' applications into account -such as Apple- to revive its image of a visionary company. In 2009 Microsoft opened a small number of retail stores and enabled users to play with an Xbox 360 gaming console and at the same time get to know its peripherals. (Fierce, 2009)

Another application of Microsoft is cooperating with a charity foundation to deliver Xbox 360 video game console kiosks in Children's Hospitals across U.S. It is also one of the programs Nintendo applies. According to marketing analysts, Microsoft will have some advantages with the suggested strategy of paying attention to social environment. First of all, Xbox 360 addressed only to hard core male segment until 2007 and the planned to include other segments into its consumer portfolio. Therefore, the kiosk in the hospital environment for children is a means for introducing Xbox 360 and hence arousing brand recognition from early ages and developing long term relationships. Therefore, the strategy helps forming loyalty of children consumers, who will continue playing and creating buzz with their recommendation to their friends or by word of mouth advertising they will readily apply.

Furthermore, Microsoft witnessed Nintendo's strategy of involving especially women as a new segment in consumer portfolio. Thus, Microsoft begins to handle women consumer issue. It develops new strategies for attracting the new segment for increasing the revenue they acquire both from video games and video game consoles. Microsoft concentrates on video games, and especially Xbox 360.

In order to attract women, Microsoft started with brief changes the brochure they published in 2005. It uses the male gamers who live with women, and included the note “Here are some things you might want to tell your wife this thing does.” which reminds Nintendo’s note in playbook. (Cole, 2005) In 2008, Microsoft began with a new service: house parties which involve sending free Xbox 360 to women who accept to invite 10 friends or family members for the house party in U.S. as brand advocates. (Howard, 2008)

In 2009, Microsoft cooperated with different people to reach the target segment women. While maintaining their strategy on communicating with women with house parties, Microsoft provides $ 150 pack of Xbox as free for house cleaners, hairdressers, guidance counsellors and IT technicians on the condition that they open their homes to at least 10 friends and relatives. Moreover, Microsoft carries out some promotional activities with celebrities: signing up with prominent sportsmen and several celebrities to draw interest of the women to display new Xbox 360 console that Microsoft cut the price to $199. (Krangel, 2009)

However, on account of different characteristics and especially concerning technical specifications, Xbox 360 mainly addresses male video game players. The games of Xbox 360 require game experience and have some different taste of video games that women may not prefer and moreover find them complicated for a less experienced gamer.

As for products, Microsoft offered two types of Xbox 360 which had three versions before Microsoft withdrew core type of the console. In the web site of Xbox 360, Arcade and Elite models are presented. (Microsoft, 2009) The differences between two models are that the elite model has a more developed hard drive: 120 GB. On the other hand, Arcade model has 256 MB[19] hard drive which enables gamers to save data on the console. Furthermore, due to the advanced electronic parts, the price of elite becomes higher than arcade type: Elite type of Xbox 360 is currently available from 299.99 Euro and Arcade is available from 159.99 Euro. Especially for hard core gamers, Microsoft markets elite model with an assertive quote: "Explore the most advanced Xbox 360". It is delivered with promotional products headset and black console controller.

2.7.1.4. PC

PC market is one of the inseparable parts of video games market. In fact, it is one of the alternative platforms for gaming. With MMORPG games, PC market becomes one of the important revenue sources of video games sector. In 2008, 228 million units of notebooks and desktops were sold. The figure is expected to increase to more than 600 million by 2013. (Capcom, 2009)

Video games have the advantage of being published for PCs and PC market gets advantage of running video games that are mainstream. The growth in PC market is up to a significant proportion based on video games, especially online games.

[19] 256 MB is equivalent to 0.256 GB

(Geddes, 2007) PC gaming software revenue was a $13.1 billion in 2009 by increasing 3% when it is compared with the previous year. (Capcom, 2009) However, developers and video game players pay more attention to console games and throughout the time PC games market seems to stagnate and even a bit shrink.

2.7.2. Video Game Developers (Software Market)

2.7.2.1. Costs and Finance

The lucrative part of the video games industry is video games or the software part: the games themselves are born in the kitchens of developers and given to publishers for presentation and access by the consumers. Video game developers and publishers are the main schools accepted in the software part of the video game market. In literature review, developers and publishers are dealt as the components of the value chain.

In this part, prominent firms in the video games software market are examined. The strategies they apply to make profit, and the applications they use to survive are mentioned.

In order to have a place in the industry, the companies in the software industry try to keep up with the changes. Day by day the video games platforms are becoming more sophisticated; therefore, the games developed for them need to be more advanced. Therefore, higher costs per unit of developing and marketing occur. Generally, developing an advanced title or game by employing a qualified team takes from one to three years changing according to financial situation and other problems encountered. (Wikipedia, Game Development, 2009) Creating a video game is assessed to be a quite costly process in that it requires sound evaluation of financial resources, time and robust cooperation. Developing a video game for the modern consoles in the market approximately costs between $1 million to $20 million. (Wikipedia, Video game publisher, 2009) Thus, independent game developers make agreements with game publishers to get financial support, and market their games and transfer the rights of the game. Terms are determined by a contract signed. Through the copyright agreement, developers acquire a royalty of approximately 20% of the game sales profits and leave 80% as the profits to publishers. (Encyclopedia VBXML, 2008)

2.7.2.2. Research and Development (R&D)

Other than the financial side of a game, there are also some points to take into consideration: R&D activities. R&D are known to be a new technique used by the firms in product development, advertising and distribution. It is very hard for developers to predict whether the game they have written will be successful i.e. whether there will be high demand for a game or not. Thereby, they meet the need for getting information on the reactions of the consumers about the existing or upcoming game by means of online community of game consumers in addition to consultation of marketing research firms. Consumers engage in long term connection with producers by means of game community participation in delivering their ideas about the development of the game and the problems the consumers encounter. By taking the advantages of R&D department into account, both the information gathering about the product and demand forecasting will be time and cost saving. By R&D activities, advertising games in advance is controllable. Therefore, R&D activities turn out to be one of the essential applications for the game presentation. (Jeppesen, 2002)

2.7.2.3. Risk Reduction

Another crucial application in creating video games is reducing the risk of the projects which corresponds to developing titles or games. Publishers generally take the risks for the upcoming game, in that from the beginning, they take the responsibility and ownership[20] with an agreement signed with developers about the copyrights, transferring rights, and in turn provide financial source for the development of the game. Therefore, they need to reduce risk by several ways, one of which is spreading the risk across multiple projects, which suggests investing on several projects so that the failure of one title has the possibility to be compensated by other successful title sales and multiple platforms. Thus, one title can be written for more than one console. Also PCs with control over intellectual

[20]The extent of the ownership changes according to the contract they make with video game developers.

property rights and loss of a title have the chance of compensation with a profitable title. (The Video Games Industry Report, 2008)

As a matter of fact, the creation of video games which are appropriate for current generation of consoles, Nintendo Wii, Sony PlayStation 3, and Microsoft Xbox 360 involves financial management, commitment to R & D, the spread of risk across multiple projects by not forgetting platforms and to be painstakingly careful about the intellectual property rights.

However, there are some points which necessitate clarification. Developer and publishers are the main parts of the video game industry. A respectable part of the software market process of the industry is based on the interaction and cooperation within them. However, some problems can arise among them. To reduce risks, there are some ways they choose to apply to avoid some problems. One of the most important problems is surely, that of between publishers and developers or console manufacturers, which also develop games themselves. They have the opportunity to work with independent developer firms or in-house developers consisting of small groups.

2.7.3. Video Game Publishers

According to Gallaugher, some markets are composed of two distinct categories of network parties. (Gallaugher, Wang, 2002) In fact, such a network system is also valid for video game market; even if the market structure is comprised of various participants like video game developer, retailer, distributor, publisher, hardware manufacturer. Among them the two participants being the hardware manufacturers and software developers, constitute the backbone of the industry. Due to the agreements made between software developers and hardware manufactures in advance, consumers are able to play specific games designed for PC or the particular console. Therefore, software and hardware are interdependent parts of the video game industry. Publishers are the owners of the video games and video game consoles by means of agreements. Furthermore, publishers also have the responsibility for carrying out the transactions to the customer side. They operate the sales and perform marketing of a game, and they take business decisions such as translation of a game into other languages by means of cooperating with other studios. (Wikiinvest, 2009) On the other side, a profitable market brings about a framework that participants of the market require to operate within a predefined system, thus; some challenges, limitations, difficulties and complications might take place.

2.7.3.1. The Situation of Significant Companies

2.7.3.1.1. Electronic Arts (EA)

Electronic Arts is one of the publishers mentioned as a video game giant in the market. In their official web site, the firm claims to be the world’s leading independent developer and publisher of entertainment software and advanced entertainment systems. With its software works, Electronic Arts has gained 700 awards in the United States and Europe since it was founded in 1982. By means of specific licensing and partnership agreements, EA has made in recent years, its place at the top of the industry. The company develops, publishes, and distributes interactive software worldwide for videogame systems, personal computers, cellular handsets and the internet. The company's flagship brands include EA, EA Sports, EA Sports Big and Pogo. EA primarily operates in North America and Europe and employs 7,900 people. The company recorded revenues of $3,091 million during the fiscal year ended March 2007, indicating an increase of 4.7% over 2006. However, the operating profit of the company was $39 million during the fiscal year 2007, which meant a decrease of 88% over 2006. The net profit was $76 million in fiscal year 2007, showing again a decrease of 67.8% over 2006. The net profit was higher than the operating profit in fiscal year 2007 owing to net interest and other income of $99 million. (Wikiinvest, Electronic Arts (ERTS), 2010)

In video games industry, EA has a different place among other firms in that, it gives importance to several other factors such as quality. According to Electronic Arts, quality is a priority whereby they manifest their philosophy through providing titles : *The Sims*, *Fight NightRound4* (which was the best sports game chosen in E3 Expo and sold over 1.7 million) *Tiger Woods PGA TOUR 10*, *The GodfatherII*, *Harry Potter* and *Half-Blood Prince*. Moreover, EA is open for novelties and has the courage for novelties. EA maintains its position of being the leading third party publisher in Europe and North America. (Mitra, 2009)

Electronic Arts works with several companies providing platforms: PlayStation 3, Microsoft Xbox 360, Nintendo Wii, PSP, Nintendo DS and also PCS, cellular phones, smart phones by developing, marketing, publishing and distributing titles. The genres of the titles it develops are composed of action-adventure, casual, sports, family, fantasy, racing, music, massively multiplayer online role-playing, simulation and strategy. Three different labels are included in Electronics Arts Company: EA GAMES, EA Sports and EA Play, and all of them provide games of different genres.

2.7.3.1.2. Activision Blizzard

Activision Blizzard, a worldwide online, PC and console game developer and publisher, is another important brand as its name suggests. The company creates the effect of a blizzard both in markets and gaming history with its titles such as *Warcraft* which is a strategy game, launched and published in series as *Warcraft: Orcs& Humans, Warcraft II: Tides of Drakness, Warcraft III : Reign of Chaos* which are real time strategy games. The last title of the serial *World of Warcraft* is developed as mass multiple online role playing game. According to the announcements of Activision Blizzard; subscribers of the game reaches 11.5 million worldwide. (Blizzard, 2009)

In recent years, Activision offers games for the Sony Computer Entertainment PlayStation 2, Sony PlayStation 3, Nintendo Co. Ltd. Wii, and Microsoft Corporation Xbox 360 console systems, the Sony PlayStation Portable and Nintendo Dual Screen hand-held devices and the PC. (Blizzard, 2009)

Activision Blizzard is owned by three companies: Activison, Blizzard Entertainment and with majority of shares Vivendi Games, to become “"the world’s largest and most profitable pure-play video game publisher". (Activision, 2009) The company is operated by four divisions: Activision Publishing, Blizzard entertainment, Activision Blizzard Distribution, Activision Blizzard’s Non-Core exit operations. (Blizzard Fact Sheet, 2009)

With its $1 billion revenue, Activision Blizzard offers a wide range of games with which its name is mentioned: *Guitar Hero*, *Call of Duty*, *Call of Duty:Modern Warfare 2* and *Tony Hawk*, as well as *Spider-Man*, *X-Men*, *Shrek*, *James Bond* and *Transformers, Marvel Ultimate Alliance 2* and important franchises *Crash Bandicoot* and *Spyro* and also Blizzard Entertainment's *StarCraft*, *Diablo*, and *Warcraft*. (Activision, 2009)

According to Atlantis Research Group, the sales of *Guitar Hero 5, World of Warcraft, Marvel Ultimate Alliance 2* had important contributions in the 2009 revenue of Activision Blizzard. Especially titles from *Guitar hero* and *Call of Duty* drive a head of the estimates, $47 on the 2009 revenue to $755 million. In spite of the fierce competitive market of video games, Activision Blizzard market share increases 3 % in U.S. However, it is worth to mention that it was the merge of Vivendi Games and Activision in 2008 as the principle reason behind the exceeding financial goals. (Coppola, 2009) The mentioned unity gives the chance of being an important leader in online video games market and especially in Asian markets. Therefore, *World of Warcraft* is affected from the merge which makes it by far the biggest game in the sector with approximately 9.3 million subscribers globally, and causes Activision Blizzard to earn $1.1 billion annually. Moreover, Vivendi's loyal customer contribution cannot be denied. According to video game analysts there are about 15 million World of Warcraft game players in the world, and more than half of it are Vivendi customers.

2.7.3.1.3. Take-Two Interactive Software

Take-Two Interactive Software is another name among the respectable publishers, developers and distributors. The company continues its activities worldwide by offering video games for PC's, home consoles and hand held consoles of Microsoft, Sony, and of Nintendo: the PlayStation 2, PlayStation 3, PlayStation Portable, Nintendo Wii, Nintendo DS, Microsoft Xbox360. The company also publishes games with its own brands as Rockstar Games and 2K via the titles 2K Games, 2K Sports, 2K Play. (Take2games, 2009)

The majority of the popular video games of Take-Two Interactive are composed of action, adventure, role playing, first person shooter and racing genres. With its subsidiary Rockstar Games, Take Two publishes the *Grand Theft Auto* series: *Grand Theft Auto, Grand Theft Auto 2, Grand Theft Auto III*, *Grand Theft Auto: Vice City*, *Grand Theft Auto: San Andreas*, *Grand Theft Auto: Liberty City Stories*, *Grand Theft Auto: Vice City Stories*, and *Grand Theft Auto 4*. It also publishes other notables games such as *Serious Sam*, *Manhunt*, *Manhunt 2* and *Bioshock.*

2.7.3.1.4. Ubisoft

Founded in 1986 in France, Ubisoft is a creation of five brothers. Starting from a family company, Ubisoft made record sales in U.K., Germany and U.S. within ten years. (Wikipedia, 2009) Ubisoft, as a video game publisher and developer has three basic strategies shaping the way they follow for success. Becoming a strong brand is the first factor the company is focused on. The quality in games is a significant principle for Ubisoft in that it offers distinguished titles such as *Prince of Persia* which is sold 14 million, and *Assassin's Creed* 8 million, *Tom Clancy's Rainbow Six* 21 million, *Petz* 17 million, *Rayman*, 20 million, *Driver* 14 million and *Red Steel* 1 million units sold worldwide. Moreover, Ubisoft aims at expanding its catalogue to reach new market segments. Another factor is that the company believes in internalizing video game development with their teams and 17 studios. Distribution is the last point Ubisoft stresses on, when success is the point at issue. The company serves the consumers and offers their video games through making the products accessible with its worldwide distribution network in 23 countries.

2.7.3.1.5. Toy Head-Quarters (THQ)

Among the top video game developer and publishers, THQ differs from its other competitors as video game developers and publishers in the market on account of the fact that, especially it is distinguished in the target market it aims to serve. THQ mainly focuses on hard core gamers by means of offering high quality and innovative games, which extends the company's leadership in the genre of fighting games. The product portfolio THQ presents consists of internally created and externally licensed titles. (THQ, 2009)

The important franchises THQ performs are *Saints Row*, *Red Faction*,*Frontlines*, *MX* vs. *ATV*. Furthermore the company gives importance to licensing agreements with sports and entertainment content creators such as *World Wrestling Entertainment*, *Games Workshop*, *Ultimate Fighting Championship*, *Marvel Entertainment*, *DreamWorks Animation*, *Nickelodeon*, *Disney Pixar*. (THQ, 2009)

2.7.3.1.6. Namco Bandai

Well known brands have their name made known to publicity with the products they offer to them like Namco Bandai. Namco Bandai is established by the merger of the two companies in 2005: Bandai and Namco. The company publishes titles such as *Pac-Man World Rally, Mario Kart Arcade GP2, Tekken 6, Soulcalibur IV,* *Super Mario Sluggers, Soulcalibur: Broken destiny, Tekken 6: Bloodline Rebellion, Power Rangers, Teen Titans, Tamagotchi,* As a matter of fact, Namco Bandai does not facilitate only in the area of video games and video games market, they also participate in toys market, amusement activities, visual software, apparel, sundries. (Bandai, 2009)

2.7.3.1.7. Konami

The last publisher and developer that will be dealt with is Konami. Konami is remembered with some of the significant video games over the past 15 years. As the video game platforms which include PCs, video games consoles and mobile phones are getting more complicated and advanced, Konami takes important decisions on the products they will offer for consumers to be aesthetically pleasing, entertaining and engaging. (Konami, 2009)

Konami is known for its video games under sports titles such as *PUROYAKYU SPIRITS 6*, *J.LEAGUE Winning Eleven 2009 CLUB CHAMPIONSHIP* and *JIKKYOU PAWAFURU PUROYAKYU*, *PORTABLE 4*, under animated titles *A penguin's troubles X* and *Okamikakushi*, and a new game which Konami offers it under communication games is *LOVEPLUS.* It covers daily life characters according to the time and season in the real world. Furthermore with *Dance Dance Revolution* series[21]and *Pro Evolution Soccer* series, Konami captures its

[21]*Dance Dance Revolution* series are known as *Dancing Stage* in Europe.

place in the market. In previous years, *Metal Gear Solid 4 Guns of Patriots* becomes one of the main titles in the market which was also appreciated in the reports of Konami. The financial performance of the company is evaluated as ¥51,419 million in 2009 but it decreased by 44.7% when it is compared with its previous performance.

2.7.3.2. Evaluation of Publishers

Taking publisher side into consideration has a particular reason. The software part of the market has a very significant share in the industry. Approximately, more than half of the revenues and expenditures, on one side and creation of important decisions about the games on the other side are taken at the stage which publishers have dominant roles. In the process of working on the suggestions for the solutions about the video games purchase reluctance of women, the publishers can be seen as one of the important factors needed to be questioned.

In the previous section, main publishers are introduced and in the present part, there will be an examination of the results of their efforts according to the products they have worked on. Most important source mentioning about publishers is Atlantis Research. Atlantis Company prepared a financial document for Activision Blizzard for the year 2009. In it, the stocks and comparative data of several video game publishing companies are manifested. According to the table demonstrating video game industry valuation, Activision Blizzard has the largest market capture with $13.737 which is followed by Electronic Arts with $6,698, Take Two with $658 and THQ with $ 200 as shown in the following table.

Table 3: Market Capture of Publishers According to Video Game Industry Valuation of Atlantis Research Group (Coppola, 2009)

COMPANIES	**TICKER**	**MARKET CAPTURE**
Activision Blizzard	ATM	$ 13,737
Electronic Arts	ERTS	$ 6,250
THQ	THQI	$ 200
Take-Two	TTWO	$ 658

In table 4, below Activision demonstrates the best performance of the videogame companies in revenue growth[22] and THQ has the second largest revenue growth by leaving behind Take Two Interactive with 7 % and Electronic Arts with 0 % growth in the comparison. On the other hand, the scene of the market changes in the international revenues. Electronic Arts leads in the global platform by having 48% of the revenues, Activision Blizzard and THQ share the second rank by 45% revenue, Take –Two Interactive has the third rank with its 25 % international revenue.

[22] 59 %

Table 4: Percents of Revenue Growth and International Revenue of Publishers According to Atlantis Research Group (Coppola, 2009)

COMPANIES	TICKER	REVENUE GROWTH	REVENUES INTERNATIONAL
Activision Blizzard	ATM	59 %	45 %
Electronic Arts	ERTS	0 %	48 %
THQ	THQI	24 %	45%
Take-Two	TTWO	7 %	25 %

The other research on the ranking of video game publishers is carried out by the Game Developers' magazine: Game Developer Research. Game Developer Research was implemented in 2009. The ranking in the table was by taking into account of the number of game releases, average view scores and estimated revenues of the publishers between the dates August 2008 and July 2009 on the quantitative data side. Furthermore, the magazine applied for the opinions and comments of 900 industry professionals who took apart in all of the game production process. Besides, workers and partners in direct relationship with publishers were taken as another reference group for the research. Their scores and commentaries on the issues marketing, popularity and paying feedback resulted in the construction of one of the yardsticks. However, some significant web sites such as gamasutra made opinion surveys. Opinions of 30 major publishers were also collected and included in the evaluation of the top publishers in the research. (Game Developers Research, 2009) Out of such diversity of component data, the rankings of Figure 4 were concluded.

1.Nintendo
2.Electronic Arts
3. Activision Blizzard
4. Ubisoft
5. Take-Two
6. Sony Computer Entertainment
7. Bethesda Softworks
8. THQ
9. Square Enix
10. Microsoft
11. Konami
12. Sega
13. Capcom
14. MTV Games
15. Namco Bandai Games
16. Warner Bros. Interactive
17. Disney Interactive
18. Atari
19. Atlus
20. LucasArts

Figure 4: Top 20 Publishers identified by 2009 Game Developer Research (Game Developers Research, 2009)

According to the rankings of the Game Developer Research, previously, Electronic Arts has the top position, until Nintendo displaced it. Activation Blizzard came also forward into the third place. In 2009 the company is made mention of especially with its MMORPG game; *World of Warcraft*, its new music- based franchise, *Guitar Hero* and new customers after its merge with Vivendi Games. Ubisoft maintained itself in the fourth slot. The 2009 revenue of the company exposes to a small drop when it is compared with the previous years. However, Ubisoft takes its situation under control on account of three reasons. First of all, the company acquires new development studios in different parts of the world. Second of all, titles such as *Shaun White Snowboarding* and *Far Cry 2*, which are sold over three million copies, contribute the revenue of the firm. Third of all, the workers of the company are pleased with the firm. They describe the firm as “a friendly place to work”. Take- Two Interactive displays a different picture when it s compared with Ubisoft in that Take- Two Interactive shows an uptick from the sixth rank to fifth rank by displacing Sony Computer Entertainment. Bethesda Softworks follows Sony Computer Entertainment as a new company in the list by entering the list in seventh place.

The mentioned effect of replacement of rankings by the firms, which is given in the study was measured by using Spearman’s Rank Order Correlation Coefficient. (Sachs, 1984) It comes out to be 0,8 Testing the result, it seems that between 2009 research and its predecessor the concordance of top ratings are significant at % 90 level. Hence, the result indicates the existence of some stability in keeping the ranking places at the top of the list by giant companies.

2.8. Video Games Market

2.8.1. General Outlook

In the mid 1970s, as a result of the endeavour and irresistible curiosity of a nuclear scientist, made with full motivation, the inexplicable creation was born: video games[23]. At the beginning video games was a form of entertainment embracing solely children. Within a decade, an entertainment tool has recreated itself out of its skeleton buried years ago to become a niche market. Video games begins its journey with the support of technological advancements, and its lucrative attraction which leads to exciting avenues for analyzing and developing the ever growing innovation, and which turned out to be a 50 billion dollar industry in more than 30 years. (Kioskea, 2008)

There some specific characteristics of the industry that makes it worthwhile to study, examine and analyze. First of all, in video game market, video game consoles constitute a significant part. The sale of the console portion of the market is very important. (Toldt, 2008) The general marketing strategy relies on the selling of the consoles which was found to have a five year life cycle. Thanks to length of the console life cycle, continuous revenues from the sales of games are ensured. (Clements, Ohashi, 2004)

[23]Interactive Entertainment is used interchangeably.

Video games industry attracts attention of game culture researchers, marketers and investors in business as an area to deal with and examine. Some determinant factors such as sales, growth profitability indicate that video games market deserves the label of being “successful”. One of the foremost factors among them is the growth of the market. In literature, the research on the subject matter depicting the promising future stress on the growth the video games market. In U.S. various companies, e.g. the publisher and developer Empire Interactive have the consultation of research groups like NDP group to assist and direct their marketing decisions. NDP announced 28% growth in the sales of video game consoles and 11% in video games in 2009. (NDP, 2007) There are some various reasons lying behind the suggested portrait which manifest the growth. Tomaselli, Di Serio and Oliveira (Tomaselli et. al., 2008) highlighted one of the reasons for the growth of the market. They observed the generation, playing games. They found out the generation playing games are brought up with television and video games. The presented generation is called video gamer generation. (Tomaselli et. al., 2008) Video gamer generation is larger than “baby boomer” generation which directed the U.S. economy for years. (Zackariasson, Wilson, 2010) Addressing and targeting such a large segment requires acre and sound knowledge and data. By means of appropriate marketing strategies, the presentation and marketing of video games and video game consoles to the diverse segments within the suggested video gamer generation, which covers gamers, non-gamers, casual gamers, hardcore gamers among young women and young men is a crucial opportunity.

The other factor to stress upon for the success of the video games market is the shelf life of video game consoles. Video games consoles which are the best seller products in the video game market by constituting the most important part of the steady growth have a life span of approximately five years. Over the entire life course, the technologies of most of the consoles support the game play of new titles of games which are developed for them individually; therefore, most of the consoles - especially running on CDs - succeed to keep up with the new technological novelties in the software part of the market.

Video games and consoles are very significant and determining market since they trigger the purchase of a large number of complementary products. The mentioned complementary products are categorized in four parts: processors, content, devices and internet access. For game play quality of a new title[24], new technologies are developed. IBM, Toshiba and Sony develop chips for faster transfer of data via providing more advanced central processing units. (Crandall, Sidak, 2006) HDTV is another complementary product which is significant especially for console game play. By means of high definition characteristics, it enables gamers to enjoy lifelike visual experience in game play. As a matter of fact video games themselves are perfectly complementary in that they are played with PCs, video game consoles and a screen which includes computer screens and TVs. However, some video games require extra complementary goods like extra game pads, controllers, speakers, microphones and other devices like the guitars and drums which are played in Wii consoles in rock band game. However, the general motive

[24] such as superior graphics, sound and faster game play

can be better exemplified by the on-going strategy Nintendo has maintained for years. When compared with other consoles competing with Nintendo's videogame consoled, they are superior in various technological specifications such as graphics. Therefore Nintendo follows a different road in marketing its consoles which is called Blue Ocean strategy, which will be dealt with in following sections. Nintendo develops creative, cute games that provide satisfaction and enjoyment with easy game play like Super Mario. By means of successful games developed for their console, Nintendo achieves satisfactory sales of the video game consoles and video games.

Notwithstanding, video games industry is point at issue of the comparison especially with other sectors in entertainment industry, moreover it mutually interacts with them. There are various video games of eminent movies that draw interest of the people such as *Batman: The Dark Knight* which was released in 2008. In 2009, the video game of *Batman* arrived on the stage and *Batman Arkham Asylum* which intertwined comics, movie and video game industries via the characters and main plot, was published by Eidos Interactive Ltd for PC (Microsoft Windows), PlayStation 3 and Xbox360. At the same year, MTV games published and Electronic Arts distributed the video games of *Beatles* who are ever known best music group of 60s and 70s, Beatles: Rock band which brings together music and video games industry and achieved 1.3 million units to sell in U.S. according to NDP Group (Wikipedia, 2010)

In 2008 which is the year of economic recession, analysts interpret the state of video games industry as recession proof in that video games market kept growing by $18.1 billion. (Zyl, 2009) According to World Bank, Global Economic Prospects of 2009, the 2009 recession is spreading pervasive effects throughout the global economy that go well beyond substantial declines in production and trade. (DEC Prospects Group, 2009) In spite of the slowdown of the video games industry in 2009, (Ubisoft, 2009) the industry is still expected to grow $68.3 billion in 2012 according to Price Waterhouse Cooper**.** (Trendbird, 2009)

2.8.2. Threats in Video Games Market

A volume of production which generates an economic activity and hence "value added" of the explained huge dimensions, should also be considered according to the possible threats, because if the sector shrinks, it might cause some disastrous effects.

Moreover, economic reasons can be prevented by economic measures. However, is the threat is exogenous and non-economic by its very nature, then it must be examined carefully, and adequate preventive measures must be taken.

Video games sector has such an exogenous threat. It is the possibility of addiction on one side, and the intolerable action in the stories of video games, like violence on the other. These psychological effects must be subjected under serious, effective and continuous control, if the economic activity should be kept out of non-economic interventions. Those interventions arise from necessities for the survival of a healthy society, which is primarily task of every government and international organizations.

The following subsection deals with those psychological effects. It will briefly handle the case of "piracy", to complete the picture.

2.8.2.1. Addiction and Violence in Video Games and Their Control

2.8.2.1.1. Violence

Psychological side of the video game entertainment is created one of the important debates in both media and academic platform. Violence, aggression, introversion, addiction, child issues are main subject matters that are discussed and among the psychological issues in terms of video games and players. The examination of psychological issues on the video games enlightened some essential facts especially in violence and aggression concepts.

In 90s, newspapers wrote about some news related with video games which people were not used to see. A violent murder of 13 students at Columbine High School in U.S. by two teenage boys Eric Harris and Dylan Klebold was reported on the first pages of the newspapers and opening news of on TVs. Even though the cause of the teens' attack was not exactly understood, some theories about the effects of video games on children were put forward. (Anderson, Dill, 2000) Some critics in media industry claimed that video games are the major trigger of high school murders such as the one committed at Columbine High School in 1999. (Dang et.al., 2007) According to Anderson and Dill, both killers, Eric Harris and Dylan Klebold, enjoyed playing violent video games such as *Doom*. Therefore, the mentioned claim put forward the idea that these games had a role in violent acts. (Anderson, Dill, 2000)

In academic literature, there are numerous approaches in handling the concept of violence in video games. First of all, violence is defined in a way, that it manifests itself in the form that a character in the game attempts to cause physical injury or death of another character. (Thompson, Haninger, 2001) In the video games that are defined as violent, the behaviour is learned and practiced by means of the unique characteristic, interactivity of video games. Afterwards, the player may use the skills and experience they get from the games in real life situations, when they participate in community. (Dang et.al., 2007)

On the other hand, there are some opposing studies. Wikipedia refers several studies that find no link between the usage of video games and violent acts. The studies of groups such as The Harvard Medical School Center for Mental Health, The Journal of Adolescent Health, and The British Medical Journal indicate that there are no conclusive relationships between video game usage and violent activity.

2.8.2.1.2. Addiction

Addiction is another issue, frequently encountered in the examination video games in terms of psychological aspect. There are some reasons lying behind preferring to play video games very frequently. It provides entertainment, relieves stress and sometimes it lets out the anxiety and violence by and among people. However, there are some extreme cases reported. On account of excessive gaming activity: some gamers fail to accomplish daily tasks which arises problems. (Dang et.al., 2007) Aristotle delves into the issue of addiction with more simple and explicit explanation: he uses the word “akrasia” which means “lack of mastery”. It is defined as losing the control, and going against reasonable thoughts and coming to the situation of a breakdown into weakness and reacting with passion. (Tyrer, 2008)

In terms of video games, addiction means the compulsive use of video games. It gains its meaning with several observations. Some particular behavioural patterns are related with video game overuse cases, such as playing compulsively, isolating oneself from other forms of social contact, and focusing almost entirely on in game achievements rather than life events. Furthermore, Hauge and Gentile (Hauge, Gentile, 2003) considered the issue of video game addiction in detail and concluded that video game “addiction” is a problem among adolescents, particularly among males, and addiction is associated with adjustment problems such as school performance and aggressive attitudes and behaviours.

With the increasing popularity of video games, the concern about the video game addiction is spreading among parents and mental-health professionals. Even if video games are proved to have some positive effects on children, such as learning some skills for self-care, imparting the attitudes and behaviours that are taught. (Gentile, 2005) It was found out that, playing violent games has a positive correlation with antisocial and aggressive behaviour.

2.8.2.1.3. Control of Video Games

Therefore, an irresistible need for controlling and knowing the content of the games arises especially by parents when purchasing video games for their children. ESRB in U.S. and Canada, OFLCA and OFLCNZ in Australia, BBFC and ELSPA in U.K, VET in Finland, USK in Germany, MJ/DEJUS in Brazil, CERO and EOCS/CSA in Japan, GRB in South Korea, ESRA in Iran, PEGI by European Union were established. Furthermore, there are some different rating companies other than the ones sponsored by governments such as TIGRS, or for example of Apple, examining the games distributed through App Stores of Apple in the world. The mentioned companies implement measures of content rating system in order to classify video games into suitable groups. The rating systems are not only used to assist parents and other consumers about the appropriateness of the video game content, but they are also used to restrict sales of some particular video games by stores. (Wikipedia, 2009)

Among the content rating systems, the ESRB initially proposes four rating groups: Universal which is appropriate for all ages, Teen which covers 13 years old and older young segment, Mature which includes 17 years old and older people, and Adults Only. Although the ESRB is sponsored by video game industry, the content ratings are done by professionals who are expected to make decisions objectively. The content descriptors are used according to the level of violence, crude language and sexual themes. (Funk, et .al., 1999)

ESRB identifies two categories in ratings that are used in togetherness and for different purposes: rating symbols and content descriptors. Rating Symbols give information about age appropriateness of a video game. Content descriptors point out the elements in a video game, such as alcohol reference, animated blood, blood, blood and gore, cartoon violence, comic mischief, crude humour, drug reference, fantasy violence, intense violence, language, lyrics, nudity, partial nudity, sexual themes, sexual violence, simulated gambling, strong language, strong lyrics, strong sexual content, suggestive themes, tobacco reference, use of drugs, use of alcohol, use of tobacco, violence, violent references. (ESRB, 2009) Table 5 resumes some rating categories of ESRB for purposes of illustration.

Table 5: The Rating Scale Determined by ESRB (ESRB, 2009)

Rating Symbols		**Explanation**
EC	Early Childhood	Video games suitable for players in early childhood, three years of age, or older
E	Everyone	Video games suitable for everyone over six years of age
E10+	Everyone 10+	Video games appropriate for ages ten and up
T	Teen	Suitable for teenagers and older people.
M	Mature	Video games restricted to mature gamers, meaning seventeen or older
AO	Adults Only	Video games restricted to adult use, with adult being defined as eighteen years old or older

The rating of a video game is done during the final stages of its development and prior to a launching of a video game. A detailed ESRB questionnaire is given to game publishers to submit their responses about pertinent content of their video game. Other than written information about the game, a DVD of the game that is not playable and containing all pertinent content: gameplay, missions, and cut scenes, extreme instances of content, is expected to provide by publishers (ESRB, 2009)

2.8.2.1.4. Piracy

The other important issue, which is discussed in the framework of production issues of video games, is the video games piracy. According to the Entertainment Consumers Association, piracy includes the acts of illegal manufacturing, copying, selling or distributing of intellectual property, such as video games, without the expressed consent of the rights. (ECA, 2009)

Games are a form of intellectual property, similar to books and films: once they have been created, they can somehow be replicated. Generally the replication process is applied in two main types which are known as video games piracy. First is the duplication of the video game software by individual video game player by means of internet and torrent: download sites. The second type is the copying video games for commercial purposes which are accepted as a criminal offence on account of violating intellectual property rights of the copyright holder. (Everis, 2008) It is a significant problem that video games industry faces with (Nielsen, Research Report: Video Gamers in Europe, 2005) on account of the fact that games, especially named as best seller games, cost tens of millions of dollars to develop. Therefore, without the opportunity to compensate the investment, video games industry can stagnate. (Gallagher, 2009)

CHAPTER 3

WOMEN AND VIDEO GAMES MARKET

Everyday people make millions of decisions, consciously or unconsciously, and everyday people make decisions to buy a good or service or not to buy them in similar way. The point which is needed to deal with is the explanation of the reasons of buying or not buying of the presented good or service in the markets. In order to assist in finding the answer of the golden question in marketing, which is how the buying decisions of consumers can be understood, consumer behaviour discipline has been developed through the interaction of the fields of psychology, sociology, economics, anthropology, social psychology. Consumer behaviour discipline tries to answer questions as such: Why consumers buy or do not buy the presented product or service and if they buy, where, when, how, how much they buy them.

The subject matter of consumer behaviour has importance for our study in that we try to understand the reasons for the college women's unwillingness for purchasing video games and consoles. In our study consumer behaviour becomes one of the guides. It is a practical and crucial means for permeating their minds to have an idea about the factors that demotivates and precludes them from purchasing video games and getting involved in the video games world. By means of consumer behaviour, the study will examine their needs, wants and characteristics to suggest appropriate ways for reaching female consumers.

3.1. Consumer Profile

In U.S. younger adults aging between 18 and 29 are golden opportunity for video games market. They are leaning to playing video games in comparison to older adults. (Pew Interet & American Project, 2008) Gender is another important factor observed in video game playing habits. According to studies, males play video games for more hours and more frequently than the females do. (Chan, 2008) Furthermore, the findings of market studies indicate that traditional market comprises of the young male demographic audience of 8 to 16 year old children (Kleinstein, 2005) and parents of children under 18 age who annually earn at least $100.000. (Nielsen, Research Report: Video Gamers in Europe, 2005)

Table 6: Women Consumer Profiles Given by Nielsen Video Game Tracking Survey (Nielsen, 2009)

Playing and Buying More

Characteristic	Index Value
Total Xbox 360 Games Purchased	139
Traditional Sports Gamer	129
DVDs Purchased	128
Age 7 to 12	127
Xbox Live Subscriber	121
Parent of Child Under 18	116
DS or DSi Owner	113
African American	113
Male	107
Earn $100,000 or More	73

Playing and Buying Less

Characteristic	Index Value
Asian or Pacific Islander	140
Age 18 to 24	129
Female	121
Strategy Gamer	111
Used PS3 Games Purchased	109
Cable TV Subscriber	100
Wii Owner	83
Movies Seen in Past 12 Mos.	76
Total Xbox 360 Games Purchased	53
Video Game Rental Subscriber	33

Source: Nielsen Video Game Tracking survey

On the other side, a recent approach, used in the video game industry, is a widening age demographic of the video game consumer. Therefore, Nielsen Company gives a detailed account of a new profile: female group. They are Pacific Islander or Asian. Their age is varying between 18 and 24. They have fewer tendencies to buy video games. (Nielsen, 2005) They own Wii video game console and Xbox 360 game purchasers.

In Turkey, the situation is different. The youth frequently play video games in cafes, (Ogan, et.al., 2009) although 79 % of the Turkish household notifies that they have at least one PC. (TSI, 2009) According to households' use and access of information technologies study, the maximum computer usage of female respondents is observed between ages 16 and 26 who form 49,1 %. Among them, 86 % of Turkish women have higher education. Moreover 87, 9 % of the female respondents are students. (Table 7)

Table 7: Turkish Statistical Institute's Depiction of Household Information Technologies Use Research (TSI, 2009)

2009

	Bilgisayar - Computer			**İnternet** - Internet		
	Toplam Total	**Erkek** Male	**Kadın** Female	**Toplam** Total	**Erkek** Male	**Kadın** Female
Yaş grubu - Age group						
16 - 24	62,2	76,4	49,1	59,4	74,1	46,0
25 - 34	46,6	58,6	34,5	45,1	57,2	32,9
35 - 44	31,8	42,1	21,3	30,2	40,3	19,9
45 - 54	20,2	28,9	11,6	18,6	26,7	10,5
55 - 64	6,7	10,6	3,1	6,2	9,5	3,1
65 - 74	2,2	3,2	1,4	2,0	3,1	1,2
Eğitim Durumu - Education level						
Bir okul bitirmedi - Literate without a diploma	2,6	7,0	1,3	2,1	5,6	1,1
İlkokul - Primary school	12,8	16,3	9,3	11,1	14,5	7,7
İlköğretim/Ortaokul ve dengi - Secondary and vocational secondary school	55,3	61,1	47,1	52,4	58,6	43,5
Lise ve dengi - High and vocational high school	72,4	77,5	64,6	70,6	76,0	62,4
Yüksekokul, fakülte ve daha üstü - Higher education	88,5	89,8	86,7	87,7	89,0	85,8
İşgücüne dahil olmayanlar- Persons not in labor force	26,1	40,9	21,2	24,2	38,9	19,3
Ev işleriyle meşgul - Houseworks	14,2	18,1	14,2	12,4	15,9	12,4
Emekli - Retired	17,1	15,1	24,1	15,9	13,7	23,8
Öğrenci - Student	91,5	94,7	87,9	88,2	90,9	85,1
Çalışmak istemiyor - Not want to work	34,3	33,5	34,8	30,9	31,7	30,5
Engelli - Disabled	5,9	6,4	5,0	5,3	5,5	5,0
Diğer - Other	20,4	28,8	12,1	19,8	29,5	10,1

According to the research results shown in Table 7, the young women who are between 18-24 years, having degree in universities as students is an appropriate market for the mainstream digital products, video games and consoles. In the study, it is mentioned that the suggested market is appropriate for the marketing of video games and consoles, in that the population are at the life period of learning and using technology.

3.2. Consumer Behaviour

As its name suggests, consumer behaviour places human factor at the centre. It concentrates on the activity of buying or not buying by searching for the mental and physical grounds preparing the final action of purchasing or not purchasing a product or a service. Therefore, it can be defined as: it is the psychological part of marketing, trying to understand and explain consumers' activities in the process of searching for purchasing, evaluating, using and disposing products, services and their reactions to outer stimuli, and furthermore examining the reasons lying behind them.

There are various definitions of consumer behaviour in literature. Mellot (Mellot, 1983) defines consumer behaviour as "it is what goods and services people buy, how they buy them, when they buy them, where they buy them and how often they buy them." According to Schiffman and Kanuk (Schiffman & Kanuk, 1996), "Consumer behaviour refers to the behaviour that consumers display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs." In the same way, Best and Coney state that: " The field of consumer behaviour is the study of groups or organizations and the processes they use to select, secure, use and dispose of products, services, experiences or ideas to satisfy needs and the impacts that these processes have on the customer and society." (Hawkins, et.al., 2007)

For marketers, the critical point in understanding customers and consumers is infiltrating into their black box, where all the process of decision making is generated step by step. (Lee, 2007) The essential part in understanding consumers, which consists of analysis of consumers' decisions and offering solutions for understanding their buying behaviour, embodies a clear understanding of buyers' black box that is mentioned in model of buyer behaviour. Generally, marketing and other stimuli pass through buyers' black box, where buyer decision process takes place and consumers give responses. It is important to understand the ways stimuli are taken, manipulated and produce response. Several factors are active in stimulating the process in the direction of purchasing the product and service or not purchasing them. According to Kotler, stimuli can be grouped as marketing stimuli and other stimuli. Marketing stimuli are mentioned as four P's in marketing[25], and other stimuli are depicted as the major forces in consumer's environment that are economic, technological, political, and cultural factors. (Kotler, Armstrong, 2006) However, it can be illusory to accept these factors as being the only ones that effect consumers' response: consumers' characteristics, their differentiating needs and wants, their characteristics and the process they

[25] product, price, place, and promotion

involved in purchase decision can also make difference. When gathering all these dispersed elements and synthesize them, some variables are seen to shape consumer behaviour in demographic, geographic, psychographic and behavioural sense. (Mescon, et.al., 1999)

3.3. Women as Potential Consumers and The Market

In marketing, consumer and product relationship is essential in reaching consumer markets. If the product represents a huge market, it refers to a huge amount of income, thanks to available segments they address. However, the challenge begins when the huge market, such as video games market, is related with a new segment: women. In literature, there are numerous studies made on women, on the other hand, there are limited number of studies which combines women with marketing of video games.

Nevertheless, women are seen as a new segment for video games market, they constitute the largest market opportunity in the world. (Silverstein, Sayre, 2009) Their economic power leads companies and researchers to deal with women. By means of spending on goods and services, they have the capacity to shape the market place according to their preferences. (Grundley, Savrina, 2008) They have an effect to the extent of changing business, in that several companies are working on creating marketing messages to gain their trust and loyalty. They have a growing spending power. They embody $20 trillion annual consumer spending.

Their annual consumer spending is more than the sum of GDP of China and India which is $ 5.6 trillion which indicates that they have the capacity to direct economies of the countries. (Silverstein, Sayre, 2009)

Another essential side of the women is that they are more likely to have been socialized to derive pleasure from shopping when they are compared with men. (Roberts, 1998) Specific sectors are identified as the sectors women make expenditures at the most. Fitness, Cosmetics and Apparel industries are the mainstream focus of women. They have made billion dollars of annual income thanks to their loyal female customer who form the majority of their customers. In 2009, fitness industry was worth $20 billion. Cosmetics industry has a global share of $135 billion. (Akagün Ergin, et.al., 2005) Apparel industry becomes $47 billion global industry. (Silverstein, Sayre, 2009)

Video games market is quite new for women when it is compared with industries like cosmetics and apparel. However, this novel industry shows a promising picture. In apparel industry, global sales of the uniforms of Cristiano Ronaldo sum up 1.2 million. (Hürriyet, 2010) When constituent parts of entertainment industry are examined, a comparison of bestsellers suggests facts about the situation of video games market. The DVD and blue ray of the movie, Avatar has been sold 6.7 million units worldwide as the bestseller film ever in 2010. (Murray, 2010) Michael Jackson's Thriller has been the best seller album in the music history. The album has been sold 110 million copies. A classic novel, Tales of Two Cities of Charles Dickens has been sold 200 million since it was published. Mario, the bestseller video game ever, has been sold 222 million in the world. (Figure 5) (Wikipedia, List of best-selling books, 2010)

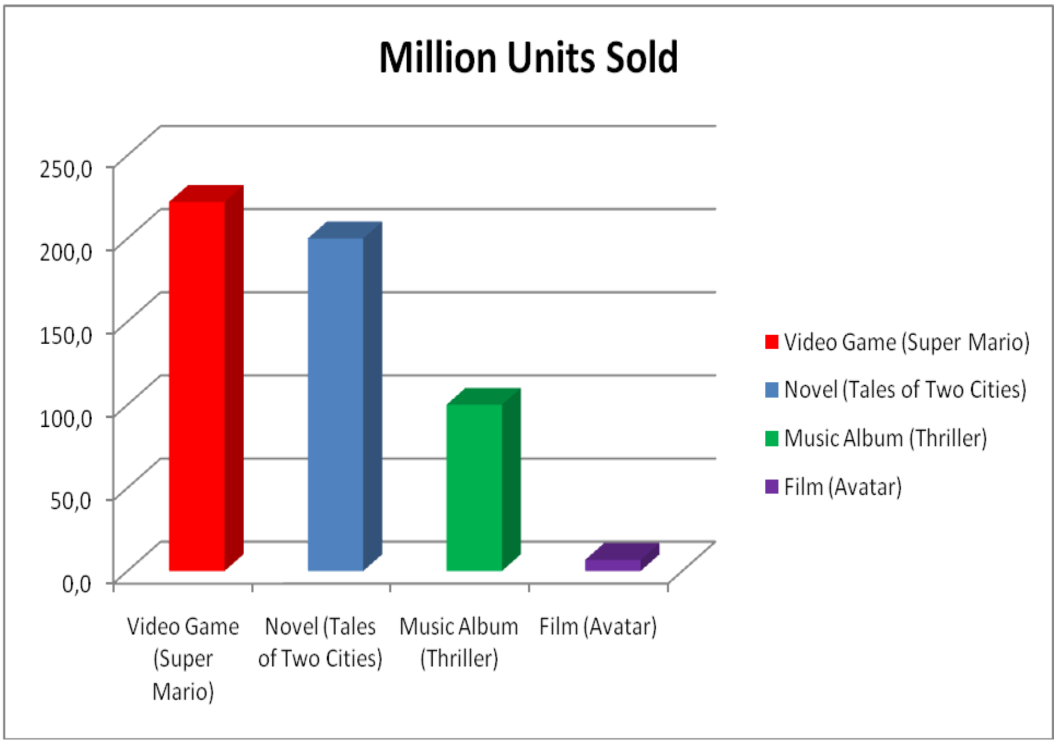

Figure 5: Comparison of the Bestsellers of Fiction, Album, Film and Video Games in Entertainment Industry

If video games market is assessed within digital entertainment industry, magazines have 1%, films have 4%, newspapers have 4%, recorded music has 20%, and video games have 35% market shares in 2008. (Table 8) (Ifpi Digital Music Report 2009, 2009) While the prevailing and widely-held view of video games was children's toys or the "geek" subculture; in recent years, the past's niche market make these conceptions seem outmoded by taking a breath of gaming audiences and their spending on video games.

Table 8: 2008 Global Digital Revenues by Industry

Global digital revenues by industry (2008)	
	Digital share
Games	35%
Recorded music	20%
Newspapers	4%
Films	4%
Magazines	1%

Assuming the given percentages as data and applying Dixon's outlier test to video games, the Dixon's parameter comes out to be 0.441 for the year 2008, which indicates even then a significance level of more than 80%. (Dixon, 1953) Therefore, today, the difference of outlier percentage becoming bigger should reflect a situation, showing that the payment for video games was an outlier with respect to payments for recorded music, newspapers, films and magazines. This, being the general payment situation did not however change the situation of addressing the women for digital games much. In fact, the industry has grown. Some variables such as potential customer and actual customer have to some extent changed and diversified, new genres are developed, internet connectivity and hardware power has improved.

As a matter of fact, in recent years the industry becomes aware of the fact that it has a problem. Furthermore, some effort is made by the firms in the industry to change themselves with the diversity drives. Today they have young white male consumers, by whom they have a surplus (Thompson, 2006) and they know how to deal with them in terms of products and promotional activities. It is indicated that female market is not as mature as male market. (Taylor, 2006)

Nevertheless women form an immense part of the economy and consumer segments in other sectors such as apparel and cosmetics; they have a smaller share in the portfolio of video games market. In fact, 19% of females confirm the statement “I play video games but I am losing interest,” as opposed to 27% of males. (E-Poll, 2009) Women segment have been slower to get involved in gaming, (E-Poll, 2009) however; it is important to consider the fact that the video game industry is also pretty young. (Zackariasson, Wilson, 2009) There are undiscovered opportunities to unite the 30 billion industry: video games industry with a great potential consumer market: women. Our study focuses on the grounds for the lack of robust cooperation of the two basic elements in the video games market: consumer and product relationship, college women with their purchase reluctance of video games and consoles, in spite of their considerable potential.

CHAPTER 4

RELEVANT STUDIES ON WOMEN

4.1. Studies on Women Attitudes Towards Video Games

In Chapter 2, a large scale literature review about market information and relevant marketing aspects of video games were forwarded. After dealing with the specific subject matter to be focused on chapter 3, namely the women having or not having interest in video game playing, another literature review will be needed, which will dwell upon the basic facts concerning the women and video game marketing. The mentioned review will reflect issues which inspired our empirical research work. Therefore, the descriptions will have rather a literature survey character, upon which the line of thoughts of the implemented survey on college women will be based.

One of the subject matters that call marketers' and researchers' attention is the high shopping tendency of women. In her book *Marketing to Women* Mary Quinlan asserts that women constitutes 51, 4 % population of U.S. and they are active in purchasing 85 % of goods and services. Furthermore, according to Quinlan, women wants to be handled specially by marketers, and request a different type of marketing strategy that will be developed particularly for them.

As for technology, the scene for the interaction between marketers and women gets a bit sharper. She states that many women find that the least attractive products are digital type of products. In her book, there are certain reasons designated for this fact. In the stage of researching about the product, a woman prefers a technological product that her female acquaintances use than buying it without any reference. Moreover, women are different in their way of selecting a product in the process of purchasing in that, they concern how the product will fit into their lives whereas men are after to learn about what the product does and what extra features it has. In dealing with the differences in the ways men and women buy technological products; Quinlan puts an emphasis on the approach of both marketers and salesperson particularly to women and their effect on women's technological products purchase. (Quinlan, 2003)

When women's purchase reluctance of video games is a point at the issue, the scene changes. Royse and associates (Royse, et.al., 2007) observe the suggested difference in terms of gender. They focus on female computer game consumers and non-consumers. They examine the individual differences in women segment in terms of consumption of computer games. The research questions the grounds for computer game playing of female gamers, female gamers' perceptions about themselves with their gaming experiences and the way self concept about themselves and computer games affect their purchase and playing activity of computer games, the relationship between their gaming perceptions and power dynamics of technologies of gendered self and whether video games influence their self image in general. Furthermore, they analyze the level of play women engage with, their video gaming experience and construct their own perspectives about gaming culture.

The authors use in-depth interviews and focus groups. They use face to face, computer mediated communication and telephone. The sample is composed of women whose ages range from 18 to 37. They have conducted the survey diverse demographics of women changing from non-players to expert players. Three profiles of respondents are identified: women being sophisticated with technology and computer games as power gamers, women consuming computer games for distraction from pressure of daily life as moderate gamers, and women not playing video games and finding them as a waste of time as non-gamers. Power gamers are found to make highest level of consumption of video games. They are interested in the mastery of game based skills. They are highly integrated with technology. Moderate gamers play video games to feel relieved from challenges of life. Non-usually say that video games occupy time that is better to be spent on other activities.

Kerr (Kerr, 2003) has performed a similar research on female gamers. She points out gender is an important factor in relation to use game consoles and ads that the invisibility of female consumers is realized by the industry. Therefore, she handles video games issue from the producers' and the consumers' perspectives. The study deals with Sony PS2 advertisements in Ireland and the way female video gamers interpret the advertisements. She used semi-structured interviews with two marketing professionals of Sony. The study follows with a case study including four stories of ten female gamers aging between 18 and over. They focus on the issues concerning video game console advertising, price of consoles, console design, game design and social networks. The study aims to answer how and why some females enter this culture, identify the pleasures female players obtained from this culture and explore gender issues in the digital games culture from the female player's perspective. As a result, it was found out that gender neutral advertising of video games for consoles are quite ineffectual in terms of female consumers' purchase of video game consoles. Redesign of the video console of Playstation as PS one which has a new small size, a rounder shape was observed to be a motivating factor for female consumers' purchase decision. A new price which makes the console more affordable is found to be a positive factor for the purchase of female consumers. All of the interviewees stress on the fact that their brother, father, cousin or friend introduced them the gaming culture. They usually bought video games and consoles for themselves. Therefore, female consumers have the chance of free access: half of them haven't got a console of themselves and none of them had paid full price for a console. In terms of social networks, the interviewees emphasise the fact that most of their female friends do not play video games and they are not interested in video games. Thus their friends do not like to talk about video games. Female consumer state that their non-gamer friends' perceptions about the games are reinforced by advertisements and packages of video games, that address to male consumers.

Carr (Carr, 2005) contributes to the same subject matter via informing about girls' gaming preferences through her observations of a games club at all-girl state school in UK. She uses questionnaire method to collect information. The questionnaire was applied to 55 female students. They were asked about video games, their access to video games and their tastes in terms of video games. As a result, the study suggests that female gamers' gaming preferences are related with their access to games and consumption. Their consumption and patterns in game access[26] derive from gendered cultural and social practices. Furthermore, familiarity and competence is observed to be important factors that develop players' experiences of gaming.

On the other hand, Reinecke and his associates (Reinecke et.al., 2007) look at the video game and gender issue more causative. They state that they observe women pay less attention to video game playing than male users. In general the study aims to find the grounds for women to play video games. The study questions the importance of challenge, social interaction and escapism as motives for game play and critical incidents that trigger the respondents' interest in games. Furthermore, the respondents' competence of computers, their social relations in respect to computer and technology use, and needs and interests of female gamers are investigated in the study. Two kinds of escapism are identified: one group of female gamers report that they get involved with the game much more than they expect and lose sense of time. The second group state that video games help them to reduce their stress and distract themselves from daily problems. In terms of socialization, they have the opportunity to meet friends in online games; however,

[26] For instance "girls with a games console at home that they considered of 'their own'" is meant by "access" in the study of Carr.

it is observed that online gamer women do not meet with new friends while playing. They first try using computer games via a male gamer.

Yong and Tiong (Yong, Tiong, 2008) analyze gender differences in the area of video games. They investigate on four aspects in the comparison of male and female gamers: their favorite game genres, the time they spend for playing video games, average mount they spent on video games and their perception of video games. They have collected data by means of questionnaire distributed randomly in cyber cafes, gaming outlets and games exhibitions. The survey was applied in Malaysia. The respondents are composed of 34 male and 20 female individuals. Their ages are changing between 19 and 22. According to results, male gamers like shooters, fighters, sports, racing, role playing, action-adventure, strategy and simulation games. On the other hand, females prefer classic board games, arcade, card-dice, puzzle and kid games. In terms of video game playing frequency, 63,6% male respondents played video games once a day, whereas 25% of female respondents play video games the same amount of time. 40 % of female respondents play video games less than once a month; on the other hand, 9,1% male respondents state that they play less then once a month. 95% female respondents report that they play less than one hour in a week, whereas 48,5 % male respondents report to be involved video game playing activies for less than one hour in a week. In respondents' statements about video game expenditures genders differ in that males have more willingness and tendency to spend more on playing games. The respondents' perceptions on video games do not show significant difference. Both male and female respondents agree that challenge through video games is pleasant, and they do not consider video games as a factor leading them to neglect their social and family life.

Hartmann and Klimmt (Hartmann, Klimmt, 2005) mention about the same fact that girls and women are less involved in video games when they are compared with boys and men. Moreover they agree that gender is effective in video game genre prefrences. Their study aims at exploring female dislikes with regard to video games. They have conducted two surveys: an online survey on the Internet and a paper-and-pencil survey in schools and universities in a major city in Germany. 317 young women aged 18 to 26 years answered the paper-and-pencil survey and 18 young women answered the online survey.The study shows that violent content, lack of meaningful social interaction and competitive elements in the videogames cause females to dislike video games.

In terms of marketing, there are a limited number of studies that handles both video games and women. Chess' study (Chess, 2008) is one of those rare studies. She deals with the advertisements of video games and gendered video game play. She discusses video game advertising in magazines and deals with video games consumers by emphasising the fact that women are recently attracting segment. She uses content and semotic analysis of advertising in traditional gaming magazines and non-video game magazines such as People, Time, Oprah analysis which focuses on women as target audience. She finds out advertisements designed for women audiences still have a problem: many of these advertisements give messages about the meaning of video game "play": the meaning of "play" is manifested as family play or productivity other than “play for sake of play”. (Chess, 2008)

Chess (Chess, 2009) explores the relationship between women and video games in further detail in her Ph.D. dissertation. She asserts that leisure activities are quite gendered on account of cultural practices that define interests of people according to the stereotypes. Her study is based on finding out how games are designed and marketed to women audience and how women’s understanding and playing video games are formed. She employs textual analysis as a method to indicate the gap between women’s perception of video games and the way these games are perceived by their core audiences. The study signifies that the games are presented to women for particular purposes such as losing weight via dealing with advertising campaigns of particular video games.

4.2. Research about the Turkish Case

In Turkey, there are no studies made in the area of marketing video games and women. However, Ogan and associates (Ogan et. al., 2009) have conducted a comparative study analyzing the differences between game-playing attitudes, preferences, practices of males and females in the U.S. and Turkey. They have conducted surveys both in the United States and in Turkey. In the United States the survey is applied by means of Pew Internet Research. In Turkey, the research is conducted in vocational high school students. In the study, both male and female students are found to spend the same amount of time on the Internet. As for their purpose of using Internet, more female students report using Internet for sending – receiving e-mail and for social network sites, when they are compared with male students. In terms of video games, female students have more tendency to use their mobile phones to play games. In Turkey, 9% female students report playing more than 10 hours a week, whereas 12% of the male students state that they play more than 10 hours. 5.2% of female students are found to play 6-10 hours a week, whereas 19.9% of the male students play the same amount of time in a week.

The reason for playing video games is another factor asked to respondents. Majority of the females explained that they play to improve their mind and to spend leisure time. On the other hand, majority of males stated that they play to reduce stress and enjoy. In both gender groups, playing games to socialize is selected only by a few of the students.[27]

A comparative study is conducted in METU and Gazi Universities in Turkey. Durdu and associates (Durdu et.al., 2005) investigated about game genre preferences, video game playing reasons, gender, monthly income, PC ownership in relation to video game playing. Survey is used to gather data in METU and Gazi Universities. 225 students from METU and 271 students from Gazi University participated in their study. According to the results, strategy, racing and action-adventure are the most favourite game genres. Diversion is found to be the main reason for video game playing. Out of 124 female respondents, 14

[27] “2.3% vs. 1.5% of the male students”

young women report to play video games, whereas 47 out of 98 male respondents state that they play video games at METU. 65 out of 93 female students report that they do not play video games. 19 female students report playing the games once in a week. On the other hand, 19 male students out of 178 say that they play video games once in a week, and 13 male students report that they play video games everyday. Male students are observed to play video games more than female students. There is no meaningful relationship found between income and playing video games. An important relationship is found between owning computer and video game playing. 59% of the respondents, playing video games, have computers whereas 41% of the respondents, playing video games, do not have their own computers.

CHAPTER 5

THE SURVEY

5.1. Description of the Survey

5.1.1. Participants

In the initial sections, the purpose of the empirical study was explained as collecting the data of gamer and non-gamer women in order to bring explanations o the multitude of relationships, which would help to explain aspects of video games purchase reluctance of women.

Without any institutional aid, the survey was conducted among female university students. In order to address general university population and display the general characteristics of overall segment, the study is applied in both a state and foundation universities. 334 women aging between 18 and 25 in Çankaya, Atılım and Ankara Universities answered questionnaires.

5.1.2. On the Sample Size

To conduct a random sampling procedure in its real sense is sheer impossible, since population addresses cannot be gathered. Therefore, a non-probability sampling with large sample had to be applied. Evidently, 334 as sample size should be very satisfactory, considering the greater number of participants than the most of the reviewed sample surveys in previous chapter.

Still, the adequacy of sample size can be checked. From the lower and upper limits equation of population mean out of sample mean, it is possible to derive the sample size at a given level of significance, an appropriate estimate of sample variance and prespecified, reasonable range of lower and upper limits of parameter estimates. (Cochran, 1960)

According to a thumb-rule being derived out of this essential fact, a relative level of precision to be attained can be estimated in a manner, with reference to population size. (Yamane, 1967)

By taking account the data (General Directorate for Higher Education, 2009) provided by General Directorate Turkish Higher Education on the Internet, the number of female students studying at Turkish universities is 761.601 which do not include open education faculty students. For that N, the sample size would be 278 if the level of precision is taken as 0.06. Therefore 334 is a very satisfactory sample size.

After sample size is identified, sample of individuals were chosen from target population. The respondents were selected meticulously in terms of the factors of age, gender and department. Female individuals between the age limit of 18 and 25 years were arranged to attend the study. In addition, the application of the survey in diversity of departments was paid attention to obtain reliable results. Hence, the survey was conducted in the departments of communication, computer engineering, economics, electrical and electronic engineering, electronics and communications engineering, industrial engineering, graphics, law, Hungarian studies, interior architecture, economics, English language and literature, civil engineering, management, Spanish language and literature, school of music, Polish language and literature, material engineering, mathematics and computer science, translation and interpretation studies, psychology, visual arts, political sciences, tourism and hotel management, agricultural engineering, international trade, production engineering, software engineering. Hence, the study is carried out in a total of 32 departments at Çankaya, Atılım and Ankara Universities.

5.2. About the Survey

5.2.1. Design

The approach of the research was designed in a descriptive way, in that the survey was prepared to find answers mainly about the individuals as consumers and non-consumers, and their consumer characteristics. The relevant information about the population is gathered by means of diverse variables that are identified according to the relationships determined in the survey literature. Product awareness, product use, experience in relevant products i.e. (computers), spending priorities, market communication channels, life style of consumers, consumers' and non-consumers, primary information sources, consumers' and non- consumers' ways of researching and selecting (technological) products, the factors influencing consumers' purchase decision of the products (video games), the effectiveness of promotion and advertisements of video games, the price of products are analyzed in the survey. Therefore, the subject matters that are intended to be investigated are framed as consumer behaviour, 4Ps of marketing and demographics of consumers.

5.2.2. Variables

For an in indept and healthy analysis of the data, the variables were predetermined at the beginning of the study design. In the process of extensive literature review that are composed of academic studies and media studies, a large number of variables are identified. Product awareness, product use, product experience, product purchase, product (package, content, usage), price, place, promotion, advertisements, economic situation i.e. (spending money), social environment, life style, self concept (gamer and non-gamer distinction), spending priorities among product groups, spending for the product are selected in order to be investigate in the study.

5.2.3. Structure of the Survey

The questionnaire, which can be found in appendices, was composed of 18 questions. The majority of the questions were written in multiple choice format. As for the structure of the questionnaire, it began with 10 main questions and was subdivided into two parts, since a distinction was to be made between the women playing video games and not playing video games. Accordingly, two types of questions were prepared for gamer women and non-gamer women, who are users and nonusers of the product. Type A which was designed for the women, playing video games, and Type B was prepared for the women, not playing video games. In each part, four different questions were directed to each group.

The first ten questions deal with the demographic characteristics of consumer and non-consumer women, spending motives of university women, purchasing power, their product awareness, technology use and experience, their primary sources of information about technology, their decision process including the research of product, product choice, product purchase and use.

Three questions are asked in the type A part of the survey. They focus on deriving information about the factors that yield purchase decision of video games, the yearly amount they spend for video games and consumer opinions of the video games prices. Four questions are presented in the type B part. The questions in Type B focus on the level of non-gamer women’s familiarity of the product, the reasons for their reluctance in conjunction with playing video games; their acquaintedness with the products in the places non-gamer women go shopping and their past experiences with video games.

5.2.4. Process

5.2.4.1. Time and Place

This study was carried out from May 20 to May 31 in 2010 on the total of 334 female university students enrolled in four year departments of Çankaya, Atılım and Ankara universities located in Ankara.

5.2.4.2. Duration

The time spent to fill a single questionnaire was on the average about 5 minutes.

5.2.4.3. Settings

The timing of the survey is planned according to conveniences of the respondents. Examination-free time and lunch time, when the potential respondents feel more comfortable, was specifically chosen for the application of the survey. The majority of the questionnaires were distributed individually. The respondents were informed about the aim of the survey and guided throughout the process of answering. The questions of the respondents were answered individually.

Personal contact enabled that all the questionnaires, 334 copies, were returned in a complete form; therefore, the response rate of the study is %100. With a high response rate of which data is coded, entered and analyzed digitally, the survey is completed.

5.2.5. Data Analysis

All the data collected by means of survey were entered, coded and analysed with SPSS statistics package.

CHAPTER 6

RESULTS

The results of the survey information are grouped according to topics that are intended to be analyzed. General profile of the female consumer who involve in four year university education will be explained in the first place. The profile part aims at informing about the sample the study deals with, in terms of their financial situation, residence type, life style, their experience in similar products, the communication sources they mostly use for accessing information about the new technological products, the way they follow in purchasing a technological product, use of the product is depicted with simple explanations of the data obtained.

In following, the data will be statistically examined, interpreted and handled within marketing mix framework. In the light of the description of the profile, suggestions will be made about the price, place, promotion and product. In terms of the products, the general characteristics which involve content, usage and package will be examined. Analysis of the place factor cover about the issues on where the product can be sold, can access the consumer and the time spent for shopping by consumer and non-consumer. In promotion part, presentation, introduction and channels of communication matters will be handled. Some marketing suggestions will be made in order to address non-users and non-consumers according to their characteristics. Finally, the price factor will be examined by taking how the prices of the products are perceived by users of the product.

6.1. Profile of the Sample

6.1.1. General View

It was mentioned that some fundamental factors affect consumer behaviour. They are generally grouped as consumer, environmental stimuli and marketing stimuli as marketing mix. (Sowdagur, 2009) In that sense, we initially deal with consumer profile in order to systematically give information and details about individual consumers. Their attitude towards alternative product groups in terms of their purchases, their social class in terms of their financial situation, their life style, their attitudes and experience in similar products were analyzed and described in the identification of the consumer profile. In general, it is observed that college women are experienced in a similar product which is personal computer. They have more tendency to outer world than staying at home, their life style is based on outer world. As for their relationship with technological products, they rely on recommendations of people knowing about technology.

6.1.1.1.Income

Table 9: College Women's Monthly Income Frequencies

MONTHLY INCOME	FREQUENCY	PERCENT
0 – 400 TL	117	35.0
400 – 800 TL	156	46.7
800 – 1200 TL	46	13.8
1200 +	15	4.5
TOTAL	334	100.0

The study is carried out both in state and foundation universities. Since a considerable part of the foundation university students have scholarship, the university student population is composed of diverse socio economic segments. In the analysis of their monthly personal income, it is observed that majority of the college women belong to middle class families. 35 % of the college women have a monthly income between 0 and 400 TL. 46.7 % women have reported to have income varying between 400 and 800 TL. Women, forming of 13.8 % spend between 800 and 1200 TL. Women who have a share of 4.5 % state that they have a monthly income over 1200 TL.

The distribution of the mentioned data was shown on Table 9. Since the final income group has no upper limits, the properties of the income distribution could be examined by the outcome of the median as the measure of central tendency, the interquartile range as the measure of dispersion, approximate value of the coefficient of variation according to the principle of dividing ratios for the sake of interpreting the dispersion property, and moreover Yule's measure of skewness and Kelley's measure of kurtosis. (Dener, 2010)

Results indicate a median income of 528.2 TL per month. Approximate value of the coefficient variation being 0.65 shows that the income distribution around the median is rather narrower dispersed. Yule's coefficient 0.25 yielded very compatible results with each other, concluding that the income distribution of college women has a shape, which is quite near to that of a symmetrical distribution.

6.1.1.2.Residence

Table 10: College Women's Residence Type

RESIDENCE	FREQUENCY	PERCENT
Living with Family	214	64.1
Living at Dormitory	44	13.2
Living with Friends	35	10.5
Other	41	12.3
TOTAL	334	100.0

Concerning the residential situation, it is to observe that in college years, only minority of students move to other cities for their university. According to the survey, 64. 1 % of the college women live with their families, 13.2 % stay in student dormitories. 10.5 % are living with their friends, and 12.3 % college women have reported to have other alternatives of living as living alone in a house rented or owned.

"The living with family" case is not only the mode, but has also an outlier frequency. The data is given in Table 10. Applying the Dixon's test for the existence of an outlier indicates with a value of 0.950 among 4 frequencies, that the abundance of this type of residence is significantly dominant at more than 99% level of significance. (Dixon, 1953)

6.1.1.3. Life Style

Table 11: College Women's Life Style in terms of Weekend Activities

LIFE STYLE (Spending Weekend Time)	**FREQUENCY**	**PERCENT**
At Home	62	18.6
In Shopping Mall	81	24.3
At Cafe	92	27.5
Other	99	29.6
TOTAL	334	100.0

Life style data is shown in the Table 11, above is identified as an essential variable to analyze, in that it depicts the way consumers spend time, according to important comparative. (Solomon, et.al., 2006) The respondents were asked what they generally do at the weekends. 18.6% of them prefer having time at home. 24.3 % spend their time in shopping malls. 27.5 % of the college women meet their friends at a cafe. 29.6 % involve in other activities.

This outcome of the nominal scaled distribution on Table 11 seems to yield rather evenly distributed life style among alternatives. To check whether the mentioned observation is to verify Kolmogoroft-Smirnov test for the frequency departures from rectangular distribution frequencies was applied. Among the 3 alternatives, goodness of fit parameter indicated a significant proxy.

6.1.1.4.Experience in Similar Products

Table 12 College Women's Computer Usage Experience Frequencies

PC EXPERIENCE (In Years)	FREQUENCY	PERCENT
0-2	6	1.8
3-5	45	13.5
6-9	122	36.5
10+	161	48.2
TOTAL	334	100.0

Personal computer usage is important in dealing with the respondent's familiarity and skill building concerning the use of video games. For that reason the question of pc experience was asked. Results are in Table 12. 1.8% of the respondents have PC experience of 0 to 2 years whereas 98.2 of the respondents have reported to have at least 3 years of computer usage experience. Therefore, it is seen that majority of the female students have computer experience.

Since the frequency of the experience time of 10+ years was the highest, a t-test of 10 years against the mean time of less experience was also devised, in order to distinguish whether the relative starting aptitude level of females can be assumed as adequately satisfactory or not. The test parameter was found out to be 2.8, which indicates a significance level more than 99%. Hence, college women's computer experience can safely be regarded as creating no barrier that might underline the mentioned purchase reluctance

6.1.1.5. Mostly Used Information Channel for Knowledge of Technological Products

Table 13: Frequencies of Information Channels for Knowledge Mostly Used by College Women

COMMUNICATION CHANNELS	FREQUENCY	PERCENT
Family and Friends	160	47.9
Magazines and Brochures	16	4.8
Internet	122	36.5
Not Interested, By Chance	36	10.8
TOTAL	334	100.0

In the survey, the ways and means college women use to be acknowledged about the new technological products were asked. 47.9 % of the respondents state that they hear about new technological products from their friends and family. 36.5 % of the respondents keep up with the news of technological product from the Internet. 10.8 % of the respondents have reported that they are not interested in the suggested subject matter, they get know about new technological products by chance. This observation also reveals - in some sense - the downfall of paper based communication channels for the technological products under question.

6.1.1.6. Mostly Used Information Channel for Purchase of Technological Products

Table 14: Frequencies of Information Channels for Purchase of Technological Products Mostly Used by College Women

INFORMATION CHANNELS	FREQUENCY	PERCENT
According to person know about technology	149	44.6
I research myself	138	41.3
According to Suggestions of Salesman	19	5.7
No channel, buy randomly	28	8.4
TOTAL	334	100.0

Another question concerning communication channels was about the information channels in relation with intentions to buy. Table 14 resumes the related frequency distribution. According to the answers of the respondents, it is depicted that a majority of them rely on recommendations of in the comprehension of technology. 44.6 % prefers taking references of people knowing about technology. 41.3% of the respondents search personally and decide on purchasing a technological product. 8.4 % of college women state that when they buy a technological product, they choose randomly and buy. Finally, 5.7 % of the sample asks for the recommendation of a salesman in the process of purchasing a technological product.

6.1.1.7.Product Usage

Table 15: Video Game Usage of College Women

VIDEO GAME USAGE	FREQUENCY	PERCENT
Yes	98	29,3
No	236	70,7
TOTAL	334	100,0

To close the profile building general view of college women, the answers to the directly forwarded question on whether they play video games or not can now be investigated. The data is given in Table 15. 70.7 % college women define themselves as non-gamers whereas 29.3 % of the respondents report playing video games. Hence, the majority of the college women are not users of video games.

The properties of “Yes- No” distribution should be kept in mind, before starting with further considerations (Dener, 2010) By taking video game user ratio as P in this dichotomous variable the arithmetic mean is obviously 0.293 and the standard deviation 0.455, coefficient of variation 1.533, the third standardised moment around the mean 0.909 and the fourth standardised moment about the mean 1.826. Therefore, the video game use distribution of college women is wider dispersed, skewed to right-hand-side and platykurtic.

6.1.2. Purchase Power and Purchase Reluctance of Video Games

Having above stated univariate general view in mind, we can now match two-variable data, to examine important hypothesis. An evident hypothesis is to expect an increase in the amount of games purchased as the monthly income of female customers increase. Table 16 shows the related cross-table.

Table 16: Matched Bivariate Data of Monthly Income and Amount of Games Purchased

AMOUNT OF GAMES PURCHASED IN A YEAR	MONTHLY INCOME				TOTAL
	0-400TL	400-800 TL	800-1200 TL	1200 TL+	
0	92	117	33	9	251
1-2	21	25	8	3	57
3-5	3	11	2	1	17
6-10	1	2	2	2	7
11+	0	1	1	0	2
TOTAL	117	156	46	15	334

As can be observed, the last groups of both the amount and income variables are open-end, in order to increase the reliability of answering efforts. However, they wouldn't disturb the validity of measurement with 'Personian cross table correlation coefficient', as the data clearly shows.

'The Personian cross-table correlation coefficient' among yearly video game purchases and monthly incomes were applied to the open-end truncated cross-table (Blalock, 1960) The coefficient, through pointed out for a positive relationship among income increase and game purchase increase has significance below 90% level according to the F-test result being applied upon it. Its value, being around 0.1 also reveals the existence of not a strong relation.

Still, since the 90% F at the 300 degrees of freedom is 2.71, whereas by over calculations it appeared to be 2.57, the positive relationship between income level and game purchase could be made visible. Figures 6(a), 6(b), 6(c), 6(d) illustrate this fact, by comparing the first line data of Table 16 with the rest, to show "buy-don't buy" tendency dichtonomy according to income levels ever increasing.

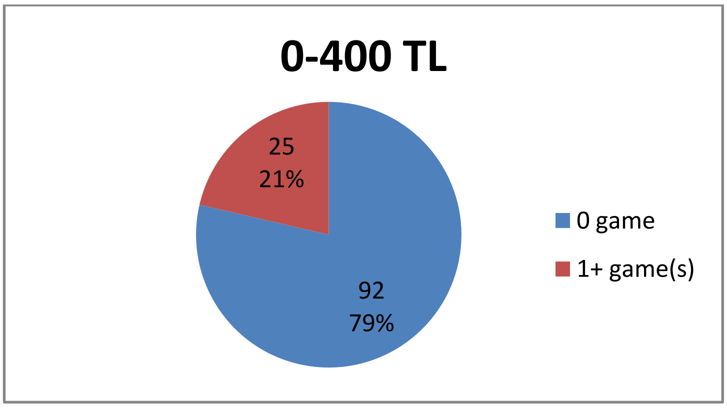

Figure 6 (a) 0-400 TL income versus "buy- don't buy" tendency

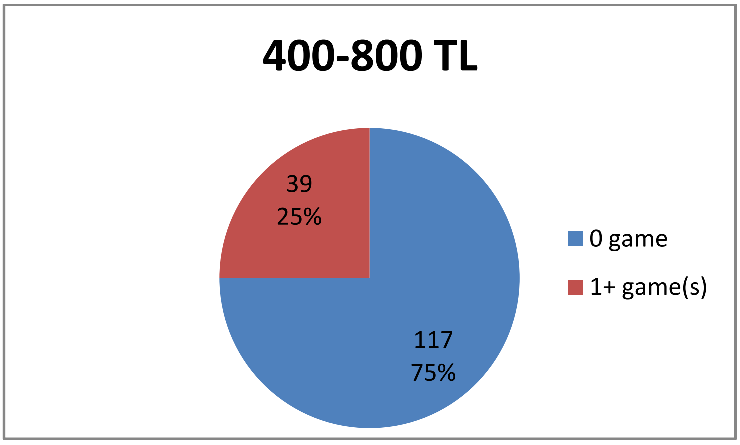

Figure 6 (b) 400-800 TL income “buy- don’t buy” tendency

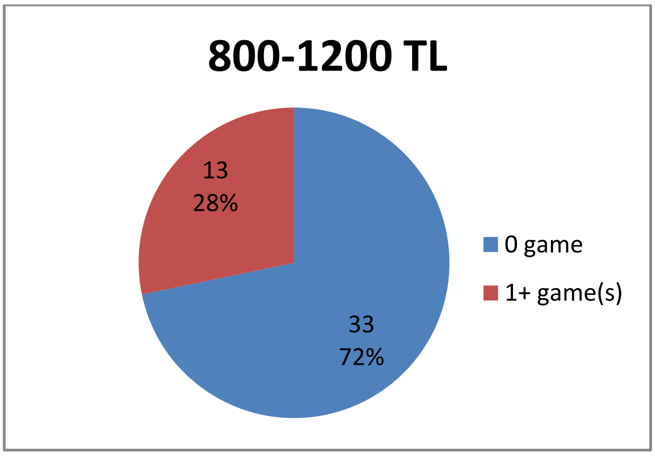

Figure 6 (c) 800-1200 TL income “buy- don’t buy” tendency

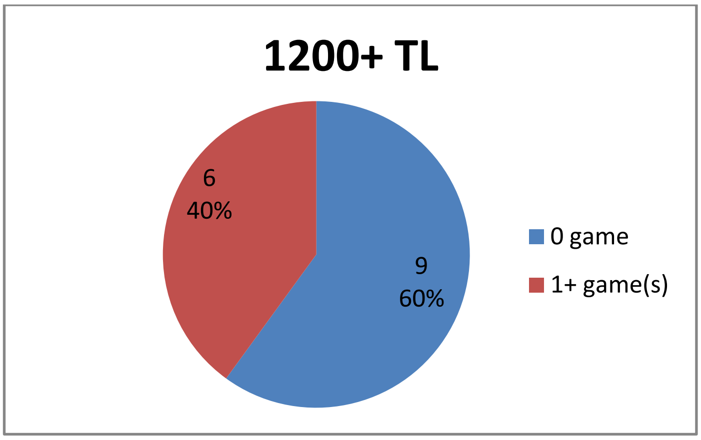

Figure 6 (d) 1200 + TL income “buy- don’t buy” tendency

Figure 6: The Relationship between Game Purchase and Monthly Income

Together with the above visualization, Figure 7 shows comparatively the income distribution of respondents according to 800TL demarcation value.

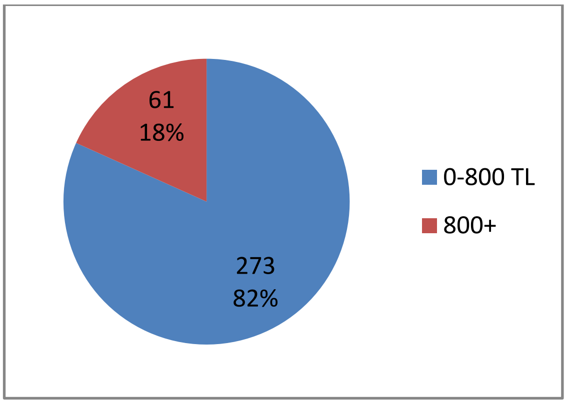

Figure 7 Monthly Income Distribution of the Respondents

Conclusively, it seems that, although not creating a uniform tendency among buying amounts and income levels, there exists an overall effect between purchase reluctance of video games and purchasing power by female video game consumers.

6.1.3. Comparison of Consumers and Non-consumers in terms of Financial Stand

Since the same monthly income categories were applied to both consumers and non-consumers of video games, we can furthermore examine whether video games and non-gamers among women indicate different patterns of income distribution or not. Figure8 and 9 illustrate both income patterns.

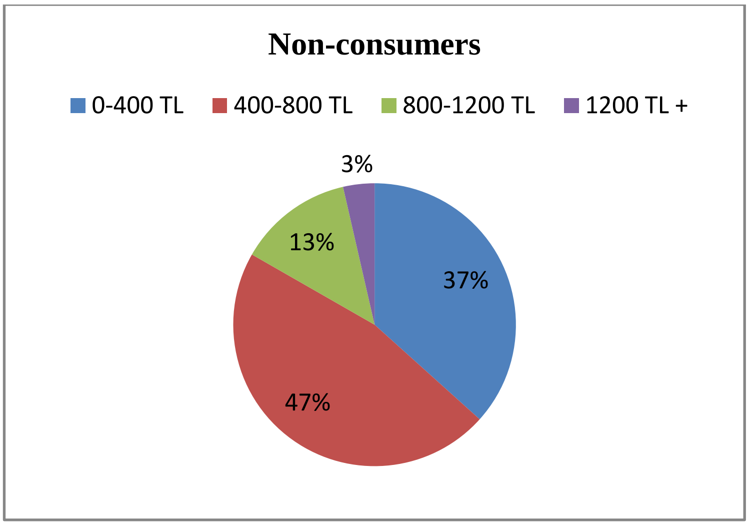

Figure 8: Monthly Income Shares of Non-consumers

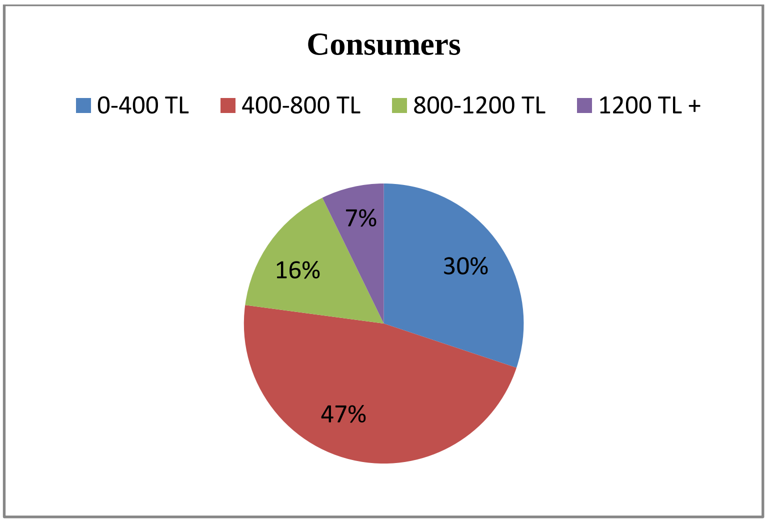

Figure 9: Monthly Income Shares of Consumer

In the examination of the incomes of non-consumers and consumers of the product, it is observed that 400-800 TL income group comprise both of consumers and non-consumers. By other income groups the percentage shares differ somewhat as shown in Figures 8 and 9. Applying Brandt-Snedecor test to all the matched income shares of consumers and non-consumers, it is however to observe that the income distribution patterns of both groups do not reflect any significant difference. (Kendall, Buchland, 1967) The related chi-squared table value comes out to be insignificant.

6.1.4. Purchase Power and Non-Gamer Women's Familiarity with Video Games

By the same token, the relationship between the income variables and modes of familiarity with video gaming might be examined. In that sense, Table 17 affects the data gained from the survey sample.

Table 17: Cross Table of Income and Product Familiarity

INCOME	FAMILIARITY			TOTAL
	Never Heard	Know but Have Never Tried	Tried	
0 - 400 TL	3	42	44	89
400 - 800 TL	4	59	49	112
800 - 1200 TL	0	11	17	28
1200 TL +	0	7	0	7
Total	7	119	110	236

If the Figures 10, 11 and 12 will be inspected one after the other, the data can also be somewhat visualised.

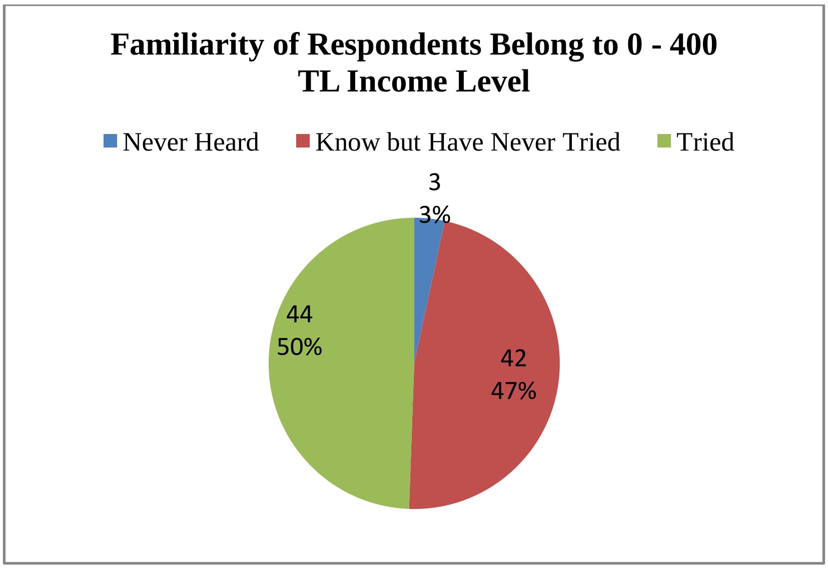

Figure 10: Video Games Familiarity of the Respondents Having 0 - 400 TL Income Level

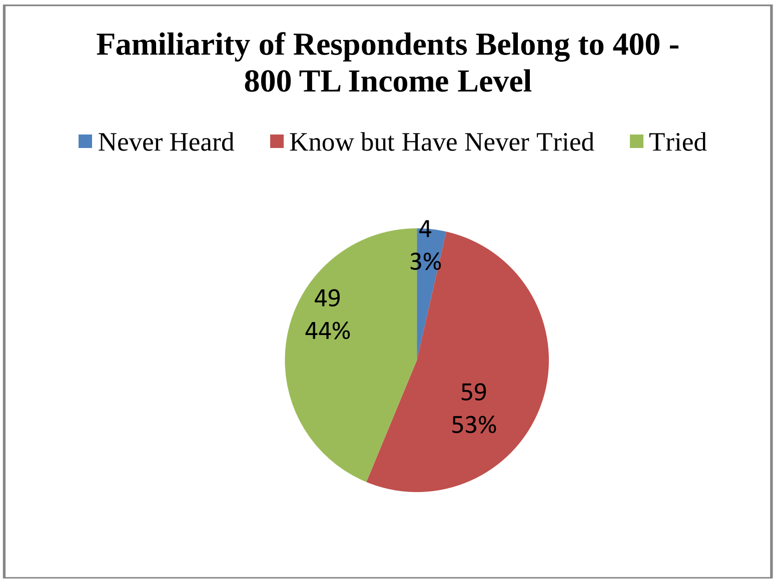

Figure 11: Video Games Familiarity of the Respondents Having 400 - 800 TL Income Level

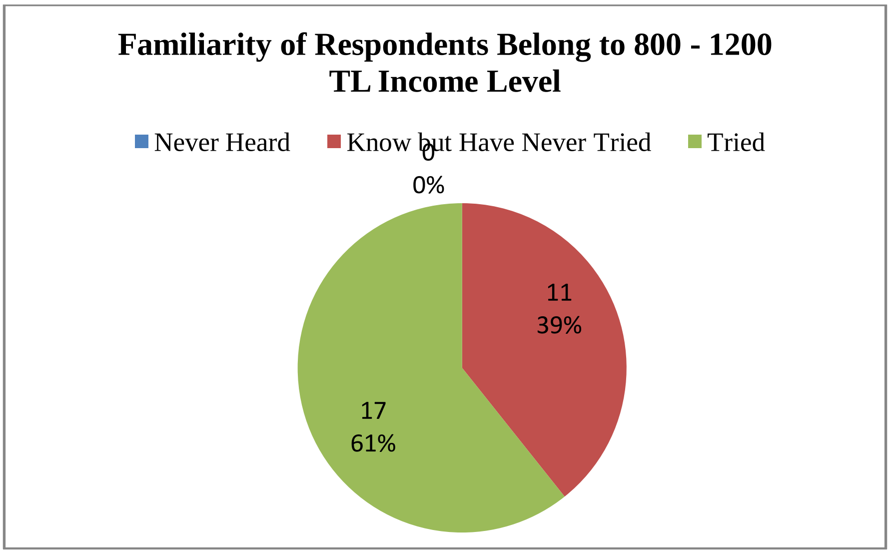

Figure 12: Video Games Familiarity of the Respondents Having 800 - 1200 TL Income Level

As can easily be seen, most of the income segments have the product awareness. There are only 7 respondents out of 236 (3 %) who have never heard about the product. In the distribution, respondents who have more than 800 TL monthly income all state that they have heard about the product, which means they are all aware of the product. While nearly half of the respondents have tried the product the other half not. These statistics may be interpreted that the purchase reluctance of the non-gamer segment is not directly due to the price effect on product awareness and familiarity.

To observe whether the relationship of the data on Table 17 is strong or not, chi-squared analysis can be applied. Computations indicate a X^2 value of 10.49 which corresponds to 90% level of significance. However, Pearson's coefficient of strength comes out to be 0.21. Compared with the upper bound 0.82, it points out for a weak relationship. Hence, the familiarity with video games seems not be closely related with the income levels of college women, which is compatible with the initial conclusions stated above.

6.1.5. Life Style and Video Game Usage

The approach to the life style might be examined on two consecutive grounds. Figures 14 and 15 indicate use and non-use of videogames by alternatives of staying at home or remaining outdoors. The Pearson's coefficient of strength of this fourfold relationship is however, very low, indicating the value of 0.08, whereby the maximum strength of the relationship would yield the value 0.71. On the other hand, the details of outdoor activities, together with "the staying at home" alternative, are illustrated on Figure 13.

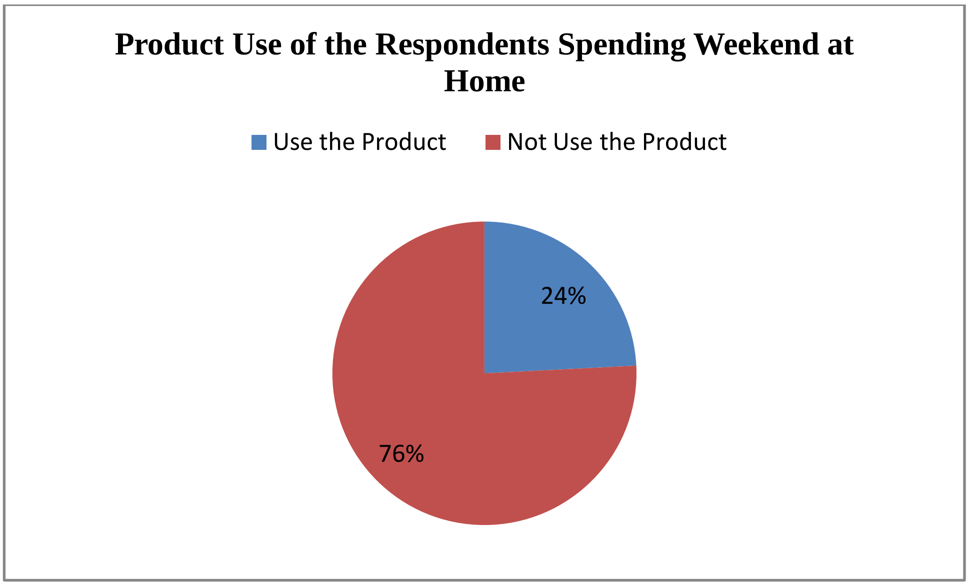

Figure 13: Product Use of the Respondents Spending Weekend at Home

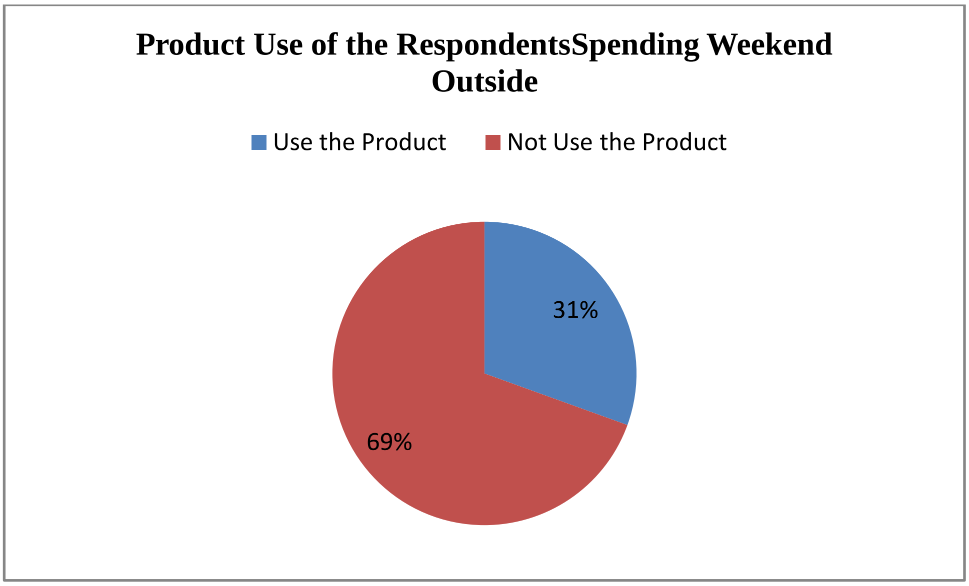

Figure 14: Product Use of the Respondents Spending Weekend Outside

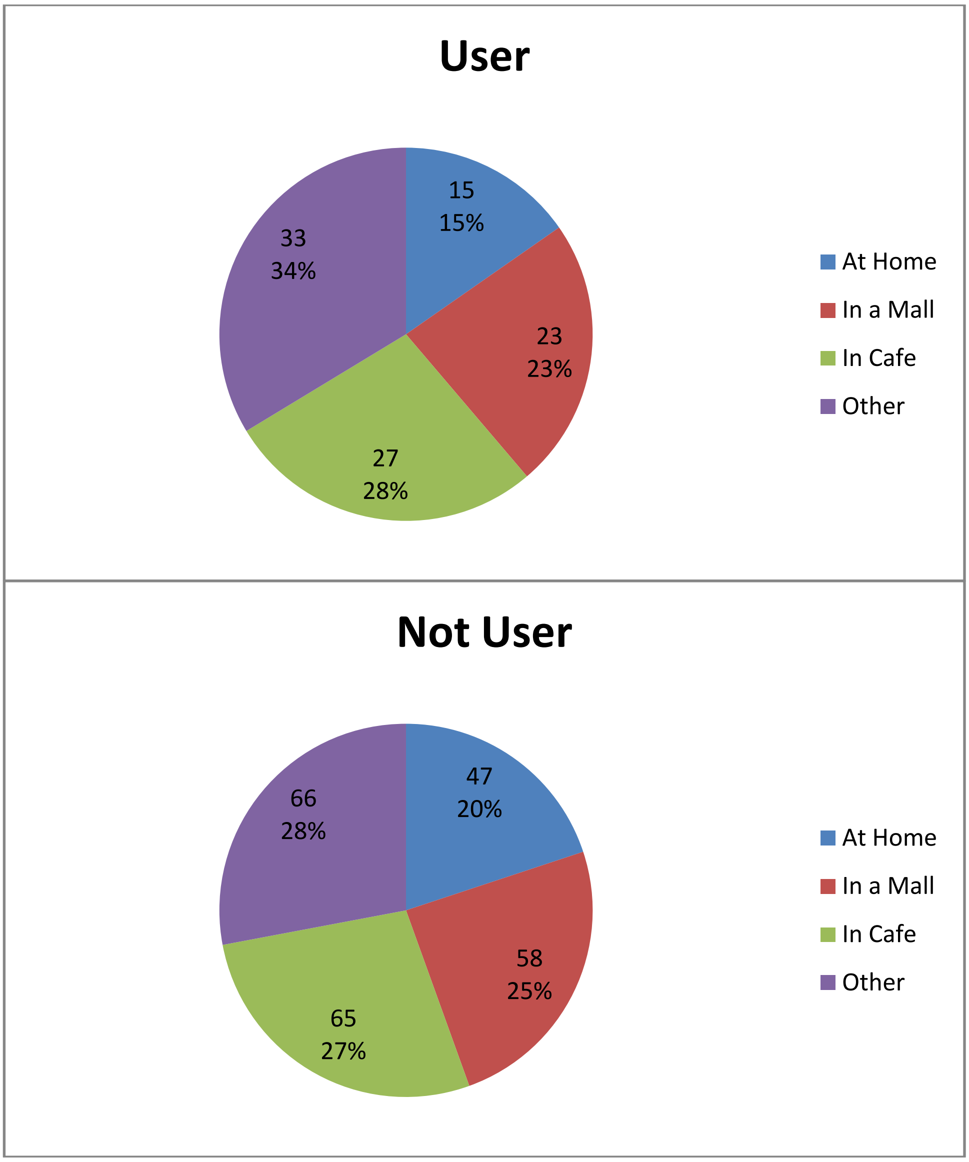

Figure 15: Life Styles of Users and Non-users

In the observation of the data, it is interpreted that respondents, who use the product, mostly prefer spending their spare time in outdoors (in a mall, in cafe or other). Respondents who do not use the product show similar tendency in spending their time in outdoors rather than staying at home. In the comparison of two profiles, no explicit distribution difference is observed such that the rankings of life style choice alternatives have perfect coincidence.

6.1.6. Information Channel for Knowledge and Video Game Purchase Behaviour

Table 18 indicates the information sources on technological products in their relationship with video game purchasing

Table 18: Cross Table of Information Channels and Video Game Purchases

INFORMATION SOURCES ABOUT TECHNOLOGICAL PRODUCTS	**VIDEO GAMES PURCHASE STATE**		**TOTAL**
	NOT BUY	BUY	
Family and Friends	119	41	160
Magazines and Brochures	14	2	16
Internet	86	36	122
Not Interested, by chance	32	4	36
TOTAL	251	83	334

Family and friends are found as the most effective source of information for both consumer and non-consumer groups. Magazines and Brochures are found to be the least appealing information source about the new technological products to both of the consumers and non-consumers. In section 6.5.6., the information given by the Table 26, which is an enlarged Table 18, will be analyzed.

6.2.Product

6.2.1. Similar Product Experience

Now, the primary factors that might affect the video game use can be examined. Since computer skills can be an advantage for an easier development of gaming skills, computer experience of the sample is investigated. Table 19 shows the data of the survey.

Table 19 Similar Product Experience Frequencies

THE YEARS OF COMPUTER EXPERIENCE	FREQUENCY	TOTAL	PERCENTAGE
0 - 2	6	334	1,8
3 +	328	334	98,2

According to the findings, 1,8 % of women have no experience or 2 years of experience. On the other hand, 98,2 % of the women in general have at least more than 3 years of computer experience. By taking the results into consideration, complexity in game play of the games may not have negative effect on target market sales.

6.2.2. Product Awareness

Table 20: Product Awareness of in the Target Market

PRODUCT AWARENESS LEVELS	FREQUENCY	PERCENT
Never Heard Before	7	3.0
Know But Never Tried	119	50.4
Tried	110	46.6
TOTAL	236	100.0

As mentioned in the “Promotion” perspective, majority of the respondents know about video games. In fact, as shown in the Table 20 46.6 % of them at least have chance to play and experience. 50.4 % of them know about video games but they haven’t gotten any experience of these games. The remaining 3% of the college women have never heard about video games. Therefore, it is seen that majority of the college women have known about video games. Two levels of familiarity of video games and consoles were identified: women who have tried video games and also aware of them and women who have heard about video games and consoles but have no experiences of them. They are familiar with the products; however, nearly half of the women haven’t tried video games which will have an effect on their perception and consumer behaviour in terms of purchasing video games. In the examination of results among non-gamers; women manifest product awareness in terms of video games product line.

6.2.3. Past Experience and Product Perception

With the knowledge of the previous observation in mind, we can now grasp the attitude or willingness charge towards playing video games. Figure 16 segregates those who once played video games and don't play any more due to complexity of games.

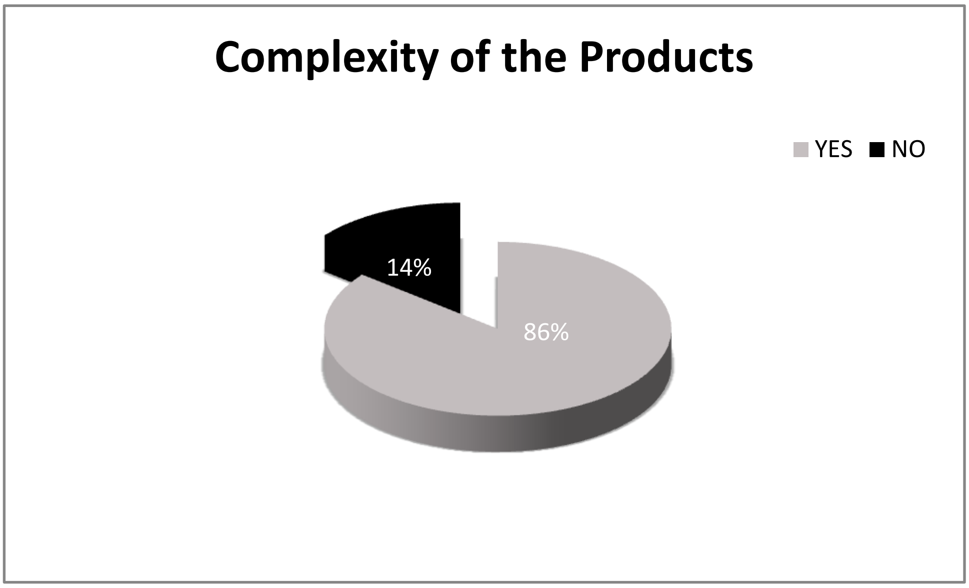

Figure 16: Past Product Experience of Non-users who do not play Video Games on account of Complexity of Video Games.

Actually, the complexity of video games is one of the important factors identified in the reasons why target market does not use the product. The distribution of the reason of the complexity of games for not playing games is investigated among respondents who had gaming experience at childhood period and who hadn't got experience. In the analysis of the data, 86 % of the respondents who have played video games in the past are found to quit playing games whereas 14 % of the respondents have no past experience of games report complexity of games as the reason for not playing video games. However, the coefficient of variation of these ratios being 2.48, which is far apart from the boundary value among wider and narrower dispersedness, indicates against the boundary a very significant z-value of 14.4, meaning that the 14% quit in playing video games is actually a modest percentage of the involved sample size (Dener, 2010) The respondents forming 86 % share also find that the new games do not seem and feel like games they played in the past. They are more developed and require practice.

In order to provide familiarity and comfort in usage of the product, more simple game play which does not require hours of tutorial may be more attractive for the target market. The results are consistent with another study made on females and video game play. Aquila (Aquila, 2006) points out that women cease to play video games approximately at the age of fourteen. However, she stresses on the fact that, their life changes at high school period with socialization with same sex friends, who may not understand their gaming activities. Therefore, the conditions force them to quit playing video games.

6.2.4. Residence Effect

We discussed the residence effect with the aid of Table 10. We have found that the choice “living with family” has a significant outlier. In other words, majority of the respondents have reported that they live with their families. Therefore, family oriented marketing via emphasising product’s function of entertaining groups might be more appropriate in providing priority to product characteristics such as Wii games, which address to all members of the family.

6.2.5. The Importance of Product Package

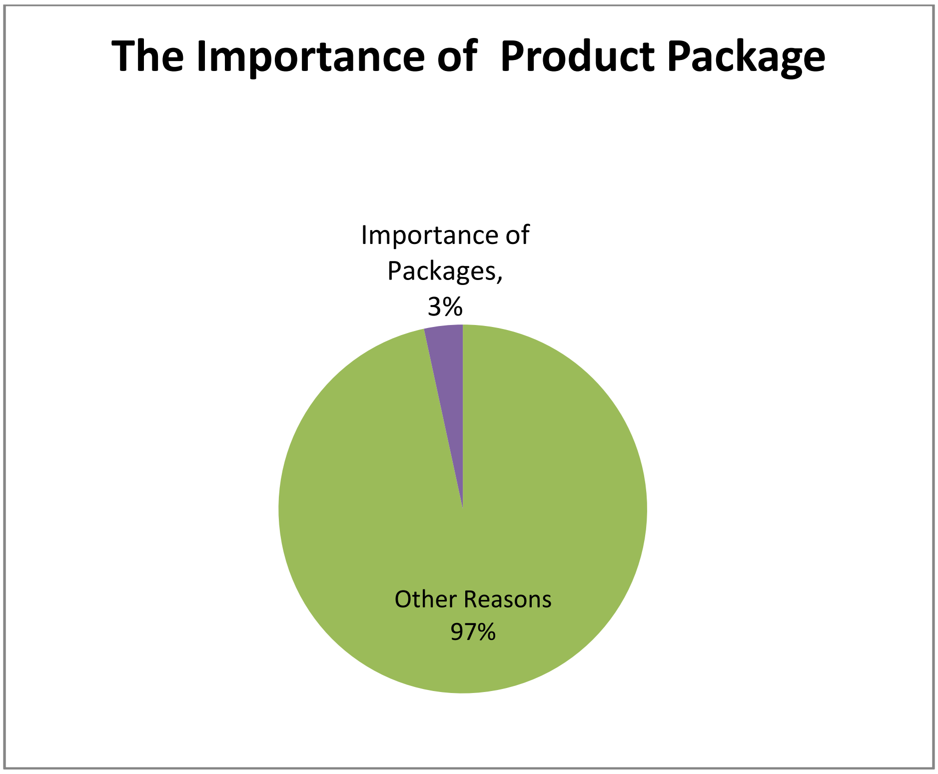

Figure 17: The Importance of Product Package

The survey also enables to observe the relationship between purchase reluctance of video games of college women and product packages. In the analysis of the data, package factor has 3% importance for the respondents which was visualized in figure 17. As a result, it is indicate to that product packages do not have an important effect on women's purchase reluctance of video games.

6.3.Place

6.3.1. Market Place

The effect of location on video game playing activities should also be considered. The table concerning the weekend locations of participants was given in the Table 11. Figure 18, visualising dispersion, illustrates actually why the Kolmogorof-Smirnov test had indicated the previously stated results.

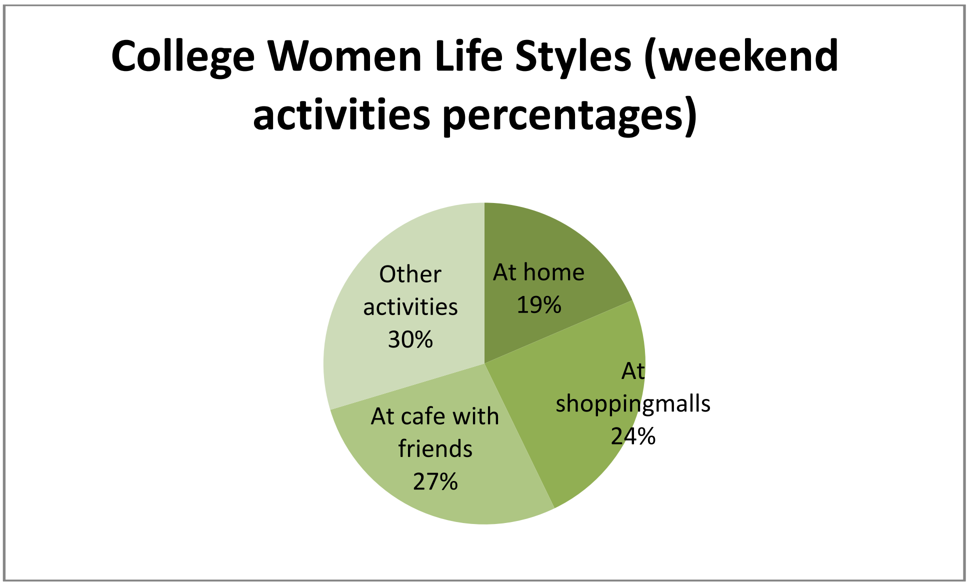

Figure 18: Life Style of College Women in terms of Spending Time at the Weekends

In choosing and designing places for the sale of the product, the suggested information may assist in accessing the target audience appropriately. Video games sales in cafes where the majority of the sample spend their spare time with friends with whom they will have chance to experience and enjoy video games seems to have a priority. In the same sense, shopping represent another opportunity to sell the product. Particularly, the stores of the product groups can be useful for presenting and selling video games which will be dealt with in the following sections of the study.

6.3.2. Spending Priorities and Place Factor

In the survey, the respondents were asked to order seven product groups: cosmetics, apparel, books, music CDs, film DVD/VCD/DVX/Blue-ray, theatre and movies, video games. Each respondent's first three choices have been taken into consideration for reliability precaution.

Data are visualised on Figure 19 and 20. For both gamer and non-gamer groups, apparel is the primary product group in the order of their purchases. Apparel comes first for women and cosmetics is the second preferred product group. The least purchased product group is video games even in the case of gamers.

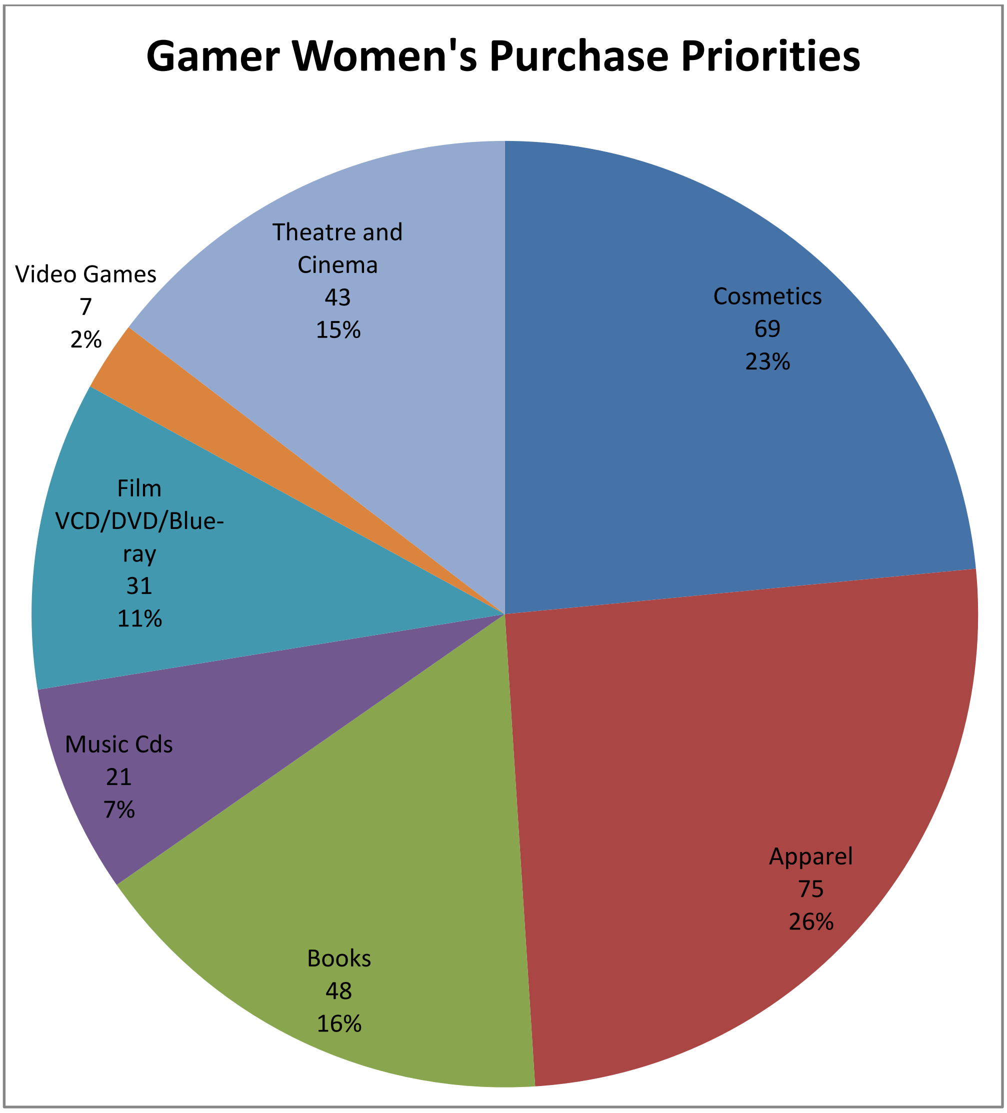

Figure 19: Gamer Women's Purchase Priorities

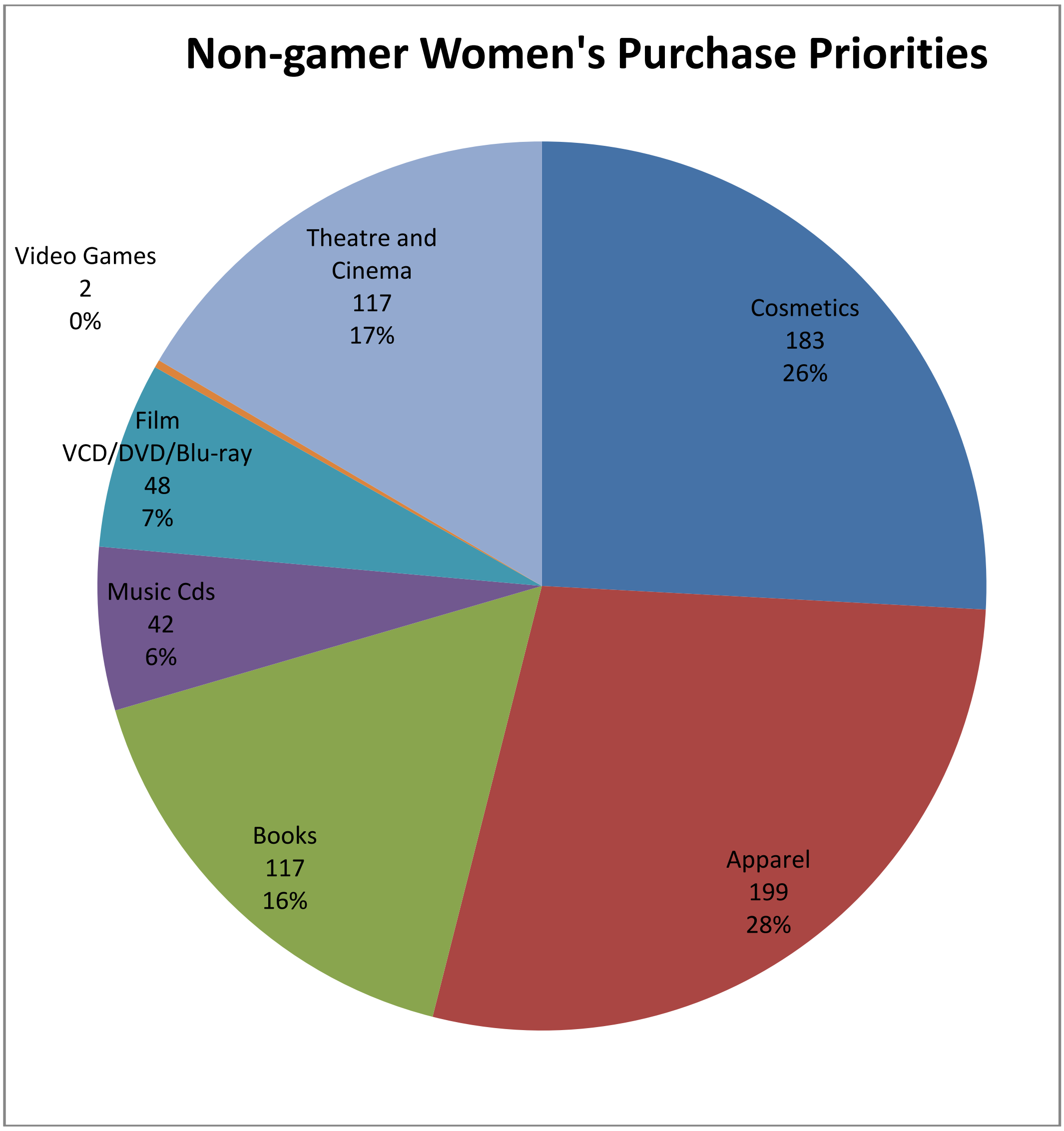

Figure 20: Non-gamer Women's Purchase Priorities

As we observe, consumption priorities of gamers and non-gamers are very similar. In terms of the illustrated gamer and non-gamer data, if we assign rank, it appears to be that the purchase inclinations do not differ. The Spearman's rank order correlation coefficient for adjusted data, come out to be 0.99, at almost perfect significant level. (Dener, 201)

6.3.3. Availability of the Product in the Places Target Market Shops

Table 21: Cross Table of Availability of the Product in the Places Where Target Market Is Found

WHETHER VIDEO GAMES SOLD AT THE PLACES RESPONDENTS MAKE SHOPPING	**VIDEO GAME PURCHASES**		
	NOT BUY	BUY	**TOTAL**
YES	69	12	81
NO	139	16	155
TOTAL	208	28	236

Data of Table 21 reveals an interesting observation on the side of non-gamer college women. In developing marketing mix, place is one the factors that taken into consideration to reach consumers. In terms of video games, the relation between the purchase reluctance of women and the place where the games was sold is questioned. In the group of non-gamer women, 139 out of 208 (66.8 %) women remark that in the sections of stores they go for shopping, video games are not sold. Therefore, place factor might have a role in women's buying or not buying video games.

To examine on whether there exists a strong relation between video game purchases and availability at the preferred shopping point Gart's F-test was used

(Sachs, 1984) with F=1.07, the test indicated no sensible relationship. Therefore, the result supplies more weight to the mere observational argument stated above.

Furthermore, taking only the non-user shops of preference under consideration, which is illustrated in Figure 21 below, it is to observe that 34% of non-users meet video games available in the market places of their choice. What kind of shops these mostly are, were treated above when discussing data of Figure 20.

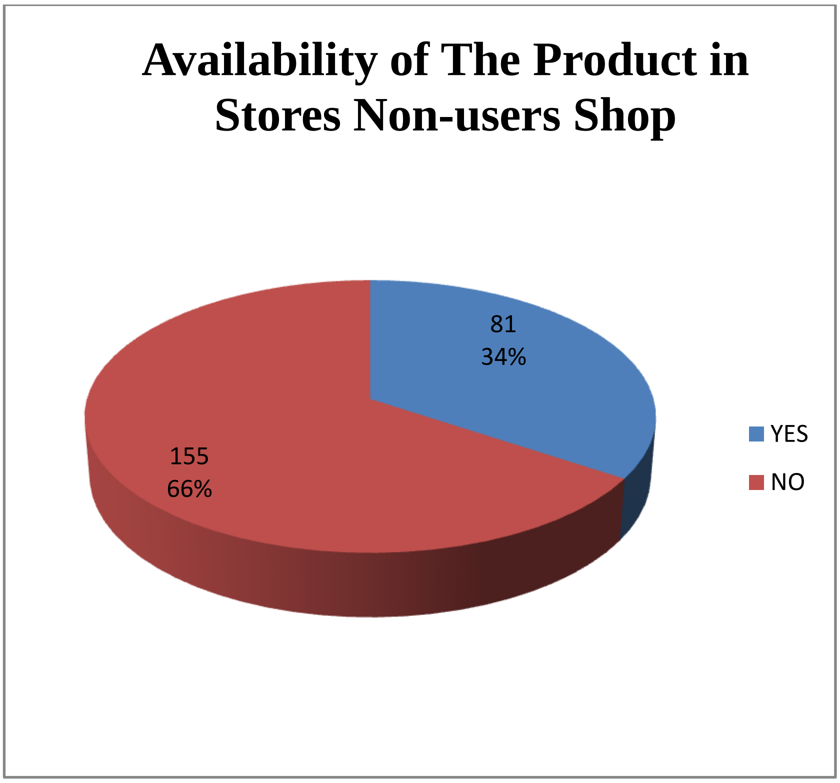

Figure 21 Availability of Video Games Sale in the Places Mostly Non-Users Shop

6.4.Promotion

6.4.1. Life Style and Video Game Purchases

By examination survey data, effects promoting sales can also be discussed. Initially, life style effect will be encountered. The respective data is on Table 22.

Brandt-Snedecor test was applied to “buy” and “not buy” dicotonomy according to residence type. The test indicates a strong and significant relationship. This verification leads to some practical conclusion family oriented games and advertisements can be useful in promotion of video games.

Table 22: Life Style and Video Game Purchases

RESIDENCE	**VIDEO GAME PURCHASES**		
	BUY	NOT BUY	**TOTAL**
Living with Family	159	55	214
Living at Dormitory	35	9	44
Living with Friends	25	10	35
Other	32	9	41
TOTAL	251	83	334

6.4.2. Residence and Purchase Behaviour

The same subdivision according to residence when being crossed with the amounts of yearly game purchases would indicate the effect on purchase behaviour. Table 23 illustrates the relevant data.

Table 23: Residence and Purchase Behaviour

RESIDENCE	**AMOUNT OF PRODUCT PURCHASE IN A YEAR**					TOTAL
	0	1-2	3-5	6-10	11+	
Living with Family	159	38	13	4	0	214
In Dormitory	35	6	1	1	1	44
Living with Friends	25	8	0	1	1	35
Other	32	5	3	1	0	41
TOTAL	251	57	17	7	2	334

Applying chi-squared analysis upon Table 23 data, we observe with a chi-squared value of 131.7 at 12 degrees of freedom a very significant relationship. Moreover, the Pearson coefficient having a value of 0.53 with respect to an upper bound of 0.89 indicates also the existence of a somewhat strong relationship among the residence type and eagerness to buy video games.

Therefore, the fact that college women living with their families purchase more video games than the ones staying with somewhere else seems to reflect an aspect which can be generalised. Hence, promotions targeting locations like dormitories and student-houses may be applied to increase the sales of video games.

6.4.3. Life Style and Purchase Behaviour in terms of Promotion

Table 24: Life Styles of Women in General

LIFE STYLES OF WOMEN (weekend activities)	**FREQUENCY**	**PERCENTAGE**
At home	62	18.56
Outside	272	81.44

From the data of Table 24, it seems evident that the inclinations of college women to outdoor activities at the weekend are considerably more. The ratio of variation is 0.19 (Dener, 2010) Therefore weekend activities for the presentation and trial of the product can be useful in addressing target market by taking the mentioned profile into consideration.

6.4.4. Places that Products Can Be Presented

Now, extracting from the "outside" category the places which are appropriate for the presentation of video game products, we meet the situation which is illustrated in Figure 22.

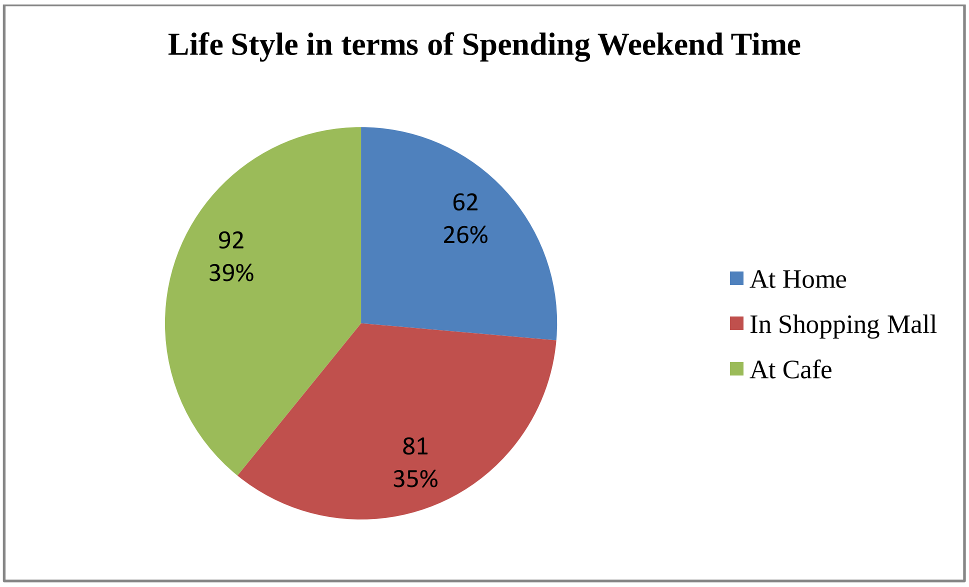

Figure 22: Places Appropriate for the Presentation of the Products

When other places not taken into consideration, cafes and shopping malls are found to be the appropriate places for the presentation of the products. Both places are visited almost at the same concentration. If we take the deviations of respective frequencies from that of the computed root-mean-square to the rectangular distribution's mean yields a ratio which is even less than 0.1. This estimate also indicates that by the corresponding population, both locations are to be "equally-likely" visited. Figures 19 and 20 reflected what was to understand under "shopping mall" heading."

6.4.5. PC experience and Video games Familiarity

According to the importance of computer experience, which would facilitate and hence promote video game use, it would be appropriate to investigate PC experience and familiarity with video games. Table 25 categorizes the relevant data.

Table 25: Cross Table of Data among PC Experience and Video Games Familiarity

PRODUCT FAMILIARITY	PC EXPERIENCE		TOTAL
	0-5 Years	5+ Years	
Never Heard	1	6	7
Know but haven't tried	20	99	119
Tried	16	94	110
TOTAL	37	199	236

In the Table 25, it is indicated that 16 respondents who have less than 5 year computer experience have tried the product whereas 94 respondents, who have more than 5 year experience of computer, had the chance to try video games. In accordance, 20 respondents who have less than 5 year experience of computers, have not tried the product even if they have information about the product. 99

respondents, who have more than 5 year computer experience, state that they haven’t used the product, even if they are knowledgeable about the product. As a result, respondents who have more than 5 year computer experience have more product familiarity.

In order to examine the extent of similarity among product familiarity with relatively high or high PC experience, a chi-squared analysis is applied to the data. The X^2 appeared to be very small, at a magnitude of 0.22, which indicated high insignificance. Thus, the product familiarity observed to be independent with the acquisition of PC experience. The result also signifies increase in PC experience wouldn’t necessarily change the pattern of product familiarity level.

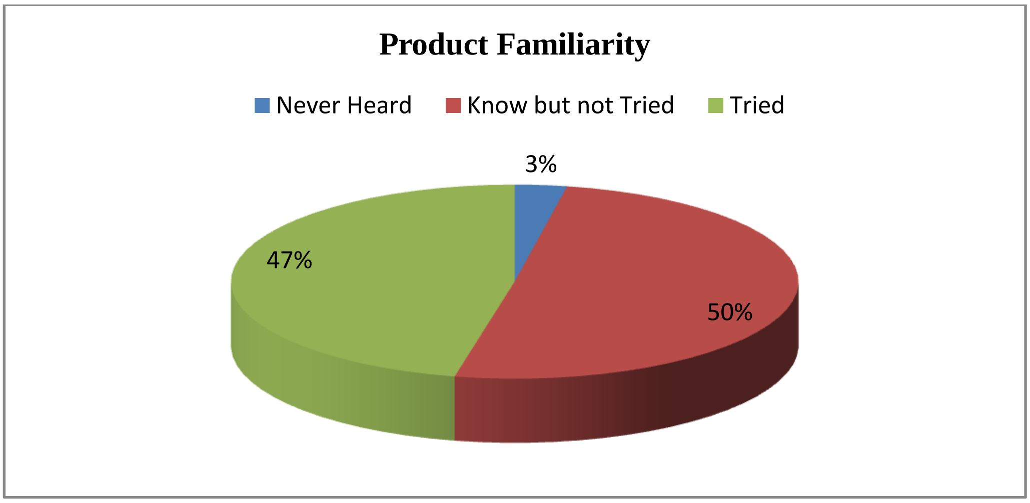

Figure 23: Product Familiarity Shares of Non-users of Video Games

As it is shown in the Figure 23, among non-gamer women; the group stating “Know but haven’t tried” and “Tried” have the greatest shares. Majority of the respondents (193/229, that is 84,28 %) in these groups have more than 5 years experience of computer usage. As a result, Internet can be an effective means for marketing video games.

6.4.6. Information Channels for New Technological Product Knowledge Mostly Used by Consumers and Non-consumers

Coming to the ways consumers and non-consumers acquaint themselves with the information on new technological products, Table 26 indicates information channels for new technological product knowledge used by consumers and non-consumers of video games.

Table 26: Information Channels for Information Effective for Consumers and Non-consumers

INFORMATION CHANNELS	NON-CONSUMERS		CONSUMERS		TOTAL
	Frequency	Percent	Frequency	Percent	Frequency
Friends and Family	119	47,41	41	49,40	160
Magazines and Brochures about Technology	14	5,5	2	2,41	16
Internet	86	34,2	36	43,37	122
By coincidence	32	12,7	4	4,82	36
TOTAL	251	100,0	83	100,0	334

It is observed that with 47,41 % share, friends and family are found to be essential in informing non-consumer respondents about the new technological products in that they incline to get informed about new technological product from friends and family. 34,2 % of them report that Internet is important in getting information about new technological products. 12,7 % of them heard about new products by coincidence. 5,5 % of them find magazines and brochures effective in accessing information about new technological products.

In the research, consumer and non-consumer participants show some similar characteristic in using information sources for accessing information about new technological products.

A chi-squared check points out a significance level about 97,5% for that observation. Herewith, the “magazine and brochure” way of being informed seems to be least effective.

6.4.7. Analysis of Information Channels for Purchase Decision

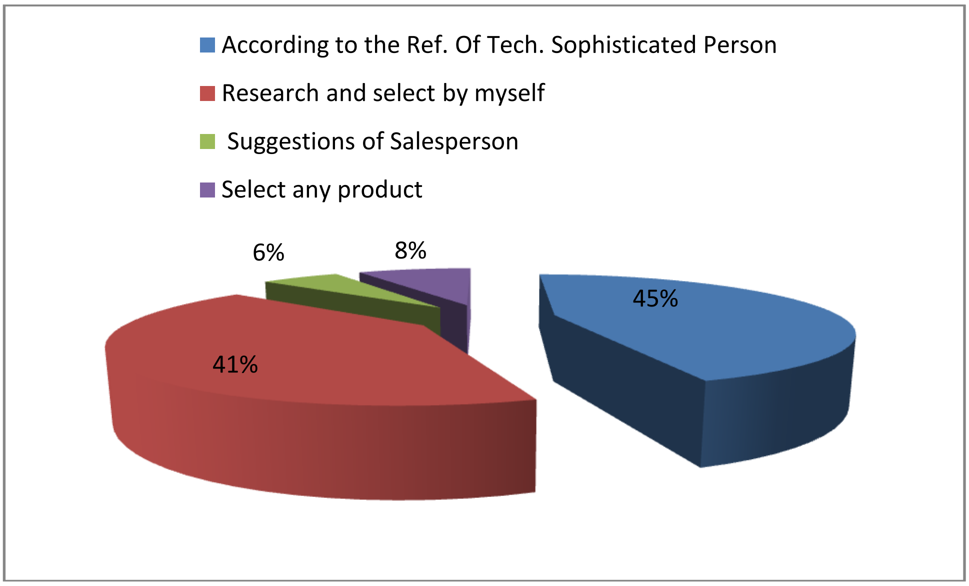

Figure 24: Information Channels for Purchase Decision Shares

The respondents were asked on which information basis they research, select and buy technological products. The shares of their answer are given in the chart above. The findings point out that the advice of technically sophisticated person, and research and select solely by own effort highly dominate the other two causes of haphazard selection and asking the salesperson. Whereas the differences between the two mostly chosen and the two least chosen information sources are important, in that the difference of proportions among those two groups are highly significant.

6.4.8. Analysis of Information Channels for Technological Product Knowledge

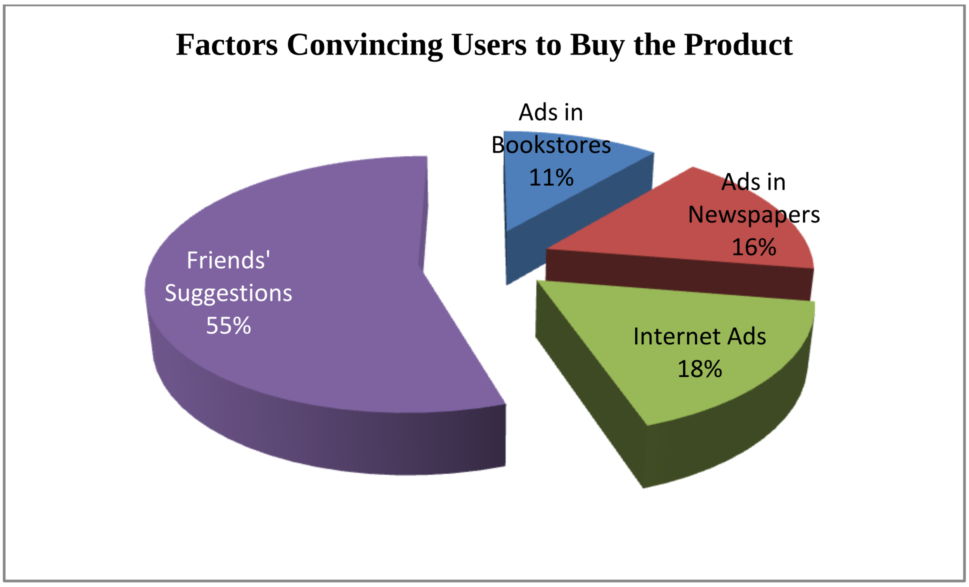

Figure 25: Information Channels for Technological Product Knowledge Shares

The respondents who use the product are asked about the factors that lead them to purchase the product. Figure 27 indicates the outcome according to their answers; social environment shows itself as an important factor in its effect on respondents who are users of the product.

In the analysis of the relevant data, it is seen that friends' suggestions have a greater percentage with respect to the total percentage of all other factors. In fact, Dixon's parameter indicates for the difference between "friends' suggestions" and the next important cause being "Internet ads" that referring to friends' suggestions is at about 98% level of significance an outlier with respect to the relative importance of all other causes. Therefore, creating buzz in the promotion of the video games can be an effective means for reaching the university women segment.

6.4.9. Childhood Video Game Experience and Purchase Behaviour

Inspecting the effect of childhood experience on the inclination~~s~~ to buy video games at the adult ages, Figures 26 and 27 indicate the data. Brandt-Snedecor test indicates that the childhood experience determines today’s behaviour at 99, 5% level of significance. Hence, it is evident that respondents who have video game experience at their childhood period show more willingness in the purchase of video games in comparison to inexperienced respondents. This might indicate that a video game is much more perceived as a gift for non-gamer women who cease to play video games.

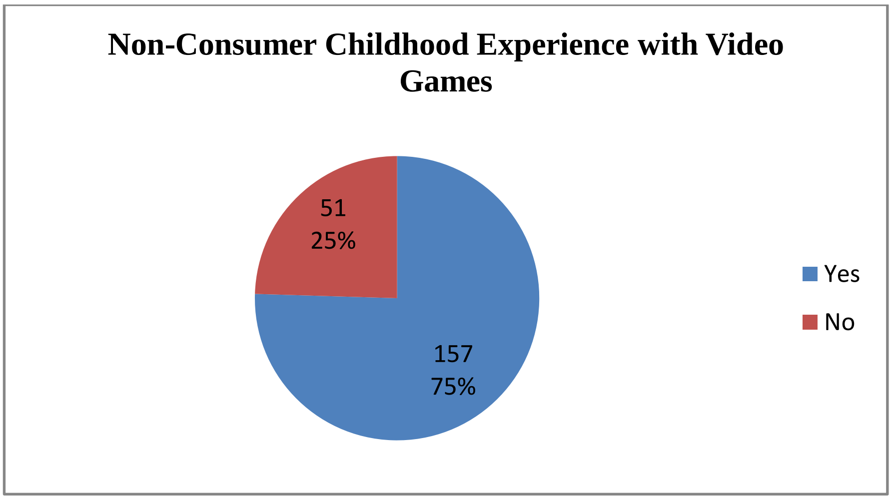

Figure 26: Childhood Experience Shares of Non-Consumers

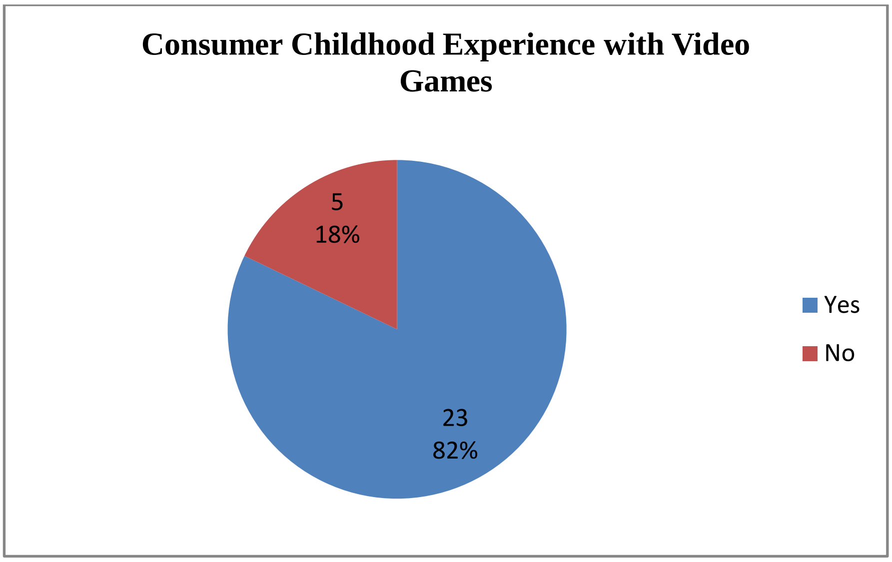

Figure 27: Childhood Experience Shares of Consumers

6.5.Price

6.5.1. Income and Video Game Purchase

In order to observe how the video game prices are perceived by the respondents, the cross table among monthly income groups with respect to video game purchase spending per year is examined. Below is the relevant table.

Table 27: Income and Video Game Purchase

INCOME (TL)	AMOUNT SPENT FOR VIDEO GAMES IN A YEAR					TOTAL
	0	0-50 TL	51- 100 TL	101-250TL	250 TL+	
0-400	92	21	3	1	0	117
400-800	117	25	11	2	1	156
800-1200	33	8	2	2	1	46
1200+	9	3	1	2	0	15
TOTAL	251	57	17	7	2	334

It is assumed that as their monthly income quantity increases, the amount of video games purchase increases. A hypothesis is set, stating that as the respondents' monthly income increases; the mount of video games purchase tends also to increase.

In order to test the mentioned hypothesis, a cross table regression line might be fitted to the data. (Blalock, 1960) Since both distributions are grouped, whereby last groups consist of open classes for the sake of increasing the answer reliability, a truncated data set without the last groups can be subjected to regression analysis. In fact, the data table clearly indicates that this can be done, since those groups are virtually empty.

By a further attempt we can also remove the initial group's data of purchase distribution, since it overwhelmingly represents the non- consumer. Applying the regression line computations to the remaining data of 3x3 table, we observe that the insignificant regression line refutes the mentioned hypothesis also in that its slope is negative as against the expectation.

6.5.2. Consumer Perception of Video Games' Prices

Finally, the opinions of consumers about game prices are investigated. The data concerning the related question is on Table 28.

Table 28: Frequencies of Consumer Perception of Video Games' Prices

PERCEPTION ON VIDEO GAMES PRICE	FREQUENCY	PERCENT
Expensive	67	68,37
Normal	21	21,43
Cheap	0	0
Not interested	10	10,2

It is observed that the majority of the respondents find video games prices expensive. In fact, the respondents having this opinion are very abundant, such that the ordinal scale from expensive to cheap has a high skewness. It is consistent with the previous finding that the product is perceived expensive in terms of income so that the prices of video games create a general purchase unwillingness.

CHAPTER 7

CONCLUSION

The present research work aims at investigating the reasons behind video game purchase reluctance of female market segment. In order to examine the mentioned phenomenon, the study depicts a general picture of the sample by taking several factors into consideration. Income, life style, residence, experience in similar products, the product use and purchase, information channels for knowledge on technological products and purchase of technological products, past product experience and spending priorities of the target market are examined. In following, the study manages the general information by dwelling upon with marketing mix as product, place, promotion and price. Familiarity with video games, consumers' past product experience effect on product perception, importance of product packages as a reason for purchase reluctance, market place for video games, spending priorities for video games market place, availability of video games in the places consumers and non-consumers shop, life style effect on purchase behaviour, places for video games presentation, popular information channels for knowledge and purchase of technological products, past product experience effect on purchase behaviour and suggestions, consumers' perception of video games' price, the level of income effect on video game purchase were all analyzed in terms of marketing mix.

From the analysis of the data, collected from the college women sample, a general profile is elicited. Majority of the respondents have at most 800 TL of monthly income. It is observed that the relationship between their purchase power as income and their familiarity with video games is not too distinctive, in that as their monthly income increases, the mount they spend for video games increases. Still, respondents from all levels of income find video games expensive.

Female college students' social attitudes seem to generate a quite determinant motive in their lives and behaviour as consumers. They tend to spend their time outside at the weekends. Through their hearings from friends and family, they get informed about new technological products. Furthermore, they get influenced from the opinions and suggestions of their friends and family when they search and decide to buy a technological product.

Computer use is found to be another important factor. Most of the young women have more than 5 year PC experience. Moreover, they display more product awareness of video games than less PC experienced respondents. Although majority of them do not play video games, they know about video games.

In fact, most of the non-user respondents report that they played video games at their childhood period, but they quit playing them in following years. Complexity of the games is found to be one of the reasons for them to cease with playing video games. Furthermore, even if they do not play video games any more they display more tendencies to purchase video games as a gift, when compared with the non-user respondents who have no video games experience at their childhood period.

Majority of the non-gamer respondents confirm that they are aware of video games, however; they do not prefer buying video games. Furthermore, when we investigate the product groups they prefer purchasing at most, video games is observed to be the least preferred product group for purchase of gamer and non-gamers. On the other hand, cosmetics and apparel are found to be the mainstream preferences for both groups. Therefore the stores and departments of cosmetics and apparel are the places they mostly go for shopping. However, it is observed that video games are not available in the mentioned stores and departments.

Promotional activities with particular brands of cosmetics and apparel can be useful as places for the sale, presentation and promotion of the products. Before consumers meet video games in apparel and cosmetics stores, giving marketing messages via employing buzz marketing and ads in web sites popular for women might also be effective when taking the information about the target market into consideration.

The study shows that even if young women are familiar with the product of video games, most of them do not use them and buy them. Thus, rather than adopting a selling approach, taking the target market at the core can be a better attitude to address women segment and develop accurate marketing strategies for them.

CHAPTER 8

FUTURE WORK

The present work is an introductory study for getting acquainted with young women segment and video games market. In dealing with the issue from a dual perspective as from consumer side and market side, the study provides a guideline for an approach to female segment for technological product markets. As mentioned before, the present the research presents diverse characteristics of young women consumers and non-consumers such as income, life style, residence, purchase decision and behaviour of the product, spending priorities among various product groups, similar product experience, their information channels for knowledge of technological product, their information channels for purchase of video games, gaming history of consumers, consumers' amount of spending on video games, the places they prefer for shopping. Second of all, all in financial, behavioural, affective, and personal characteristics data were collected to develop solutions in terms of product, price, place and promotion.

For the future work, the study can be expended to address the women in general via suggesting non-consumer profile groups according to age ranges. The same variables of the present study can be examined and evaluated in the design of marketing mix reports for each profile.

The research can be taken a step further with several additional applications. Real time case studies might be carried out especially in spring fests at the Turkish Universities. Console Gaming Experience corners can be constructed for female students to try video games upon the emphasis with female video gaming time concept for the real time observation and interview with newcomers about their preferences and behaviours for the consumption of the products. By means of the observation of the sample, the details about their opinions on use, appearance, content of the products can be inquired in detail in order to make necessary changes in the product for better addressing to female audience.

On the other hand, in order to delve into the issue of purchase reluctance, an interview may be useful in understanding the deficiencies of the framing of general reasons by handling self concept, the place of video games in women's lives and the reasons why they are not taken as part of their lives in terms of entertainment, the concept of "play for sake of play versus play for a particular aim" and their effect on non-gaming. Basic information on the relevant issues can be acquired from the present thesis and they can be further structured with the feedback obtained from the respondents for the design of promotional activities stressing on self concept and "playing for sake of play".

Finally, for implementation of the projects for the introduction and promotion of the video games to female segment, a particular cooperation with one of the mainstream companies in both video game and console areas will be beneficial. The present study can be summarized as a report which involves additional documents on details of the applications, scientific grounds of the suggestions and cost estimates of the applications in order to present it to the selected company.

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APPENDICES

A. LIST OF ABBREVIATIONS

EA: Electronic Arts

MMORPG: Massively Multiplayer Online Role Playing Game

NES: Nintendo Entertainment System

PC: Personal Computer, computer

PSP: PlayStation Portable

QA Providers: Quality Assurance Providers, Game Testers

SNES: Super Nintendo Entertainment System

THQ: Toy Head-Quarters

B. THE SURVEY QUESTIONNAIRE

a. Questionnaire in Turkish

Cinsiyetiniz: **Yaşınız:** **Bölümünüz:**

Aşağıdaki sorularda size en yakın gelen alternatifleri seçiniz. Her soru için tek şıkkı cevap olarak işaretleyiniz.

1- Genelde elinize geçen aylık para miktarı aşağıdaki aralıklardan hangisine girmektedir?

a) 0 TL- 400 TL
b) 400 TL - 800TL
c) 800TL – 1200 TL
d) 1200 TL+

2- Aşağıdakilerden hangisi ikamet biçiminizi daha iyi tanımlar?

a) Ailem ile Ankara'da yaşamaktayım.
b) Öğrenci yurdunda kalmaktayım.
c) Arkadaşlarımla beraber yaşamaktayım.
d) Diğer (Belirtiniz:…………………………………………………)

3- Haftasonları çoğunlukla...

a) evimde eğlenmeyi tercih ederim.
b) bir alışveriş merkezinde gezip alışveriş ederim.
c) bir kafede arkadaşlarımla buluşurum.
d) diğer seçeneklerden farklı etkinlikler yaparım.

4- Yılda kaç tane konsol veya bilgisayar oyunu satın alırsınız?

a) 0
b) 1 - 2
c) 3 – 5
d) 6 – 10
e) 11+

5- Yalnızca aşağıda verilen hizmet ve ürün alımlarınızı kendi aralarında 1'den 7'ye kadar para harcama miktarınıza göre sıralandırınız. (En fazla miktar için: 7 - En az miktar için: 1)

( )- Kozmetik
( )- Konfeksiyon
( ) -Kitap
( )- Müzik CD
( )- Film DVD/VCD/DVX/Blu-ray
( )- Video Oyunları
( )- Tiyatro ve Sinema

6- Cep telefonunuzun tüm özelliklerini biliyor musunuz?

a) Tüm özelliklerini bilmiyorum.
b) Birkaç özelliğini biliyorum ama hepsini değil.
c) Telefonla konuşabilmemi sağlayan fonksiyonu dışındaki özellikleriyle ilgilenmiyorum.
d) Tüm özelliklerini biliyorum.

7- Kaç yıldır bilgisayar kullanmaktasınız?

a) 0 - 2
b) 3 - 5
c) 6 - 9
d) 10+

8- Yeni çıkan teknolojik ürünleri aşağıda belirtilen hangi vasıtalarla öğrenmektesiniz?

a) Arkadaşlarım, ailem ve çevremden duyarak ve onlardan görerek öğrenirim.
b) Teknoloji dergilerini, aylık tanıtım broşürlerini takip ederek öğrenirim.
c) İnternetten takip ederim.
d) Bu konuyla ilgilenmem, tesadüfen öğrenirim.

9- Teknolojik bir ürün alacağınız zaman...

a) Genelde yanımda o ürün hakkında bilgi sahibi bir kişi olur, onun referansına göre seçim yaparım.
b) Kendim araştırır, seçerim ve o ürünü almaya veya almamaya karar veririm.
c) Satış görevlisinin önerdiği bir ürünü alırım
d) Bir ürünü beğenir ve alırım

10- Video oyunları oynar mısınız?

a) Evet, oynarım
b) Hayır, oynamam

Yukarıdaki soruya yanıtınız “A” şıkkı ise “Tip A” isimli sayfayla, yanıtınız “B” şıkkı ise “Tip B” isimli sayfayla ankete devam ediniz.

Tip A

UYARI: AŞAĞIDAKİ MADDELERİ YALNIZCA VİDEO OYUNLARI OYNAYAN GRUP CEVAPLAYACAKTIR.

A11- Bir video oyununu satın almanızda aşağıdakilerden hangisi en etkili oldu?

a) Kitap veya oyun satan yerlerdeki tanıtım ve reklamlar
b) Okuduğunuz gazete ve dergilerdeki tanıtım ve reklamlar
c) Web sitelerindeki reklamlar
d) Arkadaşlarımdan duyumlarım

A12- Yılda bilgisayar ve video oyunları için ne kadar para harcarsınız?

a) Hiç harcamıyorum.
b) 0 - 50 TL
c) 51 – 100 TL
d) 101 – 250 TL
e) 250 TL+

A13) Video oyunlarının fiyatlarını nasıl buluyorsunuz?

a) Pahalı
b) Normal
c) Ucuz
d) Fiyatlarıyla ilgilenmem.

Teşekkürler

Tip B

UYARI: AŞAĞIDAKİ MADDELERİ YALNIZCA VİDEO OYUNLARI OYNAMAYAN GRUP CEVAPLAYACAKTIR

B11- Aşağıdaki ifadelerden bilgisayar ve konsol oyunlarıyla ilgili sizi en iyi ifade eden cümleyi seçiniz.

a) Bugüne kadar hiç duymadım.
b) Biliyorum ama oynamadım.
c) Deneme fırsatım oldu.

B12- "Video oyunlarını oynamamamın en önemli sebebi...." cümlesini aşağıdaki alternatiflerden hangisi ile tamamlanması sizi daha iyi ifade eder?

a) Video oyunlarını karmaşık bulmamdır.
b) Teknolojik ürünlere yakın olmayışımdır.
c) Arkadaşlarımın video oyunu oynamamasıdır.
d) Ambalajlarını beğenmememdir

B13- Alışverişteyken, gezmeyi tercih ettiğiniz reyonlarda video oyunları satılıyor mu?

a) Evet
b) Hayır

B14- Çocukluk yıllarınızda konsol veya bilgisayar oyunu oynar mıydınız?

a) Evet
b) Hayır

Teşekkürler

b. Questionnaire in English

Gender: **Age:** **Department:**

Choose the best alternative given in the questions below. Do not choose more than one alternative.

1-Which of the following amount of monthly income range belongs to the monthly amount you have?

a) 0 TL- 400 TL
b) 400 TL - 800TL
c) 800TL – 1200 TL
d) 1200 TL+

2- Which of the following defined your residence type?

a) I live with my family in Ankara
b) I stay in a student dormitory
c) I live with my friends
d) Other (……………………………………………………………………)

3- Mostly, at the weekends…..

a) I prefer having good time at home.
b) I prefer going to a mall and shopping.
c) I prefer meeting with my friends in a cafe.
d) I prefer activities different from the above.

4- How many console or computer games do you purchase in a year?

a) 0
b) 1 – 2
c) 3 – 5
d) 6 – 10
e) 11+

5- Put the given product groups into order according to the amount of money you spend for.
(7 is fort the most – 1 is for the least)

( )- Cosmetics
( )- Apparel
( ) -Books
( )- Music CD
( )- Film DVD/VCD/DVX/Blu-ray
( )- Video Games
( )- Theatre and Cinema

6- Do you know all the specifications of your mobile phone?

a) I know all of them
b)I know a few but not all of them
c) I do not concern with features other than telephoning.
d) I know all the features of my mobile phone.

7- How long have been using PC?

a) 0 – 2
b) 3 – 5
c) 6 - 9
d) 10+

8- Which of the following media you use for acknowledgement of new technological products?

a) I see and heard from my friends, family and acquaintances.
b) I keep up with techno magazines and monthly advertising brochures.
c) I keep up with it over the Internet.
d) I'm not interested in technological products, I hear about them by chance.

9- When you will buy a technological product…..

a) A technologically acknowledge person comes with me and I decide according to his/her suggestion.
b) I research, select and decide to or not to buy it on my own.
c) I buy the product salesperson suggests.
d) I randomly select and buy a product.

10- Do you play video games?

a) Yes, I do
b) No, I don't

If you choose "A" for the question above, please carry on with the page named " Type A"; if you choose "B" fort the question above, please carry on with the page named "Type B".

Type A

CAUTION: THE QUESTIONS BELOW WILL BE ANSWERED ONLY BY THE GROUP PLAYING VIDEO GAMES.

A11- Which of the following is the most effective factor in your video game purchases?

a) Advertisements and promotions in bookstores.
b) Advertisements and promotions at the newspapers and magazines.
c) Advertisements in web pages.
d) Tidbits from friends

A12- How much do you spend from computer and console games in a year?

a) I do not spend at all.
b) 0 - 50 TL
c) 51 – 100 TL
d) 101 – 250 TL
e) 250 TL+

A13) What do you think about the prices of video games?

a) Expensive
b) Normal
c) Cheap
d) Not interested with their prices.

Thank You

Type B

CAUTION: THE QUESTIONS BELOW WILL BE ANSWERED ONLY BY THE GROUP NOT PLAYING VIDEO GAMES.

B11- Choose the best alternative which describes you in terms of computer and console games.

a) I have never heard about them.
b) I know them, but I have never played them.
c) I have had a chance to try them.

B12- "The most important reason why I do not play video games is that…"Which of the following completes the sentence the best?

a) I find video games complicated.
b) I do not feel close to technological products.
c) My friends do not play them.
d) I do not like their package.

B13- Are video games sold in the departments and stores you go for shopping?

a) Yes
b) No

B14- Did you play video games in your childhood?

a) Yes
b) No

Thank You

C. CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Birdal, Sevim Tuba
Nationality: Turkish (TR)
Date and Place of Birth: 31 October 1984 , Antalya
Marital Status: Married
Phone: +90 312 442 80 82
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EDUCATION

Degree	Institution	Year of Graduation
MS	Çankaya Univ. Management	2010
BS	Çankaya Univ. English Language and Literature	2006
High School	Antalya Anatolian High School, Antalya	2002

WORK EXPERIENCE

Year	Place	Enrollment
2006-Present	EMS Electromechanics	International Affairs Coordinator

FOREIGN LANGUAGES

Advanced English, Beginner German

HOBBIES

Pencil Drawing, Video Games Playing, Interior Design, Writing, Swimming, Yoga, Movies and Novels.