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"WE WANT A 3D GAME"

Customer expectations for the games company when buying a serious game

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ABSTRACT

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All digital games are not used for entertainment. Some of them can also be used for non-entertainment purposes and these games are called serious games. This thesis is carried out in co-operation with one Finnish games company that produces serious games.

Customer expectations for the product bought and the fact how well these expectations are met are the basis for the value perceived by the customer. The purpose of this study is to try to understand the expectations the customers have when making a purchase decision to buy a serious game. Expectations are subjective experiences of the customer, and because of this subjective nature, a semi-structured interview was considered to be the best data collection tool. The background knowledge for this thesis is obtained from the literature concerning theory of marketing and digital games.

The material was analysed using a qualitative content analysis and classified into main categories according to the content of the data. The categories were formed based on the theory on customer value and customer satisfaction. The analysis revealed that the customer had different expectations for the game and the company developing the game. The main expectations concerned information about pricing but also information about possibilities and restrictions of the technology being used. Beside expectations, the analysis revealed that even though the serious game bought was easy and fun to use, the customer felt that it was still difficult to implement. This was mainly because of the prejudice of the potential users. This thesis does propose suggestions for the games company, how to develop their marketing of serious games in order to better meet the expectations of new, potential customers.

Keywords: serious games, marketing, customer expectations

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1 INTRODUCTION

During the history of humans, playing games has been a way for people to entertain themselves and others. Playing and games also have a more serious meaning in the evolution of man, as they provide a natural way for us to learn and to develop.

The development of computer and network technology over the past decade has been significant. The computers of today enable the creation of more and more advanced and complicated virtual environments. Also, the general attitude against computer technology has changed dramatically, and today computers (of all sorts) are a normal part of everyday-life. These changes have also reflected to the digital games industry, making digital games increasingly more popular and making playing digital games more acceptable. Partly because of this, a new form of gaming has formed, serious gaming.

Globally, the games industry has been the fastest growing sector of the entertainment business throughout the 21st century, reaching the sales of over USD 50 billion in 2010. At the moment the games sector is bigger than the music sector and is closing in on movies every year. (Neogames 2010, 3.)

Games can roughly be classified into two categories according to the purpose of the game. **Entertainment games** are purely meant for entertainment, where **serious games** have a different aspect to the goal of gaming. The goal of serious games is to teach and to develop the players in a certain area or areas. Therefore, serious games can be regarded as a new and innovative way to learn and to develop. In addition, applications of serious games are limited only by our own imagination.

When taking a look at today's market of digital games, most of the games offered are entertainment games and serious games are only a small minority among them. It is estimated that the business share of serious games is only

few percent of the whole gaming industry. And, even though games industry is recognized as the biggest cultural export item of Finland, only approximately 10 gaming companies develop serious games and these games are mainly targeted for the domestic markets. (Lehto, 2012.)

1.1 Background of the study

The idea for this thesis originates from a conversation with the CEO of the games company, in spring 2011. He mentioned that the most difficult part in selling serious games to the customers is the substantiation of the price. The price of a serious game is usually relatively high due to production costs. In addition, one reason for high costs is that in most cases the game is tailored to meet the requirements of the customer.

It was noted that instead of telling about the production costs, the company has to tell the customers something that they really want to know; the value of a serious game to the customer.

1.2 Purpose and scope of the study

Even though this thesis deals with innovative and new ideas, which serious games are, the markets are still controlled by the traditional law of trading: the customers only buy products they think are worth buying. In other words, the seller has to be able to present the value of the product to the potential buyer in order to generate sales.

The purpose of this research is to try to understand the expectations the customers have when making a purchase decision to buy a serious game. This thesis also aims to identify the factors that customers regard as value-creating and to which the games company should pay more attention to.

The purpose of this research is not to create new theory or test the existing theories on customer value and customer expectations. Hopefully the findings

of this research will benefit company and help them to improve their ability to deliver the value that the customers expect to receive.

In the light of the purpose of the study, this is a qualitative research, which aims to gather in-depth and rich information about the customers and their operations in a specific purchase situation (purchase of a serious game). According to Hirsjärvi, Remes and Sajavaara (2000, 155) some of the main features of qualitative research are:

1. Research produces rich and in-depth information about the research subject
2. The primary goal of the research is not to test the existing theories
3. The target group is selected using appropriate specifications and not randomly

This research relates strongly to the theory of customer value creation. And, in order to provide the customer the value they expect, the company (seller/marketer) has to understand the customer and their needs, goals, expectations and processes.

The research question of this study is:

- What do the customers expect from the games company, when buying a serious game from them?

The games company has different ways to sell and distribute serious games to their customers. One way is to develop a new game according to the needs and wants of the customer. In this case the game is provided as a development project.

Another way is to provide the game as a service. In this case the games company does not have to develop the game as it already exists. And, instead of the actual game, the company sells the customer gaming sessions as a service, which includes everything needed to play the game.

This thesis concentrates only on the model where serious games are provided as development projects and, the game as a service model is excluded from the scope of this research. The main reason for excluding the game as a service model is the significant difference between the premises of these two models. Where the development project model can be considered as a long-term solution, the game as a service model, on the other hand, is fairly short-term. Therefore, it gives the reason to suspect that for example the expectations of the customers' in these models vary so much that they are not comparable with each other and should be processed separately in different studies.

2 DIGITAL GAMES

This chapter includes definitions for the concepts of a digital game, serious games and the activity of play. In addition, a brief history of digital games is also presented.

2.1 What is a digital game?

There are various definitions for the concept of the digital game, depending on the perspective they are viewed from. This thesis considers digital games as games which are played using a digital device such as a computer, console, phone, PDA etc.

A digital game can be regarded as a set of interaction activities performed by two or more parties. Where, one party is always the player (human), and other parties of the game can consist either of other players (human) or the computer, or a mixture of other players and the computer. In digital games these interactions are governed by rules and they have a goal they aim for. (Huhtamo & Kangas 2002, 19.) It is significant that the players of the game are not obligated to know the rules of the game beforehand, as the rules can be learned by playing the game (Eskelinen 2005, 73).

Today there are countless numbers of digital games on the market. In order to control this quantity, the digital games are usually categorized into genres, according to their contents and the interaction activities they contain. (Keinänen 2007, 9.) It is also necessary to note that there is not only one correct way to categorize games, and some games can be categorized into several different genres (Mäyrä 2003, 9).

Due to an ever growing quantity of games, genres are a subject to constant changes. Moreover, an addition of one game changes the genre as a whole, making the categorizing of games even more difficult. (Chandler 2000, 2.)

It also seems, that (at least) all the big game publishers have their own definitions of the game genres. Some examples of the genres used are: action, adventure, strategy, role-playing games, simulation etc.

2.2 Definition of play

When talking about games, it is also needed to consider the actual activity associated with them, **playing**. Thus, a game can be regarded as a tool for **playing**.

In 1958 a French philosopher and sociologist Roger Caillois presented in his book *Man, Play and Games* (translated to English in 1961) that playing is a range of activities with six basic characteristics (Siitonen 2007, 17). These Callois' characteristics describe the activity of play quite thoroughly.

According to Caillois, play should be a (1.) **free and voluntary activity** which brings joy and diversion to the players. In this way players devote themselves spontaneously to the game, which enables them to find diversion and escape from the responsibility and routine. If one is forced or commanded to play, spontaneous devotion will most likely disappear. In this case *free* also means that players are free to leave (i.e. stop playing) whenever they want to do so. If the player wants to stop but is not allowed to, it actually is the same as the player would be forced to play and therefore it would danger the devotion of the player. (Caillois 1961, 6.)

Caillois also noted that play takes place inside the precise limits of time and place and anything that happens outside is irrelevant. In other words, play is (2.) **separate** and the game's domain is restricted and protected from the outsiders. (Callois 1961, 6-7.) Therefore, it can be said that a game's domain is a sandbox, a world of its own, that does exist in the real world but is still a separate universe from everything else.

If the outcome of the game is known beforehand or if there is no uncertainty-factor, the game might not be pleasing to the one who wins without an effort. Therefore, the game has to be (3.) **uncertain** in order to keep the players devoted and feel joy from the play. (Caillois 1961, 7-8.)

One of the key features that separate play from other activities, such as work or for example arts is the (4.) **unproductiveness** of play. Caillois (1961, 5-6) describes the productivity of play with the following sentence: "*Play is an occasion of pure waste: waste of time, energy, ingenuity, skill and often money...*".

There is an exception though. Even though play can be described as an unproductive activity that does not create wealth or goods, it does have the ability to lead to an exchange of property among the players. But this happens only if the players accept the probability of the transfer at the beginning of the game. (Caillois 1961, 5.)

Many of the games are (5.) **governed by rules** of play and these rules dictate the boundaries inside which the players' actions are free. Especially in cases where the game or play has no correspondence in real life activities the meaning of the rules is clear as they, in a way, create the real life for the game. (Caillois 1961, 8.)

There also are forms of play which have no specific rules. In these cases playing requires improvisation and the joy of play is generated by playing a (6.) **make-believe** role as if the player is someone, or something else. (Caillois 1961, 8.)

Thus Caillois introduced his characteristics of play well before digital games were actually invented, his perceptions and conclusions are still valid and apply to the digital games of today. The characteristics of play that he introduced are applicable to playing in all circumstances, no matter if the playing happens using a digital device or for example outside on the playing field. From this a

conclusion can be drawn that even though time has its effect on the tools of playing (games), it actually has no or only little effect on the core essence of play.

2.3 History of digital games

When talking about computer games, most people seem to think that the history of digital games starts from the late 1970s or early 1980s. This is partly true, because during that time digital games became, for the first, known to the public, as home entertainment. But when looking further back it reveals that the history of computer games actually extends all the way to the 1950s and 1960s, to the early days of computers.

2.3.1 The 1950s and 1960s

In the 1950s, MIT (Massachusetts Institute of Technology) introduced the first courses of computing studies. At the same time they also founded an Artificial Intelligence research department. At the beginning the department was mainly funded by the military but in time they also developed close relationship with Digital Equipment Corporation (DEC), which was operating in the new market of minicomputers. DEC supported the department by providing MIT with a minicomputer and training to use it. In exchange, as a payment, MIT provided DEC with research, advice and free programs. (Haddon 1999, 306 – 307.)

From the perspective of digital games, 1962 was a significant year, as MIT introduced *Spacewar*. *Spacewar* can be considered to be the first real-time, interactive game. Soon after its release *Spacewar* was also supplied to all DEC clients. DEC's main purpose for the game was not entertainment but it was used to diagnose the operation of DEC-supplied minicomputers. *Spacewar* also had a function in the DEC's marketing. It was used to give the computer a friendly face, making computers more easily approachable. (Haddon 1999, 308.)

2.3.2 The 1970s and early 1980s

During the 1970s and early 1980s, the world witnessed the true take off of the digital gaming in the form of Arcade and home video games. Where earlier games were by-products of the computer technology meant for other than entertainment use, arcade and home video games were purely aimed for entertainment use.

Arcade games

Arcade games ran on video games machines which are coin-operated and they were located in arcades, bars, shops and amusement parks across America (Haddon 1999, 308). Arcade games still exist today but their popularity has come down significantly when compared to their golden age in the 1980s.

Nolan Bushnell can be regarded as the godfather of arcade games. With his team he is responsible for designing and producing one of the first arcade games, *Computer Space*, which actually was a coin-op version of *Spacewar*. *Computer Space* was not as big of a success as it was hoped to be, but later Bushnell and his team created *Pong*, which on the other hand did become very popular. (Haddon 1999, 308.)

In 1979 arcade games reached a big milestone in the form of *Space Invaders*. *Space Invaders* raised the popularity of arcade games to new dimensions. The sales of arcade games machines rose from \$40 million to \$500 million between years 1979 and 1981. And more significantly, the markets of arcade games machines had stretched outside the United States and became international. (Haddon 1999, 308.)

Home video games

Around the same time with the arcade games even home video games entered the market. These games were meant to be played at home using TV sets. One of the first home video games machine was *Odyssey* which was released in 1972. Even though TV games were not as highly noticed in the media as the

arcade games, they actually were quite successful in the consumer electronic markets. (Haddon 1999, 309.)

All the way to the mid-1970s TV games were based on integrated circuit technology which consisted of one or more chips on which there were fixed programs. In 1976 several companies were looking for solutions to replace chips with microprocessors which would enable the production of programmable home video games machines, game consoles. (Haddon 1999, 309.)

The concept of game consoles was a big step towards the present form of home video games. It changed the nature of home video games as a product, drawing a line between hardware and software. Consumers did not have to buy a new machine (hardware) to play every new game, but they only had to buy the game (software) and play it on the machine they already had at home. (Haddon 1999, 309-310.)

As said before, this development laid the basis for the technological architecture being used today, where computers and consoles are platforms for running games. The separation of software and hardware also created new business opportunities in the form of games development.

2.3.3 The 1980s

In the beginning of the 1980s the console hardware and software sales reached its peak. But a new way of playing was dawning, computer games. One of the biggest reasons for computer games not to develop as rapidly as console games had been the price of micro-computers. But around 1983 this all changed, as the prices of micro-computers' fell and home computers found their way into homes. (Haddon 1999, 310.) Two of the most well-known micro-computers of this era certainly are Commodore 64 and ZX Spectrum.

Even though micro-computers had the potential to become significant gaming machines, this ability was not actively used in marketing. Some of the computer manufacturers had ambitious, long-term plans for making home computers a central part of the household, which would be routinely used by the whole family. And, because games were seen as children's toys the marketing of home computers never highlighted playing games as their central function, but only as one option among others. (Haddon 1999, 311.)

Despite the efforts of manufacturers not to profile microcomputers as gaming devices, but as general-use computers, the gaming abilities of the computer did guide the development of new computers. Good examples of this are Atari ST and Commodore Amiga. (Haddon 1999, 312.)

2.3.4 The 1990s

The 1980s had been the time of microcomputers and it seemed like console-gaming had died during that time. During the 1990s console gaming made its comeback and in this decade the most striking development of hardware actually happened with home video games machines instead of computers, giving the edge back to the consoles. The leader of this development was Nintendo. (Haddon 1999, 312.)

New consoles had few main competitive advantages compared to computers. Many of the appealing new games were made available exclusively to new consoles, and thus, the offering of console games was competitive when compared with the games offered to computers. The new consoles also were relatively cheaper than microcomputers, making consoles them easier to obtain. And, because of the technological development, the gaming performance of consoles was better. (Haddon 1999, 312.)

Even though consoles had come back to the market, the development of computer games and computer hardware also continued. The games

development focused mainly on IBM-compatible platforms, PCs. (Haddon 1999, 313.)

The development of the PC-technology was rapid during the 1990s and the processing power of the computers increased on the yearly-basis which enabled for example better graphics. This development made PC a more and more attractive platform for software publishers. (Haddon 1999, 313.)

2.3.5 The beginning of 21st century

Even though the first games like *Spacewar* were multiplayer games with primitive online abilities, this was not the direction of games development in the following decades. All the way to the mid-1990s games were primarily stand-alone, single player games with some multiplayer abilities. Using these multiplayer abilities usually required the players to be in the same room playing the game on one machine using for example shared screen. (Siitonen 2007, 18.)

The first game genre that really started to make use of the online multiplayer capabilities of the game was **First Person Shooters** (FPS). Games like *Quake* (released in 1995) laid the path for the FPS-games of today. Other genre to follow FPS was **Massively Multiplayer Online Role-playing Games** (MMORPG). In fact one of the biggest success stories of gaming world is a MMORPG called *World of Warcraft* (*WoW*). In January 2011 *WoW* had respectably more than 12 million subscribers making it the most popular subscription-based MMORPG (Blizzard Entertainment 2011).

More and more games of today are offering advanced online capabilities. One attraction of these games is the possibility to play with and against other humans, instead of the computer. Playing games has become more social event than it used to be, and online games are connecting numerous people together, regardless of time and place.

2.4 Serious games

When talking about serious games, it is needed to define what a serious game is. The term serious game is relatively young. It is said that the impulse for serious games movement was actually given by the U.S. military in 2002 when they released their first version of a video game America's army. Around the same time Woodrow Wilson Center for International Scholar (Washington, D.C.) founded the Serious Games Initiative which also greatly helped the term serious games to spread. (Backlund & al. 2007, 2 and Kivinen 2008, 5.)

The term serious game seems to be in contradiction with itself. If playing should bring joy to the player, how can the game played be serious? Ben Sawyer (cited in Michael & Chen 2006, 23) defined that the word serious in serious games refers to the purpose of the game, and not the content of it.

2.4.1 Concept of serious games

Even though the term serious games is today well-established there is not an all-explanatory definition for the actual concept of serious games (Backlund & al. 2007, 3). The definitions provided are sometimes overlapping but mainly they are concentrating on their own point of view on serious games.

In his essay "Serious Games: A Broader Definition", Cook (2005) defined serious games using the following definition:

 Serious Games: The application of gaming technology, process, and design to the solution of problems faced by businesses and other organizations.

 Serious games promote the transfer and cross fertilization of game development knowledge and techniques in traditionally non-game markets such as training, product design, sales, marketing, etc.

Thus, Cook defines serious games from a business perspective. His definition regards serious games as problem solving tools for businesses and organizations.

Another, commonly adopted way to define serious games is to see them as games with non-entertaining primary purposes. For example, Michael & Chen (2006, 21) simply define serious games as “games that do not have entertainment, enjoyment, or fun as their primary purpose.”

Michael & Chen (2006, 21) also point out that even though entertainment is not the primary purpose of serious games, it does not mean that serious games cannot be entertaining, enjoyable, or fun. It only means that the primary purpose of serious games is something else than entertainment.

There is an ongoing debate about if serious games should be fun or not. The majority (over 80 %) of the developers of the serious games, educators and researchers think that fun is an important element of serious games. Fun and enjoyment are also seen as important motivators for players to continue playing the game again. (Michael & Chen 2006, 20.)

2.4.2 Purpose and use of serious games

According to Kivinen (2008, 19), serious games have a few primary purposes. Serious games can be used for **knowledge transfer**, which basically is the same as traditional teaching. They can also act as tools of **skill transfer** (training). When comparing training to teaching, training is a more precise activity, which usually concentrates on one specific skill area. Finally, serious games are also used for **attitude transfer**, which can also be called “informing”. The goal of Informing is to expand the awareness and perception of the players about something. (Michael and Chen 2006, 203 and Kivinen 2008, 21.)

Serious games can be categorized according to the markets they are aimed for and by the purpose of the game. From the developers' point of view the categorization according to the main market is useful when pre-defining the requirements for the game. The requirements inside the category are usually similar, but might differ greatly between different categories.

In their book "*Serious Games: Games That Educate, Train and Inform*" Michael & Chen (2006, 45-232) present and describe six market-related categories for serious games. Even though the categorization is based on the situation on the U.S. market, it also is applicable in any other country, too.

Below is a brief overview of the categories Michael & Chen presented, and more thorough information about the markets and the descriptions can be found in their book.

1. **Military games** are the biggest market of today's serious games. They are used in the military mainly to train recruits and officers (Michael & Chen 2006, 47). In addition, some military games are also used to recruit new soldiers. Good example of this kind of recruitment game is *America's Army*.
2. **Government games** cover the rest of government agencies after military. A good example of an agency using serious games is the Department of Homeland Security. (Michael & Chen 2006, 47.)
3. **Educational games** are used for teaching and training. Educational games is a growing market as educators have become more and more interested in the use of serious games as tools of education. (Michael & Chen 2006, 47.)
4. **Corporate games** are aimed for business markets. The games are mainly used for training employees of all levels of the corporation. The games cover a wide variety of corporation activities. (Michael & Chen 2006, 145.)
5. **Healthcare games** are games for physical and mental health (Michael & Chen 2006, 180). They are used for treatment-, recovery- and rehabilitation-purposes (Michael & Chen 2006, 47).

6. Political, religious and art games cover the third primary application of serious games, described before in this thesis. Their main objective is to inform players through attitude transfer. (Michael & Chen 2006, 203).

3 CUSTOMER VALUE AND MARKETING

People and organizations buy products and services in order to satisfy their needs and to gain benefit from the bought item. Thus, it can be said that sold products and services generate value to the buyers, i.e. customer value.

Marketing strategists around the world agree that creating superior value is one key element in the success of companies. For example, according to Porter (1996, 62) a company can differentiate from its competitors and rise above them by delivering superior value to customers or by lowering the delivery cost. Delivering superior value allows the company to charge higher prices for their products and services where lowering the delivery cost also lowers the income of the company (Porter 1996, 62).

3.1 Needs, wants and demands

According to Armstrong & Kotler (2004, 5), marketing of today is a social and managerial process which aims to satisfy customer needs through creating and exchanging products and value with others.

A customer's desire to acquire a product or service originates from a basic need. Needs are states of felt deprivations which are not created by marketers but are a part of human makeup. Needs are common and same for everyone but when needs are influenced by culture and individual personalities they become wants (Armstrong & Kotler 2004, 6).

As a simple example, about needs and wants can be used two persons (A and B) who come from different social and cultural backgrounds (e.g. from different countries). Both persons feel hunger which creates the basic need for food and both of them experience this need the same way no matter what background they are influenced by. The influence of the background can be seen on the so

called want –level. Person A wants a hamburger where Person B might want to have a pizza.

Even though the above described case about wants and needs is a simplified and imaginative example of the difference between needs and wants, it also describes the essence of the main challenge of marketing; Different wants of different customers can be results of the same basic need. Thus, in order to provide the customers with the value they are looking for, the marketer has to find the basic need behind the wants.

When customer wants are combined with the buying power, they become **demands**. Then, instead of only needing and wanting, customers start to demand products or services that offer them most value and satisfaction. (Armstrong & Kotler 2004, 6.)

Demands also contain a risk for quality. In many cases, if the customer has enough buying power, they do not only demand superior quality and value but also lower delivery times. In software business and especially in business markets, the software often has to be to meet the requirements of the customer and to deliver superior value and quality to the customer. Unfortunately, practice has shown that lowering the development and delivery times from the originally planned schedules also usually lowers the quality of the product. And this leads to lowering the feeling of value that customer experiences.

3.2 Customer value

When comparing offers, customers estimate which of them delivers the most value to them. Customers are value-maximizers as they always aim to achieve the maximum value from every purchase they make. This value-maximizing happens within the bounds of search costs and limited knowledge, mobility and income. And, customers' actions are controlled by the expectations of value they have for the purchase and their satisfaction, on the other hand, is affected by how well these expectations are met. (Kotler 1994, 37.)

One of the most common definitions of the customer value is that it is the **difference between customer benefits and customer costs**. Assumed benefits are the result of customers' expectations about the value of the product and these expectations control their buying behaviour. Customer expectations are heavily based on the customers' past experiences, on the opinions of friends, and on the marketer and competitor information and promises. (Armstrong & Kotler 2004, 9.)

In the most narrow approach the above introduced definition can be interpreted to include only monetary factors, where customer benefits is the money-income that using the product or service creates for the customer and customer costs is the financial sacrifice customer makes to buy the product or service.

Wider approaches and definitions of the customer value do not limit only to monetary factors. They define the creation of the value as a trade-off where the customer receives more than only monetary income (e.g. quality, benefits, worth, utilities) in exchange to what s/he gives up (e.g. money, sacrifices). (Woodruff 1997, 141.)

A significant characteristic of the customer value that is also approved by many marketing strategists is that at the end of the day, the customer value is always something that is detected by customers and not something that is determined by the provider (Davies & al. 2009, 276. and Woodruff 1997, 141). Therefore, it is needed to understand that the customer value has a subjective nature and it is greatly influenced by the customer's feeling how well the product or service satisfies their needs.

3.3 Customer satisfaction

Satisfaction is the level of state the customer feels when comparing the product's outcome in relation to the expectations. Thus, the satisfaction level is a function of the difference between the value perceived by the customer and the expectations of the customer. (Kotler 1994, 40.)

A customer can experience satisfaction on one of three broad levels. If the expectations are not met, the customer is **dissatisfied**. If the expectations are met but not exceeded, the customer is **satisfied**. If the expectations are exceeded, the customer is **highly satisfied**, pleased or delighted. (Kotler 1994, 40.)

Customer expectations are influenced by many factors such as their past buying experiences, statements made by friends and associates, and by information and promises of the marketer and its competitors. When making promises and providing information, the marketer tries to influence what the customer's expectations will be. (Kotler 1994, 40.)

Building expectations of the customer is a sensitive task because if the marketers raise the expectations too high, the buyer is likely to be disappointed. On the other hand, raising expectations to a certain level is needed, because if the company sets expectations too low, it will not attract enough buyers although it will satisfy those who buy. (Kotler 1994, 40.)

3.4 Exchange and relationship perspectives

The value creation process can be approached from two different perspectives according to what is regarded as the main value creator. These two perspectives are **exchange perspective** and **relationship perspective**. (Gröönroos 2007, 26.)

The relationship perspective has much more far-reaching historical roots of these two perspectives. It is said that relationship orientated marketing is as old as trade itself, and historically, trade and commerce was more relationship oriented than exchange orientated. During the Industrial revolution and following industrial era, the focus of value creation and marketing changed, as it was the beginning of mass production and mass marketing. This also led into the decrease of service and quality levels. (Gröönroos 2007, 25-26.)

Today the relationship perspective has again strengthened its position in marketing. The mass marketing approach (exchange perspective), which use to be dominant, has become less effective and less profitable. In some industrial markets the exchange perspective is still prevalent and justified but when looking at the software and service markets of today, the relationship marketing is the most commonly used marketing approach. (Gröönroos 2007, 25-26.)

When comparing the two perspectives, the fundamental differences between them are the role of the product in value creation process and the definition of the value creator itself.

In the traditional marketing models of the exchange perspective, the value for customers is created and embedded in a product by the company making/selling the product. Therefore, the exchange-oriented marketing is mainly interested in the distribution of pre-created value and the value is the outcome of a production process. (Gröönroos 2007, 26 – 27.)

On the relationship perspective the product and the company selling the product are seen more as facilitators of value than creators of value. The customer value is partly created by the customers themselves when using the product or service and partly co-created by the two parties (buyer and seller). (Gröönroos 2007, 27.)

The main goal of the relationship marketing, besides finding new customers and making new trade, is to develop a strong and trustworthy relationship between the seller and the buyer. Especially in situations where new customers are difficult and/or expensive to find, keeping existing customers might have a positive impact on profitability (Gröönroos 2007, 26).

In the software business of today, especially in business-to-business markets, the relationship between the customer and the provider is sometimes even deeper than described above (relationship-orientated marketing). More and

more development projects are followed through in co-operation with the customer and the provider. Especially during the design-stage of the project, the context knowledge of the customer is many times invaluable, providing the software provider important insight of the customers processes that may influence the software being developed. This type of close relationship co-operation between the customer and the software provider is not only used to produce tailor-made products to meet one customer's needs but it is also used to produce software for wider markets.

3.5 Business market

There are some similarities, but also differences between the consumer and business markets. Both markets are driven by the needs and wants of the customers and both markets have people who make purchase decisions and people who make the actual products in order to satisfy these needs. The most significant difference between these two markets is the buyer's role in the purchase process. In the consumer market the buyer is usually an individual person (consumer) making the purchase decision by himself (or herself). And, in most cases, the buyer in the consumer market is also the main funder of the purchase. In the business market the actual buyer, making the purchase decision, is also an individual person. But the actual purchase process, in most cases, is influenced and guided by the organization and other stakeholders. So, the purchase process of the business buyer is usually more complex than the purchase process of a consumer buyer. (Armstrong & Kotler 2004, 214-216 and Rope 2004, 17-19.)

In addition to the buyer, the controlling forces behind the purchase decisions are different in the business market, when compared to the consumer market. Even though the purchase process in the business market is usually more complex, the value factors, on the other hand, are often easier to recognise. Business buyers are in many cases pressured to control costs and the value of the product should also be presented using monetary terms (e.g. cost savings, the product produces during certain period of time). (Anderson & al. 2006, 1.)

It is common for both markets that the opinion of others, people or organizations, does influence the purchase decisions and value expectations. It actually is surprising how quickly news travel between organizations that act on the same business environment and deal with same kind of problems. Sadly, bad news seem to travel much faster than the good news. Therefore, it is important to remember that company's ability to meet the needs of the customer, not only affects the relationship with the current customer but it also might have an effect (positive or negative) on the new, future customer relationships. It can be said that the very frequently used quote "*All publicity is good publicity*" does not really apply to marketing and selling.

3.6 Institutional and government markets

The institutional and government markets share more characteristics with the business market than they do with the consumer market. The institutional and government markets can be seen as a sub-market of Business to Business - markets, as business is usually conducted between organizations. However, some special requirements have to be taken into consideration when planning marketing to organizations of institutional and government market. Otherwise, the prospective customers of the institutional and government markets can be treated like prospective customers in the business market.

The institutional market consists of organizations such as schools, hospitals, prisons etc. that are obliged to provide their services and products to people in their care. In many cases, institutional and governmental organizations are not so much interested in profit, but they have other requirements when buying services and products. A good example of these are the legislative requirements. (Kotler 1994, 219-221.)

In many cases, especially governmental organizations conduct purchases through competitive bids. Moreover, in many cases the contract goes to the lowest bidder. This is usually a result of tight budgets these customer

organizations have to work with. (Kotler 1994, 220.) Thus, because of this, institutional and governmental customers can be regarded as cost minimizers at the purest. And, because the price is usually the threshold question for institutional organizations, it is extremely important for the seller to be able to show the customer, in a concrete way, the true value of the product or service offered. The fact that institutional and governmental organizations usually have a limited year budget sets a potential problem. As the customers are forced to stick with the given budget, it sometimes does not allow them to see the value of the product in the long term.

3.7 Purchase decision

When describing the purchase decision making process, Jari Salo (2010, 79) divides it into five different stages according to the actions of the customer during the process. These five stages are presented in the figure 1 below. In addition, Rope (2004, 19) describes a similar kind of diagram about the organization's purchase process.

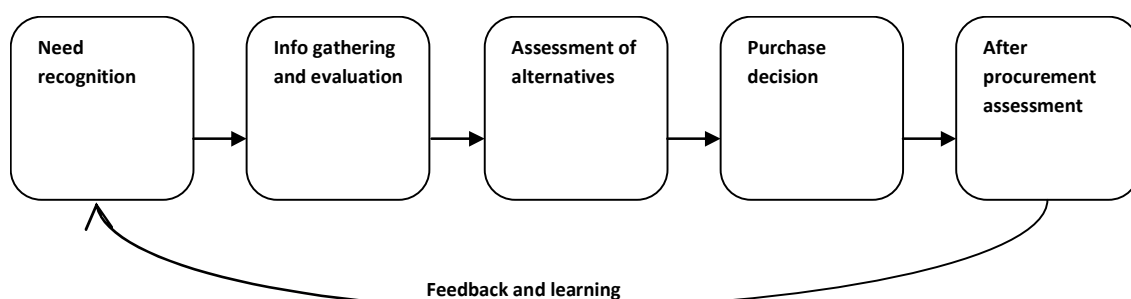


FIGURE 1. Purchase process (Salo 2010, 79)

The purchase decision process starts with the recognition of a need. This is the stage where the customer asks him-/herself if s/he should buy something. This stage is mostly controlled by the needs and wants of the customer and the need is the actual impulse that starts the whole process. At this point the customer also defines the preliminary boundaries (financial etc.) for the purchase. (Rope & Pyykkö 2003, 151.)

After the need has been recognized, the customer starts to seek the answer to the questions about what they should buy and what options they have. The main target of the customer is to gather as much information as possible about the possibilities they have. This information includes, for example, information about available solutions and solution providers. (Rope 2004, 22.)

When the information gathering and evaluation is complete, the customer continues to assess and compare the alternatives found. This is done in order to find the best solution that meets customer's needs and wants. (Rope 2004, 23.)

As stated before, the buyer in the business market is the person making the purchase decision. Because of this position, the buyer is exposed to different and contradictory forces coming from inside and outside the organization they present. (Rope & Pyykkö 2003, 166.) For example, the organization policy might require cost minimizing but at the same time the specialists inside the organization recommend the purchase of a more expensive alternative.

Because of the different and even contradictory information, the purchase decision is not always easy to make. Every factor presented to the buyer influence their decision making process. The influence of these factors is individual and depends greatly on the personality and motivation of the buyer. (Rope & Pyykkö 2003, 166.)

In the business market, another possible contradiction might occur between buyer's personal and organizational goals and desires. The buyer is always an individual person whose actions are guided by his/her own desires and by the desires and restrictions set by the organization they present. The purchase decision might sometimes be influenced by the buyer's pursuit of the personal gain. This personal gain could be for example a present awarded to the buyer (by the seller) after purchasing a certain product. (Rope & Pyykkö 2003, 170.)

In principle, the buyer sees his or her purchase decision to be the best decision in that particular situation. And it is natural that after the decision making the contradictions faced before are no longer noticed. Only the buyer's own experiences might be taken into consideration when making the next purchase decision. (Rope & Pykkö 2003, 170-171.)

3.8 Customer value proposition

As the marketing literature shows, in order to sell a product to a customer, it has to create value for them. Different customers have different expectations of the value of the product, based on their needs and wants. The main goal of marketing is to satisfy the customer's needs, and therefore the value of the product has to be presented to the prospective customers in a concrete way, so that it reaches the customer and helps them to do a favourable buying decision.

How can company's offering and its value to customers be made more concrete? Widely used tool for this is a **customer value proposition (CVP)**, which basically documents and describes the experiences a user will realize upon purchase and use of the product. (Hudadoff 2009, 2.)

Customer value propositions are constructed from the **customer's point of view**. They describe to the customer the actual value the customer will receive from using the product. Another unique characteristic of customer value propositions is that they are of **comparative nature** (Hudadoff 2009, 3). The CVP should be constructed in a relation to **the next best alternative** and answer the question: "Why should the customer purchase the product offered instead of competitor's product?" (Anderson & al. 2006, 4).

The above mentioned features of CVP set two crucial requirements for the company marketing the product. First, the marketer has to **understand the customer**. Second, the marketer should **monitor the market for changes** and know their competitors as well as they know themselves (McDonald 1997, 179).

3.8.1 Understanding the customer

Understanding the customer is more than only generally knowing the customer. It means that the company needs in-depth knowledge and understanding about the customer and their processes and activities (Ahrnell & Nicou 1990, 137).

With this knowledge the company can identify the needs and wants of the customer and offer them products and services that create them the most value. It also enables the company to identify the value factors that the customer appreciates the most, and therefore sets the framework for the customer value proposition.

Even if the company has a good offering, it will not reach the customer if it does not help them to achieve their business goals. Therefore, the company has to understand the vision, goals, strategy and plans of the potential customer in order to get their interest. This leads to the fact that understanding the customer also includes understanding the business sector of the customer. (Ahrnell & Nicou 1990, 138-139.)

3.8.2 Monitor the market

Because the customer value propositions are constructed in a relation to the next best alternative, the company is bound to monitoring the market and its competitors. It is needed to research all the available alternatives and select the alternative that seems to provide the best value to the customer (Hudadoff 2009, 3).

Kotler warns companies about the competitor myopia which means that when a company analyses the market and competitors the analysis is mainly focused on the actual competitors leaving the potential and latent competitors out of the analysis scope. (Kotler 1994, 224).

Thus, it is important to notice that the next best alternative is not always the same kind of a product the company is offering, but it can be of a totally different nature. For example, the next best alternative for a serious game could very well be a consulting company offering training, and not another serious game.

3.8.3 Structure of the CVP

There are different ways to construct the CVP. Anderson & al. (2006, 3-4) have classified the three main types of CVP: **all benefits**, **favourable points of difference** and **resonating focus**. The main differences between these types are the actual data presented in them and the factors they focus on.

All benefits

The all benefits CVP is the most commonly used and also easiest to construct as it requires least knowledge about the customer and the competitors. The all benefits CVP is simply a list of all the benefits the company thinks their offering will deliver to the customers and it is done according to the More is better-principle (Anderson & al. 2006, 3).

The major potential drawback of this type of CVP is its simplicity. There is a risk that CVP includes features that have no value to the customers. Another pitfall is the amount of product information. Because the all benefits CVP presents all the features the product will offer, the key-features that would really produce value to the customer, are in danger of being diluted by the no-value features. (Anderson & al. 2006, 3.)

It seems that the all benefits CVP does not meet all the requirements set for a CVP. It does not understand the specific needs and wants of the customer nor does it have in-depth understanding of competitors and their offerings. Therefore, the all benefits CVP is more suitable for general advertising of the product than being a part of a specific, customer-targeted offer.

Favourable points of difference

A considerably more accurate CVP type than the all benefits is the favourable points of difference. It recognises that the customer has an alternative and therefore compares the product to the next best alternative by concentrating on the features that meet the customer's needs and are superior to what the competitors are offering. (Anderson & al. 2006, 3-4.)

Constructing the favourable points of difference CVP requires in-depth understanding of the customer and their processes. The CVP should stress the points of difference that deliver most value for the customer. (Anderson & al. 2006, 4.)

Stressing the specific points of difference does contain a risk though. If the CVP is constructed without enough knowledge of the customer, it may lead to value presumption, where the marketer assumes that favourable points presented in the CVP deliver the most value to the customer. But from the customer's point of view they only deliver little or no value at all to them. (Anderson & al. 2006, 4.)

The structure, contents and especially perspective of the favourable points of difference CVP's meet the requirements of a good CVP. It does contain the understanding of the customer and their needs and it realises the need to differentiate from the next best alternative. Therefore, the favourable points of difference CVP is more preferable to an all benefits proposition (Anderson & al. 2006, 4).

Resonating focus

Even though the favourable points of difference does include most of the elements required from a good customer value proposition, Anderson & al. have discovered in their study (2006, 4) a CVP type that is superior and more successful when compared to the CVP types described above. They refer to a CVP type called resonating focus.

The resonating focus CVP concentrates only on one or two points of difference that deliver (and whose improvement will continue to deliver) the greatest value to the customer (Anderson & al. 2006, 4). In order to find the underlying value drivers of the customer, the marketer has to analyse the customer information even more specifically than when constructing a favourable points of difference CVP.

In addition to presenting the key value-producing features, the resonating focus may also contain points of parity. The points of parity are usually presented because of two main reasons. Firstly, they are presented because without them the customer might not even consider the company's offer. Or secondly, the company wants to counter the customer's mistaken perceptions that a certain value element is the point of difference in favour of a competitor's offering. (Anderson & al. 2006, 4.)

Though, the resonating focus CVP requires more work than all benefits- and favourable points of difference CVPs, it is also believed to be the most successful one. Customer representatives, who make the purchase decisions, are often cost-driven, but also ever-increasingly time-driven. The decision-makers therefore want to do business with suppliers that have the ability to see and understand the critical points in the customer's business. And, as a result of this understanding, have the ability to deliver a customer value proposition that is simple but captivating at the same time. (Anderson & al. 2006, 4.)

4 RESEARCH

As can be seen in the theory, the basis of the customer value are the needs and wants of the customer. Depending on these, the customers have different expectations about the product and the value it creates to them. Customer expectations are the result of the assumed benefits the customer assumes to achieve by purchasing and using the product. Thus, the customer's expectations strongly control their buying behaviour.

4.1 Data collection

From the research's perspective, the current customers are the best source of information, when trying to determine the reasons and motives behind the purchase decision to purchase a serious game and to mapping what expectations the customers have for the games company. The data for this research was collected from a current customer of the games company with whom the company had developed a serious game.

The data collection was done by interviewing the customer. The interview took place in January 2012. The initial plan was to interview two customers of the company, which both had developed a serious game in co-operation with them. Unfortunately, only one interview was possible as the other customer's schedule at the time was so tight that there was no time to interview them.

The questions (appendix 1) were submitted to the interviewee beforehand. The questions were used as guidelines in the actual interviews. This allowed both, the interviewer and interviewee, the possibility to change wording and order of the questions, making the interviews more open and relaxed. Some focusing questions were added during the interviews by the interviewer, in order to gain more in-depth information about some of the topics discussed.

Because of the guideline nature of the questions, the interview can be determined to have been semi-structured (Eriksson & Kovalainen 2008, 82). During the interviews the interviewer also made notes to be used in transcribing and analysing the interview. The interview was made using Finnish instead of English because it was more natural for both parties.

The interview was recorded and the recording was transcribed immediately after the actual interview. The original transcription was word-to-word with the interview and the notes made by the interviewer were used to support the transcription process. The total amount of the transcribed material was 10 pages.

4.2 Analysis

In the first stage of the analysis the transcribed interviews were divided into packages of a question and an answer. Because the transcriptions were word-to-word with the interviews, they contained some irrelevant information from the research's point of view. At this point all irrelevant information was recognized and excluded from the material.

The material was analysed using qualitative content analysis. As the analytical approach both deductive and inductive approaches were used.

The analysis started as deductive (see e.g. Daymon & Holloway 2011, 103-104). The question-answer packages were analysed separately and classified into the main categories according to their contents. These main categories were formed based on the theory on the customer value and customer satisfaction. The categories were given a descriptive name to characterize the contents of the category.

The categories created were:

- 1. The needs and wants** are the initiatives for a purchase process. They define why something will be bought (need) and also provide the preliminary definition of what will be bought (want). (see e.g. Armstrong & Kotler 2004, 6, and Rope & Pyykkö 2003, 151.)
- 2. The expectations** of the customer set the criteria for achieving customer satisfaction. The more satisfied the customer is, the more value they also tend to perceive and vice versa. (see e.g. Kotler 1994, 40.)
- 3. The experiences** of the customer about the purchase process as a whole provide important information about the value actually perceived by the customer. The value perceived by the customer is always a subjective experience of the customer. (see e.g. Davies & al. 2009, 276. and Woodruff 1997, 141.) This information serves as feedback to the seller and can be used to improve their marketing and delivering operations. The experiences also have the potential to provide information about new business opportunities.
- 4. The assessment of alternatives** is the stage in the purchase decision making process where the customer compares different options to find the best alternative to meet their needs and wants.

After the initial categorization, the data was analysed inside the categories. The analysis was not attached to any certain theory but instead, it was done with an open mind. At this stage the goal of the analysis was to find out what really comes up from the data without tying it strictly to any existing theory of the customer value and customer satisfaction. Therefore, this stage of the analysis was more inductive than deductive (see e.g. Daymon & Holloway 2011, 107).

5 RESULTS

The customer interviewed was a so-called Game as a Project customer. Instead of buying a ready game, or game as a service, they paid for the development of a new game. The development was done in a development project in which both parties, the customer and the games company, had their own responsibility areas.

This chapter includes answers of the interviewee. The answers are presented using indent and italic text and they are placed inside quotation marks. The Finnish to English translation of the answers was done by the researcher.

5.1 The needs and wants of the customer

Primary need	Secondary needs	Wants	
Need for a Tool	Need for Expertise	Want for a Partner	New features
	Need for Information	Want for Training	

FIGURE 2. Needs and wants

For the customer, the game itself (the tool) was the primary need that initiated the whole purchase process. They needed the game as a part of their own development project, whose goal was to promote new ways of learning and the use of games as teaching tools.

When comparing the Game as a Project model to the other ways to purchase a game, a significant difference is noticed in the ownership of the game. If the

customer buys a ready game or game as a service, they actually buy the rights to use the game. But in the “Game as a Project” -model, at least in this interviewed case, all the rights of the game were transferred to the customer.

“Yes, all the rights of the game belong to us.”

To possess the ownership of the game means that the customer has a full control of the game and they can decide how the game will be used from there on. It also means that for example further development and reselling of the game is controlled by the customer.

5.1.1 Need for expertise

Because the customer did not have enough know-how nor skills to develop a game, it created new needs in addition to the need for a tool. These new, secondary needs were created based on the initial, primary need.

As the game that the customer needed did not exist and had to be developed, it created a problem for the customer. The problem was that the customer did not possess enough skills, knowledge, nor resources, required to develop a game. This deficiency created **a need for expertise**.

As developing a complex system such as a serious game is an extremely demanding task, the customer’s need for expertise became **a want for a partner**. Game development was not the core competence area of the customer, so they wanted a partner that possessed all the required resources to develop a serious game.

“Back then, 2 or 3 years ago, we didn’t have enough experts here to develop a game, so The Finnish National Board of Education recommended that we should contact this one specific games company.”

The customer started a development project to develop a serious game in cooperation with the games company. In the development project the company's responsibility was the technical planning and development of the game and customer's responsibility was to specify the pedagogical content for the game.

"It was agreed that the games company's responsibility was the planning and developing the game."

"From our organization one training manager and one teacher were responsible for the pedagogical aspect; for example how the avatar functions in the game in order it to be pedagogically correct."

This resembles greatly the common way to develop a tailored and customized software system for the customer. In this model, the customer provides the definitions for the content and basic operation of the system. And the actual technical planning and development of the system is done by the software provider, which in this case was the games company.

5.1.2 Need for information

In the beginning of the development project, the customer did not have any previous experiences or knowledge about serious games. This information gap created yet another new need for the customer, **the need for information and understanding.**

"It was our first real learning game and back then, we didn't know anything about learning games. So we ordered training to open our eyes to the world of learning games."

As the customer realized the need for information and the importance of deepening their knowledge in order to successfully carry out the development project, the need became **a want for training.** The customer wanted to know more about serious games and especially about the possibilities serious games

can offer. And in order to fill this emerged information gap, the customer ordered tailored training from the games company.

“We bought tailored training from the company about serious games. In the morning we had lectures and in the afternoon we played that game...umm...<name of the game>.”

The training provided the customer more understanding and information about serious games and created the framework for the specification work they were responsible for in the development project. This “desire for information” and especially the following growth of understanding built the basis for more in-depth wants and also for expectations, concerning the game that was being developed.

Some of the customer’s wants became more accurate and more refined during the development project. This was due to the growing knowledge and understanding of the customer as they started to realize what the game could actually provide to them. These new wants concerned mostly the functionality and new advanced features that the customer wanted to be implemented into the game.

A good example of this refinement is that in the beginning of the development project the customer’s main goal was only to obtain a 3D game.

“Yes, we wanted a 3D- game.”

During the development project it became self-evident that the style of the game would be 3D, and therefore the customer’s wants focused more on functionality and new features.

“Along the way we asked for new functions for the avatar to perform. I mean, if the avatar just walks and runs, then it’s a bit dull. Isn’t it?”

These new wants partially generated from testing and evaluating the game's feasibility. But they were also partial results of the customer's previous experiences on similar products.

5.2 Expectations

When the customer bought the game as a development project, they did not only buy the game as a product, but from their point of view, they bought the whole service which would produce the actual game for them. In other words, the customer bought service instead of a certain product, although the end result of the service was the game, the actual product.

The expectations are the basis for the value perceived by the customer. If the expectations are met, the customer is more likely to be satisfied. But if the expectations are set too high and are therefore not met, the customer will be dissatisfied. In other words, the expectations of the customer guide what kind of value the customer is awaiting to receive from the purchase.

The customer had various expectations regarding the games company and the game itself. Most of the expectations concerned information distribution between the games company and the customer. The customer also had expectations for the game's features and these expectations reflected from their previous experiences on a similar product.

When developing a complex system, such as a serious game in co-operation with the customer and the provider, one cannot emphasize the importance of information distribution too much. As system development is normally not the core competence area of the customer, the system provider has to provide the customer with sufficient information about the system, in this case the game, and about the technology being used.

5.2.1 Information about pricing

The customer expected the games company to help and to assist them especially in the beginning of the development project. Game developing and the world of serious games, as a whole, were foreign areas for the customer and they felt it was the games company's responsibility to help them to get started in the beginning.

"In the beginning they (the games company) need to help out the customers as much as possible. Because the customers are...hmm...should I say, a bit naïve and ignorant at first. Only thinking that: "We have the money! Let's make a game!" "

The customer also expected to receive information about the contents of the game that had been purchased. They expected information about the features the game would contain, and especially about what would not be included.

"They (the games company) need to explain accurately, what the customer will get with their money. I think that they (the games company) need to be able to explain accurately what you get with your money and especially what you don't get, because this is the problem."

This sets a requirement for the purchase contract and relating documents (such as a specification documentation of the game) to also include what features are not included in the game without additional, chargeable work. In other words, the specification should tell what features are additional and available for an additional fee.

In addition, the pricing of the additional features was important for the customer. According to the customer, the available additional features of the game should have a clear and accurate pricing.

“They should be able to tell us the accurate price of the feature that we want.”

The customer also expected that the games company should be able to justify the price of a feature by telling how their money is going to be spent. In other words, the customer expected to know the cost factors of the features.

“They should tell us, how many working hours it takes to develop if we want this or if we want that.”

The customer has to be able to control the additional costs and to evaluate the value of the additional features as accurately as possible. Therefore, they expect to get an accurate pricing for all the functions that possibly generate new expenses.

5.2.2 Information about possibilities and restrictions

The customer expected information, not only about the possibilities of the game and the game engine, but also about the restrictions of the technology being used.

“It would have been nice to know the restrictions of the game-engine beforehand and what version was used and what it would’ve taken to upgrade it. And that the game cannot communicate with other learning games because of the version of the game engine. This we didn’t know in the beginning.”

If the customer is not informed about the restrictions early enough, there is a danger that they set their expectations too high. And, in the end, this might leave the customer dissatisfied because their high expectations were not met.

In addition, the customer’s previous experiences on similar products affected and moulded strongly their expectations for the game being developed. The

customer had experiences on one virtual environment that was used in their organization. These experiences they seemed to use as a reference when evaluating the new game and its possibilities. This referring happened even though the new game developed was totally different, when compared to the other product that they had used and for a totally different purpose.

“Second Life is fairly stable environment, where <name of the game engine>, on the other hand, is not so...hmm... “super stable.”

When the customer was asked if their experiences about Second Life had an effect on their expectations for the new game, the answer was fairly clear and simple:

“Yes. Definitely it had an effect.”

Even though the question about Second Life and its effects on the expectations seems prescriptive, it was also a justified question. The signs of Second Life's effects were showing during the whole interview. If this feeling had not been confirmed, it would have been only that, a mere feeling, with no or only a little value to this research.

Thus, if the customer has used some other similar product before, their expectations for the functionality and the possibilities of the new game seem to base on that product. In this case, the possibilities and restrictions of the new game are in danger to be regarded as self-evident by both, the customer and the game developer. And it is possible that the customers raise their expectations too high on the basis of their previous experiences and also because of the insufficient data provided to them.

5.3 Experiences

The experiences of the customer reflect their satisfaction level and also give some insight how well their expectations are met.

In the B2B markets the actual buyer is not always the same as the user of the product or service. Therefore, experiences can roughly be separated into buyer experiences and user experiences. The buyer experiences mainly concentrate on the actual purchase process and implementation of the game, where the user's experiences raise from actually playing the game and concern the game itself.

During the interview, the game was still in its Beta phase. Therefore, direct user experiences and comments were not available. Fortunately, the interviewed customer could share some insight to user experiences, but it still was at a general level.

5.3.1 Easy and fun to use

From the administrative point of view, the customer was pleased with the game as it did not require continuous monitoring and administration. Even the system architecture of the game supports the centralized distribution. When the game is installed on a server, it can be accessed from different locations when needed, and therefore its use is not tied to a place or time.

The customer has several units in different geographical locations and because of the architecture of the game they can provide the game to each of these units from one location.

“Now we have a server and it enables that now one group can play the game from one location and another group from another location. That's no problem.”

Also the gaming sessions can be carried through without the participation of the technical staff. According to the customer, the gaming session can be held with only one supervisor (power user) present. The supervisor's task is to monitor

the gaming session and provide orientation to the players. The teacher of the training can easily act as a supervisor.

“If the teacher knows the basics of using the computer, it (gaming session) doesn’t require anything from us. The teacher can run the game independently with the class.”

In order to act as a supervisor the teacher needs approximately a two-hour training after which s/he can carry through a gaming session independently. The training is provided by the technical staff of the customer.

“It only takes a two-hour training for the teacher and that’s all.”

Even though the direct feedback from the players who had tried the game was not available, the customer told that the general tone of the feedback was positive. The students who had played the game had liked it and felt that the game brought more depth to their theory lessons, adding more functionality and making studying more fun.

“According to them it has been positive, that it (the game) brings more to the theory and makes studying more fun.”

5.3.2 Difficult to implement

Even though the game is easy to learn and to use, and is practically available anywhere, the customer felt that its implementation will be a challenging task. Like with all new systems, the crucial factor in implementation is to convince the users about the advantages of the system. In this particular case the user group that has to be convinced are the teachers, as they are the ones who decide if the game is to be used in the training or not.

“We need to get the teachers excited about this.”

Currently, only a small portion of the teachers in the customer's organization have tried the game as part of their training. The main challenge is to get the rest of the teachers interested in the game and willing to try.

"We have three or four teachers who are very excited about the game, but unfortunately it doesn't describe the whole picture, as there are total of 400 teachers in our organization."

According to the customer, the implementation of the game will take time, but it also requires a change in the general attitude. The customer compared the implementation time of the game to the development of the use of email.

"Back in -96 or -97, people thought I was crazy as I sent homework assignments to the students via email. And today? ...hmm... Well, it's a normal and everyday operation."

The implementation of the game might be easier if the teachers' level of information about the game was higher. Learning to use a new system and to learn a new operating model is a stress factor, and therefore it also creates a barrier for development. In time this barrier will eventually lower due to changing attitudes and growing knowledge, but the time it takes could possibly be shorter if the information about serious games and their advantages was distributed more actively.

One source of prejudice against serious games is certainly the word "game" itself and its burden of history. Throughout time games have been seen as toys and meant for children's play, instead of seeing them as tools to be taken seriously. (see e.g. Haddon 1999, 311)

5.3.3 Development project

In all, the development project of the game had gone well. At the time of the interview, the project was near to its closure and the game itself was ready to be released.

In the interview, the customer did point out two main points about the project they saw as areas that needed improving. These subjects concerned the use of time in the project and the total monetary costs of the project.

According to the customer, the project was about six months behind schedule. The delay in the project's schedule was due to both parties of the project.

“Unfortunately we are badly behind schedule. We should’ve had the production version ready last autumn...umm...they have been late, and we’ve also had our delays. We’re sort of ...umm... six months behind schedule.”

In all, developing a 3-D game is not cheap. The customer was aware of this and they had reserved a substantial amount of money for the development project. Despite of all the customer's preparations, the monetary costs of more advanced features was a surprise for them. The customer felt that the pricing of the additional features was unclear and made the estimation of project's total monetary costs difficult.

The customer also saw the development project as a learning experience. They got useful information not only about developing serious games, but also about managing a large development project. According to the customer, as a result of the game development project, they learned that accurate and detailed specification is the foundation of a successful project and that the initial specification can never be too accurate. And when asked, “what would you do differently, if you had the opportunity to do it all over again”, the customer's answer was:

“We would be more precise in defining what we want; what kind of textures we want, what kind of 3D-surroundings we want, what kind of avatars we want, what kind of clothes we want for the avatars to wear, what kind of functions we want the avatars to perform.”

As the project is a learning experience for the customer, it also should be a learning experience for the games company. Being the games expert gives the company the privilege, but also the responsibility, to demand accurate specifications from the customer before starting the actual development of the game.

The customer specifications and requirements should be evaluated thoroughly together with the customer before the start of the development phase. As the company is the expert of developing games, it gives them the right to question the customer's proposals in order to test them and in order to provide the customer useful information about the game and the technology being used. And if the early evaluation of the requirements is done thoroughly enough, it will reduce the amount of unpleasant surprises during the actual development of the game.

5.4 Assessment of alternatives

Information about possible alternatives helps the company to evaluate the competition they might encounter in the future. Sometimes this competition can come from a totally different operating sector, offering a totally different solution for the customers' needs.

The assessment of alternatives was a point of interest in the study, because of the competition information, but also because it does give information about the decision-making process of the customer. From this information, it might be possible to recognise the factors that influenced the customer when they decided to buy a serious game from the games company.

Unfortunately, no real assessment of alternatives between different kinds of solutions was made by the customer. Right from the beginning, the customer already knew they wanted a game, so it excludes other possibilities from the equation.

Moreover, there was no assessment of alternatives made between different games companies. In principle, the selection of the games provider was done by the Finnish National Board of Education that acted as the main funder of the project. The Board of Education made the customer an offer to provide the funding for the project if they developed the game in co-operation with one specific games company.

“We didn’t look for any other alternatives, because the Board of Education said, that they have the sufficient funding and it is ours to use, if we make a learning game with <company name>.”

“So, it wasn’t really a demand, but a strong recommendation.”

The customer did not feel that they were being pressured to contact the specified company. They saw it more as a possibility to develop something new, a game for serious use. And without the monetary support of the government it would not have been possible.

“On the other hand, we were very pleased because this way we got the opportunity to develop a serious game, which wouldn’t have been possible otherwise.”

The influence of the funder raises an interesting question about to whom the marketing efforts of serious games should actually be focused on. In the light of the information received in this research, there are indications that the marketing should be focused on two sectors:

1. **The potential customer organizations**, telling them about the possibilities and advantages of serious games. And thus getting them interested in using serious games as part of their normal operation.
2. **The funder -sector**, marketing the company to them as a reliable partner who has experience in developing serious games in co-operation with the customer organizations. And thus making the company known to them.

The two sectors set a certain marketing challenge for the games company, as marketing has to be approached from two different perspectives. The actual customer has to be convinced to want a serious game, and the funder has to be convinced that the company is the best alternative to develop a serious game.

6 DISCUSSION

The interview with the customer revealed some problems that should be taken into consideration when planning the marketing of serious games. Even though developing games is innovative and creative work, the traditional laws of marketing and selling still apply to them; customers still want value for their money. Moreover, they also want to know what they are buying and what are the true costs of the purchase.

6.1 Suggestions for the games company

Here are suggestions for the games company to implement into their operation and marketing. Suggestions are based on the results and conclusions of this research and focus mainly on the productisation of the company's offering.

6.1.1 Additional features and services

The customer felt that the pricing of additional features and changes was unclear and confusing, making it difficult for them to understand and evaluate the total monetary costs of the project. The pricing of the available additional features and services (that are not automatically included in the project) should be more easily accessible by the customer. One way to achieve this is to package and catalogue the features that can be delivered with an additional fee.

Packaging the development project itself could turn out to be an extremely demanding if not an impossible task and the benefits of packaging might not be worth the effort. Each development project is individual when it comes to the content of the project and the amount of the work needed. Therefore, a standardized, general pricing of the project itself is not possible or even wise.

Catalogue of additional features

Packaging and cataloguing additional features, on the other hand, is possible. These are the features that are not automatically included but can be added into the game if the customer desires so. These additional features could for example be various, advanced functions for the avatar to perform, new more detailed textures, or even a whole new in-game environment for the avatars to operate in.

Evaluating the costs of the additional features beforehand requires understanding and knowledge about the game engine and its possibilities and restrictions. It also requires knowledge about what it takes to develop these features. The games company possesses the knowledge required to evaluate these requirements, as they possess a comprehensive amount of experience about developing different features for the game engine that is used. Basically the pricing can be done by evaluating the amount of working hours the development takes, and transforming it into monetary terms.

In addition to the price, the catalogue should also contain an estimation about how developing and implementing a certain new feature affects the project's schedule. As the original and indicative project schedule includes only the development of the basic game, the customer can review the schedule changes beforehand by adding the time consumption of the new feature (from the catalogue) to the original schedule.

The catalogue of the additional features should be included in the offer for the basic game. This way the customer can more accurately evaluate the required changes of costs and time before the actual purchase decision. Moreover, by using the catalogue the customer can also adjust their expectations to a realistic and reachable level.

The catalogue also sets a requirement for the primary offer to develop the basic game. The offer has to define accurately what features are automatically

included in the basic game that has been offered. Only this way the customer can truly evaluate how necessary the additional features are.

The catalogue can also act as a marketing tool and help to create more purchase transactions. As the customer can see what else is available, it might create new wants for them and under favourable conditions lead to additional purchases.

Additional services

In many cases the concept of serious games is new to the customers and they want more information about them. The games company is capable of providing appropriate **training and orientation** for the customer, in order to deepen their knowledge. The benefits of the training are realized when the specification phase of the development project starts. This kind of training should be automatically offered, as an option, to the customer together with the primary offer to develop a serious game.

Some customers might also regard the technical environment (e.g. servers) and its maintenance as a threshold question when thinking about purchasing a serious game. Not all the customers have the required resources or even the will to take the responsibility for the technical environment. For these customers there should be an alternative available.

Because **hosting services** are not the core competence of the company and, on the hand, do not even fit the company's business model, the games company should seek for a partner to provide hosting services for the customers who need it. The availability of this kind of service might help to achieve a purchase agreement with customers that do not have the resources to host the game by themselves.

6.1.2 Look outside the box

Understanding the customer and their processes is the key element for the marketing to be successful. If the marketer understands the customer, they can identify and anticipate the expectations the customer has for the product or service being bought. Therefore, it is possible for the company to meet these expectations better.

Customer expectations are strongly based on their experiences on products they have used before carrying out the process. In the light of this study, it appears that in the case of serious games, the customers' expectations also base on products from a much wider sector. Their expectations are not only based on experiences on other games, but they are based on similar products they've used before or are using now to carry out other processes. This might be at least partly because of serious games are relatively young and somewhat unknown solutions. Therefore it is only natural to compare them with something that has similar properties. This sets a challenge for the marketing of serious games. It is required to look outside the box, when trying to understand the customer. An important task should be identifying the products that the customer might use as a reference, and to compare these products with the serious game offered. The objective of the comparison is to identify the similarities and differences between the serious game and the other product. The information gained from the comparison can be used to meet the customer's expectations for information about the possibilities and the restrictions of the serious game being offered.

6.1.3 Game development as a service

Developing a serious game in co-operation with the customer is a long, demanding and expensive task. In order to sell this kind of big projects, the games company has to convince the customer that the gains of developing the game are higher than the sacrifices it requires. This also means that the development project should be as easy as possible for the customer.

A good question is what actually is the product that the games company is selling. Is it the game they develop for the customer or is it something else? According to this research, the game that the customer will receive is a result of the actual product of the company. As the company is an expert organization specialized in games, game development and applications of games, their main product is the expertise they possess.

Therefore, the suggestion is that the company should market serious games, not as development projects or only games but primarily **as a service** which produces the kind of serious game that the customer desires. The basis of this service should be the company's expertise in developing games. According to the desire of the customer, the service could be extended with chargeable service components, to cover other areas such as project management, hosting services etc. The only area of the development service that really requires customer participation is the content specification of the game. The games company has the expertise to cover all other areas, if needed.

6.1.4 Marketing database

As stated before in this report as well as in the theory of marketing, understanding the customer is the key to successful marketing and selling. Therefore, it is recommendable that the company continues to collect and analyse the data from their customers that is similar to the data collected and analysed in this research.

The data should be recorded in a formal form so that it can be accessed, processed and compared. This way the games company will, in time, acquire a comprehensive marketing database containing, for example, information about the expectations of different kind of customers. When this is used in the right way, the information of this database will provide the company with a competitive advantage, when creating new offers and CVPs to potential customers.

6.2 The reliability and validity of the study

Reliability and validity are traditional criteria for evaluating the quality of a research. Where the reliability measures and confirms that the study and its findings are replicable, the validity, for one, means that the test measures what it is supposed to measure. (see e.g. Daymon & Holloway 2011, 77-79 and Uusitalo 2001, 84.) There is a strong diversity between the researchers and between the methods books about if the reliability and validity are good enough criterion in a qualitative research (Eriksson & Kovalainen 2008, 292). When comparing the feasibility of the reliability and validity from the perspective of the qualitative research, the validity is considered to be more salient than the reliability (Daymon & Holloway 2011, 79).

6.2.1 Reliability

Reliability is not often used in evaluating qualitative research because of the subjective nature of it. In a qualitative research the researcher him-/herself is the research tool making the research content specific and therefore difficult to replicate. Even if the study could be repeated, the results might differ because of the researcher's own characteristics and the influence of the background which might have an effect on the conclusions. (Daymon & Holloway 2011, 79.)

This study concentrates on the subjective experiences of the customer. The data was collected using a semi-structured interview which also contained some focusing questions. It might not be possible to replicate the interview completely because of the semi-structured, and partly open, nature of it.

The analysis of the data collected, on the other hand, is replicable as it is based on the classification which emerges from the theory of the customer value and customer satisfaction. According to Uusitalo (2001, 84), the reliability of the qualitative research should be as a requirement able to replicate the analysis instead of the whole research. The researcher should use unambiguous

classification and interpretation rules when processing the data (Uusitalo 2001, 84).

6.2.2 Validity

Validity refers to how accurately the research explains or describes the event it is examining. The findings of the research can be considered to be valid if they accurately represent the phenomenon referred and are backed by evidence. (Eriksson & Kovalainen 2008, 292.) Kumar (2005, 154) also states that all the questions or items of the research must have a logical link to the objective of the study.

The primary objective of this study is to map the expectations the customers have when making a purchase decision to buy a serious game. Therefore, the interview questions, for example, are based on the theory of the customer value and customer satisfaction, as they are strongly reflected from the expectations of the customer and from how well these expectations are met.

The validity can be divided to internal validity and external validity. Internal validity means that the findings of the research accurately reflect the world of those participating in the study. The internal validity can be accomplished by comparing the findings and conclusions with the perceptions of the people involved. The internal validity can only be evaluated by the participants. (Daymon & Holloway 2011, 79.)

Evaluation of the internal validity was done especially during the interview. A good example of this is presented in 5.2.2 of this report where a question about Second Life is described. In addition, other focusing questions of the interview were done to ensure that the answers given by the interviewee were understood and interpreted correctly.

External validity, or generalizability, exists if the findings and conclusions of the research are applicable to other contexts or a larger research population.

However, this is difficult to achieve in a qualitative research as it does not look for law-like generalities but has more a interpretive worldview that prefers to focus on specific cases. (Daymon & Holloway 2011, 79-80.)

The findings and results of this research represent the opinion of one customer and therefore cannot be regarded as the general and only truth. Even though the results cannot be generalized because of the low quantity of the customers interviewed, it does not mean that this research has no value. On the contrary, the findings of this research represent the true experiences of a customer and therefore provide useful guidelines for the games company when planning their future marketing of serious games. Moreover, if they continue to collect similar data from their other customers, the value of this research will also increase when it comes to generalizing the findings and results.

7 CONCLUSION

The interview with the customer revealed that the primary need behind the purchase decision was a need for a tool. They needed a new tool to be used for educational purposes. The customer had defined beforehand that the tool to be acquired was a serious game. This definition created new needs for them. First of all they needed expertise to develop the game and therefore wanted a partner who could carry out the task. Secondly, they needed information about serious games as they did not already possess the required knowledge. This need generated a want for training.

In order to control the costs the customer expected more accurate information about the pricing. These expectations focused mainly on the price of the additional features that were not included in the basic game they had bought. These expectations for information about the pricing did not come as a surprise. Developing serious games is expensive, and therefore it is only natural for the customer (the payer) to want to control the costs generated from the development and to try to gain as much value as possible for their investment.

An even more significant finding was that the customer expected to receive information, not only about the possibilities, but especially about the restrictions of the technology being used. Furthermore, they expected that this information should have been presented to them in relation to another, similar product they were already using. This sets a requirement for the games company to look “behind the scenes” when mapping the premise of the customer in order to truly understand them and their expectations.

At times, the whole purchase process of the customer seemed a bit chaotic rather than controlled. This might be an outcome of the fact that serious games are a relatively new phenomenon in the Finnish markets. Therefore, the customers currently buying serious games most likely represent the early adopters group of the whole customer mass. Moreover, being the first ones they

do not have many or any examples of similar kind of purchases to guide them. In fact, these customers are, if something, more creators than users of these guidelines.

This study raises a question if the world is ready for serious games. As the customer stated, the serious game they had bought was easy and fun to use but still, it was adopted only by a small minority of the potential users. According to the customer it will still take years before serious games are truly accepted as serious tools. This has also been noted by games researchers and there are indications that serious games suffer from the burden of the history of games as they are still regarded as toys by the big public (Backlund & al. 2007, 7).

As stated before, serious games are expensive to develop. Therefore, the customer buying the game is not always the main funder of the purchase. For example, most of the educational serious games in Finland are funded by the Finnish government. In this financial model, the funder usually has some influence on the decision making process. With the interviewed customer this influence had appeared in the form of suggestion for a partner. This possible influence of the main funder has to be taken into consideration when planning marketing of serious games because marketing might be needed to be focused on two different sectors; the customer and the funder.

Even though only one customer was interviewed in this research, the data collected was extremely rich. It provides an insight into the mind of the customer and gives hints about what they really expect when purchasing a serious game. However, it is necessary to remember that the findings and conclusions of this research cannot be generalized to cover all potential customers. Therefore, a new research to cover more participants is needed in order to draw more general conclusions.

The research revealed interesting facts about the customer's expectations. The customer seemed to expect to receive information especially about the restrictions of the technology being used to develop the serious game.

Furthermore, they expected this information to be presented to them in relation to some other, similar product they were already using.

How customers actually build their expectations when purchasing a serious game is also another fascinating research area. As serious games are relatively young and usually the customers have no or only little knowledge about them, what is the basis they use when building their expectations.

According to this research, the funder had quite a big influence on the purchase process of the interviewed customer. This influence especially showed on the selection of the provider. This raises a question about the true influence of the funder in big scale. Studying how much power the funder really has in the purchase process of a serious game might possibly reveal information that could be helpful when targeting the marketing of serious games.

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GUIDELINE QUESTIONS FOR THE INTERVIEW APPENDIX 1

1. What is the main business area of your organization?
2. What is the size of your organization?
3. For what purpose was **The Game** purchased for?
4. Was **The Game** purchased to replace an existing function in your organization?
 - a. If yes,
 - i. How was this function carried out before **The Game**?
 - ii. Why was this function changed?
5. Do you have any previous experiences about serious games?
6. What criteria did you set for the product/service to be purchased?
7. Who created the purchase criteria?
8. How did you find information about **The Game** and the company producing it?
9. What other options were available?
10. Were there other companies providing serious games?
11. Were there other corresponding solutions (other than serious games)?
12. How the available options were evaluated and compared?
13. What different available options were considered when making the purchase decision?
14. Who made the actual decision to purchase **The Game**?
15. Were there any other stakeholders involved in the purchase process? (E.g. internal and/or external specialists?)
16. Of all available options, why did you end up buying **The Game**?
17. How has **The Game** met your expectations?
18. Has the purchase process of **The Game** changed the way how future purchases will be carried out in your organization?
 - a. If yes, how?
19. Your message to the games company producing **The Game**?