The business of micro transactions

What is the players’ motivation for purchasing virtual items?
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Abstract

Background: The video gaming industry is expanding, changing and developing. One of the trends within the video gaming market is the shift towards free to play games. The business model of free to play games is linked to the act of selling virtual items through micro transactions. The traditional business model related to the membership fees and advertisements is becoming less relevant.

Purpose: The purpose of this paper is to give insights in the players’ motivations for purchasing virtual items.

Method: To address this issue, a qualitative research has been conducted. The data has been collected through 31 interviews among students studying at Jönköping University. All participants have taken part in the practice of micro transactions.

Findings: This paper shows that customization of character is the main motivation to purchase virtual items. This purchase offers the players a possibility to express themselves and to become part of a group. There are merely positive emotions involved regarding these purchases. The advancement of character and saving of time are also mentioned as main motivations for purchasing virtual items. However, the pay-to-win model is perceived as unfair competition and there are negative emotions involved in having to spend money in order to continue with the gameplay. Therefore, it is suggested to add virtual items for advancement of character and for saving of time, but this should also be achievable through dedication to the game. Furthermore, Generation Y does not trust the marketing of companies and the players prefer extensive information search prior to a purchase. Subsequently, the suggestion is provide players with transparent communication. This can be done by making it clear when a player is purchasing virtual items with real money and by moving on from the virtual currency that detaches players from the idea that they are spending real money. Also, players perceive the possibility to purchase new levels or access to a bigger map as important. It is therefore suggested to give players the opportunity to purchase these kind of items, but make it not influential on the other players’ gameplay.
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1. Introduction

This chapter will give the reader relevant background information on the topic of purchasing virtual items. After this overview, the problem discussion and purpose for this paper are described. Based on this, the contributions and delimitations are given. This chapter will be concluded with the relevant definitions towards this topic, along with the structure of the paper.

1.1 Background

Video games did not play a significant role within people’s daily life when they first were invented in the mid-1900s. Historically, it started with very primitive games evolving into interactive and more advanced games. In 1970, when Atari got involved with the arcade games, the video gaming industry grew significantly (Chikhani, 2016). Nowadays, around 1.3 billion people spend more than one hour per day on video games. This means that roughly 20% of the world’s population are actively involved within video games. Related to the online population of nearly 3 billion people, 46% of these people play video games on a regular base (eMerchantPay, 2014). Gaming is currently one of the main activities performed on Personal Computers (PCs), mobile devices and consoles. One of the reasons is the little to no costs that are involved with playing video games. Another reason is the convenience of acquiring video games. However, not only children and teenagers are engaged with video games, but also a large amount of adults (eMerchantPay, 2014). The video gaming industry is booming due to the amount of potential customers that can be reached through video games. The expectation is that the video gaming industry will reach a revenue of approximately $93 billion in 2019 (PwC, 2015). A significant part of the money spent by consumers within the video gaming industry is related to micro transactions.

The past couple of years, the revenue model shifted from gaming hardware and gaming accessories to the sales of virtual items via micro transactions (Entertainment Software Association, 2016). Pearl Research states that approximately 75% of the revenue within the gaming market in China is related to micro transactions (Irwin, 2008). The trends of the video gaming industry show that free to play games are becoming more important. The main revenue model for free to play games is the sales of virtual items through micro transactions (Graft, 2016).
1.2 Problem discussion & purpose

The video gaming industry and the micro transactions market are expanding, changing and developing (Beattie, 2015). Online communities are becoming more popular and there is a shift going on from membership fees and advertising towards free to play games. Micro transactions are becoming an important aspect within the revenue model of the video gaming industry (Kim, Chan & Kankanhalli, 2012). The major reasons for the growth of the micro transactions market are the technological advancements with millennials as main target group (Statista, 2015).

Many researchers (Wohn, 2014; Lehdonvirta, 2005, 2009; Ho & Wu, 2012; Kim, Chan & Kankanhalli, 2012) already tried to provide an answer to the players’ motivation for purchasing virtual items, which is a relatively new topic in the video gaming industry. Ho and Wu (2012) measured the factors that affect the intent to purchase virtual goods in role-playing and war-strategy field via a survey of 523 virtual game users. For further research they suggest to use the theory of consumption values as framework in order to examine the motivations for purchasing virtual items within different types of games. Subsequently, there is still much knowledge to gather regarding the players’ motivation for purchasing virtual items linked to the theory of consumption values (Sheth, Newman & Gross, 1991).

This research will therefore focus on the motivation of Generation Y towards purchasing virtual items, because this has not been examined yet. It is relevant to conduct a research towards generation Y, because they are the main target group and the characteristics of Generation Y are different than from other generations (Papp & Matulich, 2011; Noble, Haytko & Phillips, 2009; Benckendorff, Moscardo & Pendergast, 2010). This paper will also lead to a more up-to-date view on the players’ motivation for purchasing virtual items as the video gaming industry and micro transactions market is expanding, changing and developing (Beattie, 2015).

This paper will conduct a research towards Generation Y, more specifically: students studying at Jönköping University. The participants’ motivations for purchasing virtual items will be examined. These motivations will be examined towards different types of games through the perspective of the theory of consumption values.
1.3 Research questions

The research question (RQ) of this paper is: “What is the players’ motivation for purchasing virtual items?” This research question is split into sub-questions, which are the five different values of the theory of consumption values (Sheth, Newman & Gross, 1991).

1. What is the players’ motivation for purchasing virtual items?

1.1 What is the role of functional value on purchasing virtual items?
1.2 What is the role of social value on purchasing virtual items?
1.3 What is the role of emotional value on purchasing virtual items?
1.4 What is the role of epistemic value on purchasing virtual items?
1.5 What is the role of conditional value on purchasing virtual items?

1.4 Contributions

The aim of this paper is to fill the academic knowledge gap towards the players’ motivation for purchasing virtual items.

This is provided by giving an up-to-date view on the players’ motivation for purchasing virtual items, because most research has been conducted many years ago and the video gaming industry as well as the micro transactions market is rapidly changing. Also, this research is merely conducted among Generation Y, which has not yet been done by previous research. This partly fills the academic gap, because Generation Y has different characteristics than other generations. This paper will lead to a deeper understand of the consumer’s motivation and will relate to advice for the gaming industry so that they can tailor their marketing plan according to the needs and goals of their consumers and customers.

This paper will add to the existing literature by clarifying the link between the players’ motivation for purchasing virtual items and the theory of consumption values.
1.5 Delimitations

The main delimitations consists of the limited time and resources available to write this paper. A more thorough study could be examined towards this topic with the availability of more time and resources. Therefore, this paper focuses merely on the players’ motivation towards purchasing virtual items. The log data towards the players’ actual behaviour is not used, because it is challenging to get access to this data.

Also, the sample size and its homogeneity due to the consistence of 31 students studying at Jönköping University is considered as a delimitation. Only Generation Y is taken into consideration, other generations are not included in this study. Therefore, this sample does not represent the entire population.

1.6 Definitions

**Generation Y** – members of the generation of people born between the early 1980s and mid-1990s who are seen as being discerning consumers with a high disposable income (Dictionary, 2016).

**Video game** – A game played by electronically manipulating images produced by a computer program on a monitor or other display (Oxford Dictionaries, 2016a).

**Avatar** – An icon, graphic, or other image by which a person represents himself or herself on a communications network or in a virtual community, such as a chatroom or multiplayer game. (Houghton Mifflin Harcourt Publishing Company, 2016)

**Virtual item** – A good or product traded in the non-physical realm, typically in online communities and games. It has no tangible substance and no real intrinsic value; its value resides solely in what the user is willing to pay for it (Investopedia, 2012).

**Micro transaction** – A very small financial transaction conducted online. (Oxford Dictionaries, 2016b)

**Theory of consumption values** – this examines consumption values, explaining, why consumers choose to buy or not to buy (or to use or not to use) a specific product, why consumers choose one product type over another (Sheth, Newman & Gross, 1991).
1.7 Structure of the paper
This section shows the framework of the paper with its underlying chapters in figure 1.

The introduction focuses on the background, problem statement, research purpose, contributions, limitations and definitions. The theoretical framework describes the video gaming industry, micro transactions, Generation Y and the previous research on this topic related to the theory of consumption values. The methodology gives an insight on how the research is conducted and the data is handled. The following chapter will describe the empirical findings. The analysis highlights the most salient empirical findings linked to the previous research. The conclusions and discussion will summarize the main findings of the analysis related to the research purpose.
2. Theoretical framework

This chapter will give the reader an explanation on the video gaming industry, micro transactions, Generation Y and the previous research linked to the theory of consumption values.

2.1 Video gaming industry

Pargman and Jakobsson (2007) mention in their paper that the video gaming industry has expanded along five different dimensions:

Expansion of in-game space: The first generation started with games like Pong (1972), Space Invaders (1978) and Pac-Man (1980). These games fit on the screen on which they are played. Later, platform games like Super Mario Bros (1985) were invented. These platform games are two-dimensional scrolling worlds. With the games Wolfenstein 3D (1992) and DOOM (1993), the three-dimensional aspect was developed. The 3D games were followed by Massively Multiplayer Online Role-Playing Games (MMORPGs), which provide players with immense game worlds that are inhabited by many other online players (Pargman & Jakobsson, 2007). Li, Jackson and Trees (2008) call this the collective gameplay experience.

Nowadays, there is a movement towards free to play games due to a rise of mid-level developers. These games are relatively easier and cheaper to implement within the market than games a player has to pay for (Graft, 2016; Wargaming, 2016). Evans (2015) mentions that the revenue model of these games is linked to the external, real-world economic structures. The games are initially free to play, but there is a possibility to perform micropayments. Lehdonvirta (2008) calls this an economic integration strategy between a virtual economy and the real economy. The revenues of video game Candy Crush Saga have been over $850.000 per day due to micropayments (Evans, 2015). Players of social free to play games are usually connected to each other via social media. Consalvo (2011) mentions that these free to play games are based on competition. She also mentions that most free to play games involve in-game trading activities such as gift giving.
Interface between the virtual and the real world: This dimension is linked to the quality of the screen and the quality of computer graphics. The first gaming device, called the Magnavox Odyssey, was invented in 1967 by Ralph Baer (Burrowes, 2014). Over the period 1972-1985, many companies started to develop video games to gain profit out of the expanding market (Chikhani, 2016). This resulted in the collapse of the North American video gaming market. The supply of gaming devices was immense, resulting in a drop of gaming revenue from $3.2 billion to $100 million in just two years (Plunkett, 2015). Kline, Dyer-Witheford and De Peuter (2003) mention that the demand was low due to the shift from arcade games towards home game systems. Parents did not purchase home game systems anymore after they realized that their kids did not use them intensively enough. However, the market grew again due to technological advancements and good internet access (Chikhani, 2016). PwC (2015) expects that the video gaming industry will reach a revenue of approximately $93 billion in 2019.

Development of physical game space: This is the movement from an inactive experience with input devices such as simplified controllers to an engagement related to more senses and more sophisticated controllers. Lyons (2015) invented the term exergaming for this practice. She defines exergaming as: “physical movement (beyond fingers on a hand-held controller) with video gaming.” Juul (2010) labelled this as the casual revolution. He mentions that gaming devices such as the Wii, PlayStation Move and Kinect rediscovers the simplicity of video games. Currently, there are also two other technologies that are implemented within the market. The so-called augmented- and virtual reality. Augmented reality is defined as: “a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data (Mashable, 2016).” Virtual reality is defined as: “a three-dimensional, computer generated environment which can be explored and interacted with by a person.” (Virtual Reality Society, 2015) Especially the virtual reality headset fits the requirements within video gaming and would give the players the opportunity to experience the digital landscapes as if they are in it themselves (Chikhani, 2016). Previous research shows that 55% of the gamers are aware of virtual reality and 58% of these gamers intend to play video games in virtual reality (eMerchantPay, 2014). These kind of games also promote interaction and communication via chat functions in the game. Recently, social media is becoming more important within the video gaming industry.
because players want to play with friends and share their gaming experience on social media (eMerchantPay, 2014).

**Extension of when and where video games can be played:** Historically, players were stuck to the room where the PC or console was located. This has changed since the release of handheld gaming devices such as Game & Watch (1980) and the Game Boy (1989). Nowadays, mobile gaming starts to play a more important role. The use of mobile devices (tablet and smart phone) and with this, the practice of gaming on mobile devices has grown significantly the last few years. Therefore, the mobile gaming sector generated $30 billion revenue in 2015 (eMerchantPay, 2014). This is a 23% growth in comparison to 2014. Also, it is expected that the mobile gaming sector will continue growing into $44 billion revenue in 2018. Richardson (2011) invented the term casual gamers, who play a maximum of five minutes each time and at irregular times. She also mentions that casual games are a key market within the mobile game industry.

The average player spends $8 to $15 monthly on mobile games (eMerchantPay, 2014). However, most gamers are not playing on just one device but mostly on two or more (Osborn, 2015).

**Games go beyond play:** Nowadays, players find different purposes in gaming other than just entertainment. These days, there is a business involved around video games. There are professional gamers that make profit by playing video games. Second Life is a game with a high economic exchange of real money into virtual money and conversely (Frieling, 2013). Also, the winning team of the League of Legends championship won approximately $1 million. This championship reached over 32 million people (Zorine Te, 2014)
2.2 Micro transactions

To date, internet plays an important role within the retail business. Internet has not only become an important platform for buying traditional items, but also enables a completely new form of items: “Virtual items.”

Possible virtual items are functional objects such as weapons and tools that support the players with their tasks, decorative items such as clothes and accessories that are used to customize the avatar, gift symbols such as flowers or hearts, virtual land, animation-scripts, in-world-services and tactical advantages (Ackermann, Wünderlich & Wangenheim, 2011). One thing these items have in common is that they include possibilities to interact with other people and that they support self-expression (Castronova, 2008). However, there are also games such as Second Life where the internal economy is connected to the real money economy. This leads to the act where players exchanging real money for Second Life’s virtual money and vice versa (Frielings, 2013).

2.2.1 History of micro transactions

Initially, virtual worlds consisted of Multi-User Dungeons, which are merely text-based online games. In 1997-1999, with the upcoming of the complex graphical environment games such as Ultima Online and EverQuest, the visual representative virtual items were established. Micro transactions became increasingly popular when free online world games such as Habbo Hotel (2001) and Second Life (2003) were released. The revenue model of social games such as Farmville (2009), which are played via social networks such as Facebook, are highly related to micro transactions. These video games integrate paid content such as virtual items in order to generate income via in-app-payments (Frielings, 2013), because a new revenue model has to be sought due to the game being free to play.
2.2.2 Market of micro transactions

Virtual items are processed within the virtual world and the gaming company takes the role as a central bank. Due to legislations, the players are not allowed to sell these items for real money. However, many times virtual items are found to be sold on eBay to other players. To date, especially in gaming cultures, the sales of virtual items is a small economic sector, especially in Second Life, as it is a game with a high economic exchange of real money into virtual money (Frieling, 2013). Nowadays, many gaming companies sell virtual goods as an important part within their revenue model. Even though, a gaming company can generate income via many different ways, the sales of virtual items become an important source of revenue for the gaming industry as there is a shift from membership fees and advertising towards free-to-play games (Kim, Chan & Kankanhalli, 2012). Smith (2016) argues that implementation of micro transactions is profitable for businesses, but customers are criticizing gaming companies such as Electronic Arts for removing content from the original game and later selling that content. Tassi (2013) mentions another negative emotion which is related to saving of time. He states that players do not want to pay-to-play within a free to play game. Most top grossing apps such as “Candy Crush”, “Clash of Clans” and “The Simpsons: Tapped Out” have already successfully established the micro transactions in their games. Dixon (2015) describes that the business model that is used within the free-to-play games is called the freemium business model. This model offers the consumer something useful, but once the user becomes more engaged within the activity, this results mostly in players paying money in order to get more content. This can for example be a more advanced avatar as well as more storage or less waiting time. The freemium business model is becoming more popular in the video gaming industry (Kim, Khan and Kankanhalli, 2012). League of Legends is a PC game that generates approximately a turnover of more than $1 billion merely on micro transactions (Grubb, 2014).

Many consumers spend considerable amounts of money on virtual items (Guo & Barnes, 2011). The value of virtual goods in 2012 was around $14.8 billion and the expectation is that this number is going to grow rapidly in the upcoming years (Companies and Markets, 2012). The most common reason for this growth is the age of technology where millennials spend a lot of time on smart phones, internet and games (Statista, 2015)
2.3 Generation Y

Generation Y are people that are approximately 20 to 35 years old when this paper was written (2016). These people were born between 1980 and mid-1990s (Dictionary, 2016). Members of Generation Y are also called “millennials”, “echo boomers” and “the internet generation (Business Dictionary, 2016).” The generation prior to Generation Y is Generation X. These people were born between the early 1960s and early 1980s. A characteristic of Generation Y is the constant access to technology. This generation is highly engaged with internet on mainly smartphones and tablets (Papp & Matulich, 2011). They are the first generation that experienced digital technology since they were born (Prensky, 2001). Therefore, they have a high technological knowledge (Noble, Haytko & Phillips, 2009) and they tend to purchase mainly online (Lester, Forman & Loyd, 2006; Nusair, Bilgihan & Okumus, 2013). However, Generation Y is skeptical towards the company’s communication due to the advertisement clutter (Nusair, Bilgihan & Okumus, 2013). Therefore, companies have to find a way to reach this people via unconventional marketing (Lazarevic & Petrovi-Lazarevic, 2007; Syret & Lammiman, 2003). One of the reason is that the company’s marketing is less trusted and Generation Y relies more on the feedback of friends, family, blogs and reviews (Benckendorff, Moscardo & Pendergast, 2010). Schwabel (2012) stated that the word of mouth is an important factor to Generation Y. Even though they take the feedback in account, they are perceived as an individualistic generation (Syrett & Lammiman, 2003). Wallop (2014) mentions that Generation Y is a selfish generation. Other studies show that self-expression is one of the main reasons for consumption by Generation Y (Engel, Bell, Meier, Martin & Rumpel, 2011). This does not only relate to the real world, but this takes also place in virtual environments (Sherman, Appel & Moore, 2006). Finally, Generation Y is an interesting market for companies, because they are very active on the markets (Noble, Haytko & Phillips, 2009) and they have more money than previous generations (Morton, 2002)
2.4 Previous research linked to the theory of consumption values

This section is going to link the previous research to the theory of consumption values to illustrate which of the five consumption values influence the players’ motivation for purchasing virtual items. First of all, the theory will be explained briefly. Next, the five different values will be described and related to the findings of the previous research.

The theory of consumption values was developed by Sheth, Newman and Gross in 1991 in the article “Why We Buy What We Buy: A Theory of Consumption Values”. Various disciplines such as sociology, psychology, economics, marketing and consumer behaviour were used to develop this theory. The theory of consumption values also used components from works of Maslow (1943; 1954; 1970), Katona (1953), Katona, Strumpel and Zahn, (1971), Katz (1960) and Katz and Lazarsfeld (1955). The theory explains which of the five consumption values influence the buying decision of consumers. These values are the functional value, social value, emotional value, epistemic value and conditional value (See figure 2). Different consumers might perceive different values in the same (or different) products. This theory is applicable to a range of different products and services (Sheth, Newman & Gross, 1991).

![Diagram](Figure 2. Five different values that influence consumer choice behaviour. (Sheth, Newman & Gross, 1991).)
In previous studies, the theory of consumption values has been investigated regarding different areas such as sponsorship and brand use (Pope, 1998), organic foods (Finch, 2006), clothes fashion (Park & Rabolt, 2009), travel packages (Williams, 2005) and in many more (Albaum, Baker, Hozier & Rogers, 2002; Chen, Shang, Lin & Kao, 2006; Long & Schiffman, 2000; Finch, Trombley & Rabas, 1998). Because the theory has already been successfully applied to many different areas, we acknowledge that the theory can also be used for this topic. The next sections will describe every value according to the theory and provide clarity by giving examples. Besides this, the different values will also be linked to the players’ motivation for purchasing virtual items examined by the previous research.

2.4.1 Functional value
The theory defines functional value as “the utility that is perceived to possess on in-game criteria salient to its physical or functional purposes” (Sheth, Newman & Gross, 1991). This means that this value expresses the functional, performance and utilitarian motivations of consumers within their consumer behaviour. This aspect carries attributes such as durability, reliability and price (Ferber, 1973). This assumes that a consumer behaves in the context of a “rational economic man”, where the perspective towards a product's value is rational and economical (Stigler, 1950; Marshall, 1890). Within a grocery shop, the consumer that values the functional and performance attributes will compare the price and quality of the food. Another example would be a consumer looking for a new car. The consumer will put the highest importance on product attributes such as price, low fuel consumption and durability over the hedonistic reasons of buying a car.

Lehdonvirta (2009) states that virtual items have functional values that result into functional, performance and utilitarian reasons for buying these items. He describes that the items are used to fulfil higher objective(s), for example becoming a better player. Within the Marxist theory this kind of approach is called the use-value (Miller, 1987). Yee (2006b) conducted an online survey among 30,000 players of MMORPGs. He classifies gamers within the game environment into three expectation categories: achievement, social and immersion. Gamers that are drawn to the achievement category acquire virtual items mostly for the functional value. He mentions that advancement of character is one of the main reason why players purchase virtual items. However, Guo and Barnes (2011) found in their online survey towards 250 Second Life players, that
advancement of character does not play a role concerning the purchase intention of players. The fact that both researches (Yee, 2006b; Guo & Barnes, 2011) have been done towards a different sample can explain this contradiction. Second Life is a socially-orientated virtual world where MMORPGs are game-orientated virtual worlds that are more related towards the achievement factor. This explains why there is no significant correlation to the purchase intention and advancement of character in Guo and Barnes’ study. Lehdonvirta (2005) adds upon this issue that there is a competitive advancement related to purchasing virtual items. He mentions that many players perceive purchasing virtual items to attain competitive advancement as cheating. Ho and Wu (2012) conducted an online survey to collect data from 523 video game players. Their study found that players are mostly affected by functional qualities of virtual items. Hassouneh and Brengman (2011) interviewed 20 active Second Life players. Within their study, they created a name for functional buyers such as “Functional Status Shopper” and “Functional Self Expressionist Shopper”. These shoppers are price sensitive and they are looking for a good price-quality ratio. The goal of these players is to achieve a higher skill level. This refers to Maslow’s pyramid of needs, where an individual desires a higher level of confidence, achievement, growth and adequacy (Goble, 2004). Possible virtual items with functional value could be weapons, currency, spells and clothes with special features (Live Gamer, 2008).

2.4.2 Social value
Referred to the theory, the social value is defined as: “The value derived from its association with one or more distinctive social groups” (Sheth, Newman & Gross, 1991). These associations can be negative or positive depending on current demographics, socio-economic and cultural level. The social value relates to how social groups react when one of their members obtain a product.

One of the pioneers in this area (Hyman, 1942) mentions that individual consumer behaviour is influenced by the reference group and the individual's place in a group. Some other researchers believe that consumers buy products and services mostly for the social value. Consumers are seen as communicators, who use symbolic meaning from products to express their class, status, group membership or to express their individuality and stand out from the group (Bourdieu, 1984; McCracken, 1990). An example would be a consumer buying a car. Relating to the social value, the consumer would not focus on a
car that is cheap or a car that is economically friendly, but the car will mainly be chosen because of other reasons. One of these reasons could be the popularity of the car or the status the buyer would get by buying this car. Within the buying process, the buyer could research what kind of cars their friends are using. Another important social value is how the consumers express themselves through the car. What does the car say about the buyer?

Martin (2008) states that consumption of virtual items has no real use-value, so why do players engage in these kinds of activities? In the virtual game-environment these types of goods are described as vanity items and social items (Wohn, 2014). The study of Martin (2008) shows that virtual items are closely linked to social belonging, status and conspicuous consumption in virtual world. The study of Yee (2006a) supports the statement that social influence plays a role within purchasing virtual items. He states that players purchase virtual items to socialize, build relationships and work together in teams. Other studies have also found results that positively correlate between social motivations, social presence, purchase intention and actual spending (Wohn & Lee, 2013; Heeter, 1992; Short, Williams & Christie, 1976; Jin, 2009; Animesh, Pinsonneault, Yang & Oh, 2011; Mäntymäki & Salo, 2011). The study of Hassouneh and Brengman (2011) categorized one type of players as “Social Shoppers.” These shoppers perceive the social aspect of purchasing virtual items as important.

Wohn’s study (2014) analysed the purchase behaviour of Puppy Red players via log data. This study is unique in comparison to others, because the actual log data is used to gather information about the players’ purchase behaviour. Her findings show clear evidence that having more friends, giving more virtual goods and receiving more virtual goods increases the likelihood of spending money on virtual items. The study also shows that new players give gifts in order to earn their acceptance and belonging to a group. Ho and Wu (2012) also agree that social relations are an important factor in why players buy virtual items. Huang’s study (2012) supports this claim that social identity from an individual perspective, as well from a group perspective, plays a strong and influential role in consumption of virtual goods. In some games it is essential to make alliances and belong to the group in order to survive and advance quicker in-game play. Cole and Griffiths (2007) also state that group-play and maintenance of virtual friendships is a factor why players acquire new items. This behaviour is explained by basic human need for affiliation, which states that people seek acceptance and need to belong to some group (McGuire, 1974). Motivations behind these kinds of behaviours range from status seeking
to validation seeking as well as a symbol of altruism and friendship. (Coyne, 2007; Lampel & Bhalla, 2007; Martin, 2008). Lampel and Bhalla (2007) explain that altruism, reciprocity and reputations-seeking factors influence behaviour of gift giving. Despite this, in their study the root motivation of such behaviour was undiscovered. Lehdonvirta (2009) mentions that rare items are usually closely related to the social value, because they are more expensive and/or it is harder to acquire these items.

Another factor related to the social value is the desire for online self-presentation. Kim, Chan and Kankanhalli (2012) concluded that the desire for online self-presentation is the main motivation of players for purchasing virtual items. This study was conducted through an online survey among 217 Cyworld players and 197 Habbo players. Lehdonvirta (2005) supports this finding by saying that one of the motivations for purchasing virtual items is self-expression through their buying behaviour. Martin (2008) states in his study that the symbolic value is related to self-expression by the expression of wealth, power, status, individuality and belonging. He also mentions that customization possibilities of the character relate to self-expression because it is easier to obtain a set of assets that relate to the consumers’ desire. Castronova (2005) and Dibbell (2006) state that many players want to create a best version of themselves in a virtual world.

2.4.3 Emotional value
According to the theory, emotional value is: “The derived value from feelings or affective states” (Sheth, Newman & Gross, 1991). Emotional value is described as an aspect that arouses different feelings when using a product. The consumer can express all emotions, such as happiness, sadness, anger and fear. Different products can trigger different emotional states that the consumer is looking for. Horror movies could, for example, trigger fear and excitement and candles can create a romantic atmosphere. Concerning the candle, there might be no utilitarian reason such as light or warmth, but only hedonistic reasons for creating the atmosphere of romance. Campbell (2004; 2005) has investigated the emotional aspects of consumption. He sees that consumption is a hedonistic action of pleasure seeking. Also Featherstone (2007) explored in his work “Postmodernism and consumer culture”, the field of consumption from the emotional perspective. His findings show that consumers seek pleasurable sensations. He discusses artistic expression and aesthetic aspects of different styles, product designs and models.
of different goods, as well as the fact that consumers love to mix up different fashion elements, and experience and express their artistic side. This behaviour gives them the sense of freedom, joy and happiness.

Ho and Wu (2012) conclude that playfulness is one of the factors that influences the purchase of virtual items. They define playfulness as: “The game user’s absorption, enjoyment, and curiosity in the game.” This is related to hedonistic reasons for consumption. Good gaming experience causes flow state (Hogg, Askegaard, Bamossy & Solomon, 2006). This “state of mind” affects the person on an emotional level and it is associated with playfulness. The flow state is characterized by mental enjoyment and activity for its own sake. In addition, the person has a feeling of being in control. The player might feel a distorted sense of time within their flow state. However, this phenomenon of flow state has led to some deaths (Wellman, 2015).

Guo and Barnes (2007) support the argument that playing and acquiring new virtual items is solely a hedonic process. Their study explains that one of the reasons why players acquire new items and purchase virtual items is only because of fun and enjoyment. Hedonic items as Lehdonvirta (2009) calls them, point to the aesthetic qualities of the goods. Some players see no utilitarian value in these items, but merely hedonic value. However, the individual perception on which cosmetic item is “pleasing to the eye” differs.

Belk (2013) states that adding different appearances to an avatar might increase people’s confidence. That could be one of the reasons why accessory items in virtual worlds have such a high value.

Guo and Barnes (2011) find evidence that there is a positive correlation between the perceived enjoyment and the purchase intention of virtual items. Other studies investigated the perceived enjoyment in different technological fields such as computers, mobile internet and different web pages (Bagozzi, Davis & Warshaw, 1992; Van der Heijden, 2003; Moon & Kim, 2001; Ho Cheong & Park, 2005). The findings show that there is a positive correlation between perceived enjoyment and intention of getting more involved within information systems. Hassouneh and Brengman (2011) categorized the “Relaxation/Gratification Shopper”. These people acquire virtual items because of the aesthetical value. Related to this they identified “Fun seeking” as a motivation for shopping.
Lehdonvirta (2009) explains that emotional value is tied closely with other values. An example can be a gamer purchasing functional items such as swords, helmets and shields which are aesthetically pleasing and therefore have an emotional value (Wohn, 2014).

2.4.4 Epistemic value
The theory of five consumer values states that epistemic value is: “The value derived from its capacity to provide novelty, arouse curiosity, and/or satisfy knowledge-seeking aspirations” (Sheth, Newman, & Gross, 1991). New experiences provide epistemic value. Epistemic value could relate to a consumer feeling bored and therefore decides to change of brand, product or lifestyle to experience something new.

Previous research that has coped with consumers’ variety seeking and exploratory motives (Katz & Lazarsfeld, 1955; Hansen, 1972; Hirschman, 1980). Berlyne (1960, 1970) states that “individuals are driven to maintain an optimal or intermediate level of stimulation”. Sit (2003) examines in his study: “Understanding youth motivations of entertainment consumption at shopping centres: implications for shopping centre marketing” the youth motivations for entertainment consumption. Two of the key motivators for purchasing are “thrill seeking” and “escapism”. Thrill seeking involves seeking for arousal, fun and exhilaration. Escapism is mostly described by a drive to relieve boredom. Shopping due to these reasons is very hedonistic: there is no utilitarian reason, just personal experience and adventure (Hassouneh & Brengman, 2011). The drive for epistemic value influences consumers to try new products, new brands or to get new experiences.

Ho and Wu (2012) explain that epistemic value is everything that promotes the consumers’ curiosity. Hamari & Lehdonvirta (2010) describe that a player can buy items or special points in order to experience variety and more novelty in the game. Most games are designed so that artificial scarcity and special occasions create exclusiveness and promote novelty. Lehdonvirta (2009) also identifies “experiencing new content” as a unique element within a game that relates to epistemic value. This content is mostly achieved via virtual items or points that a player has to buy. Yee (2006a) mentions in his study that immersion with topics such as discovery, role playing, customization and escapism play a significant role within purchasing virtual items. “Shopping for exploration “also indicates shopping on epistemic value (Hassouneh & Brengman, 2011).
This type of shopping refers to exploration, simulation and “thrill seeking”. Players can meet new people and new items. Wohn (2014) describes in her study that when players try accessory items such as clothes, there is an element of epistemic value involved. Wargaming (2016) states that gamers require constant updates and in order to have a high retention of loyal gamers, it is necessary to provide the gamers with new stuff all the time.

2.4.5 Conditional value

The theory of consumer choice behaviour defines conditional value as: “The value derived from its capacity to provide temporary functional or social value in the context of a specific and transient set of circumstances or contingencies” (Sheth, Newman, & Gross, 1991).

In other words the conditional value depends on the situation and specific setting. For example, some products have seasonal value (Easter ham, Valentine’s Day chocolate), relate to special events (gifts on graduation, marriage costumes) or appear for special occasions (police service). Therefore, the conditional value is influenced by the situation. During some situations the products have a certain value where in other situations they do not have any value or less value.

An example of a conditional value within a video game is the happening of a certain event for example a wedding, where it is appropriate to dress up your character like it is a real wedding. The conditional value mostly relates to holidays, in-game special events or social gatherings (Ducheneaut, Wen, Yee, & Wadley, 2009). This conditional value also relates to social value, because a character is supposed to dress up for Halloween to belong to a group (Kim, Chan & Kankanhalli, 2012). In some games there are missions where you will need certain items to complete the activity. Some of these items are only used once and after the mission there is no use for this item anymore (RuneScape Wiki, 2016).
3. Methodology

This chapter presents the chosen method, which is the tool for fulfilling the purpose through an empirical study in the appropriate scientifically way. Subsequently, the research philosophy, research approach, research design, research method, sampling method, data collection method, data analysis and the research quality are described.

The research onion is used for structuring this chapter (Figure 3). This provides a good overview about the different research philosophies, approaches and methods used in this paper.

Figure 3: The research onion. (Saunders, Lewis & Thornhill, 2009).
3.1 Research philosophy – Interpretivism

The research philosophy contains important assumptions on how the researchers see the world. The chosen philosophy lays a solid foundation on the methods that are used in the research strategy (Saunders, Lewis & Thornhill, 2009). Also, it enables the researchers to reach designs beyond their past experience (Blumberg, Cooper, & Schindler, 2014). In addition, it allows the researchers to be more creative (Easterby-Smith, & Lowe, 2002).

There are different research philosophies such as positivism, interpretivism (also called phenomenology), realism and pragmatism (Blumberg, Cooper & Schindler, 2014).

This research follows the path of the interpretivism philosophy. The interpretivist research explains that the social world is constructed and the people give a subjective meaning to this world and that the social world is observed by people. This means that every person interprets the world through their own viewpoint. In addition, the researcher is part of what is observed and sometimes they actively collaborate with the research. The last and third basic principle of the interpretivism research is that it is driven by interests of the researcher. The human interests channel our thinking and also how we see and interpret the world. It also influences how the questions are chosen and how knowledge is structured (Blumberg, Cooper & Schindler, 2014). Moreover, Blumberg, Cooper and Schindler (2014) stress that “an objective observation of the social world is impossible (pg. 21, 2014).” Researches with the interpretivist philosophy are mostly associated with qualitative techniques, but also quantitative techniques can be used (Williamson, 2002).

This philosophy is followed, because the answers of the participants will be described through the interpretations of the authors. The authors are part of the observation, because they are members of Generation Y and also practice the act of purchasing virtual items. Subsequently, this research is led by the interests of the authors. The interpretivism philosophy is used to lay a solid foundation on the research methods in this study.
3.2 Research approach – Abductive

The research approach examines how the theory is going to be applied. It involves data collection methods and the level of the findings’ generalizability (Saunders, Lewis & Thornhill, 2009).

There are two main research approaches: deductive and inductive. In the deductive approach the theoretical framework is developed before collecting the data. The direction of process is theory to data. In this case, the theory will be tested using the collected data. In the inductive approach, the theory is developed after collecting the data. Within the inductive approach, the process goes from data to theory. The inductive approach is more flexible than the deductive approach, which is highly structured. This approach is mainly used in the collection of qualitative data and the goal is to gain understanding of the meaning. The researcher is part of the research process within this approach (Saunders, Lewis & Thornhill, 2009). There is a third option to research approach – the abductive approach. The difference between inductive and deductive approach is defined as: “abduction differs from induction in that we start from the rule describing a general pattern, and it differs from deduction in that the conclusion is not logically given in the premise” (Danermark, Ekstrom & Jakobsen, p.90, 2001). The abductive approach has the elements of both the inductive- and deductive methods, but stays unique. This approach emphasises the search for the suitable theories and empirical observations (Dubois & Gadde, 2002). This method is called “theory matching” or “systematic combining”, because data collection and theory building happens simultaneously (Kovács & Spens, 2005). The abductive approach process starts with the real-life observations as inductive approach. In some cases the prior theoretical background is needed before that step (Dubois & Gadde, 2002). In the abductive research process, the data gathering and theory matching can happen simultaneously. The steps of the abductive research process are presented in figure 4. After these steps, the final conclusions are presented and suggestions are formed (Kovács & Spens, 2005). The aim of this process is to understand and explain the new phenomenon (Alvesson & Sköldberg, 1994).
This paper adopts the abductive approach, because the basic theoretical framework was developed prior to collecting the data. The collected data was matched with the theoretical framework as other researches (Taylor, Fisher & Dufresne, 2002) call it the “theory matching” or “systematic combining”.

The abductive approach is the most suitable approach, because it needs more flexibility in order to match the theoretical framework and the empirical data. This would not have been possible with a deductive and inductive approach. The interpretivism philosophy and the abductive approach are the foundations for the research.

3.3 Research design – Exploratory

A research design is a framework for conducting a research. It involves details about how to obtain the data and how the research is structured in order to solve the problem. The function of the research design is to ensure that the collected data provides the paper with answers on the purpose.

There are two ways to conduct a research design: through an exploratory design or a conclusive design (see figure 5). Exploratory research is usually a flexible and evolving approach. It tries to understand the phenomenon which is difficult to measure. Its objective is to provide insights and give understanding to phenomena. Methods that are used in this design are expert surveys, pilot surveys, qualitative interviews and/or unstructured observations. It rarely involves structured questionnaires or large samples. The exploratory study is divided into qualitative exploration and quantitative exploration. (Malhotra & Birks, 2007).
The conclusive design is used, when the clearly defined phenomena is going to be measured. Its objective is to test a specific hypothesis. The most common methods to conduct this design are surveys, databases and/or structured observations. This design is usually based on large samples and data is analysed via quantitative analysis (Malhotra & Birks, 2007).

A conclusive study is divided into two constructs: a descriptive research and a casual research. A descriptive research requires prior formulation of a hypothesis or research questions. This study requires a highly planned and structured design. Usually large samples are used within this design. A causal research’ objective is to obtain evidence about the cause-and-effect relationships. It is used for understanding which variables cause the phenomena or to test the hypothesis. Both the descriptive research and the causal research requires a planned and structured design.

The descriptive research is dived into cross-sectional research and longitudinal research. In the cross-sectional analysis, the data is only collected once from any given sample of population elements. The longitudinal research involves a fixed sample which is studied over a longer period of time (Malhotra & Birks, 2007).

![Figure 5. A classification of research designs. (Research Design Method, 2016).](figure)

This research uses the exploratory research design, because the objective of this study is to provide insights on the nature of this phenomenon. This study relates to this research design, because a relatively small sample is used and qualitative interviews are conducted in order to collect the data.
3.4 Research method – Qualitative

The research method describes how the research data is collected. There are two main research methods: qualitative research and quantitative research. Qualitative research is mostly unstructured and based on small samples. The intention is to provide a deeper insight and understanding of the topic. The quantitative research deals with numerical information and results are applied through measurements and statistical analysis (Malhotra & Birks, 2007).

This paper conducts a qualitative research, because the purpose is to provide depth within the respondents’ motivations for purchasing virtual items. Within this topic, qualitative research is more suitable than quantitative research because quantitative research lacks in providing deepness within the motivation of the respondents (Malhotra & Birks, 2007).

Qualitative research methods can be divided into direct (non-disguised) and indirect (disguised) approaches. The direct approach is not disguised, which means that participants are aware that they are part of the sample and that their answers are collected. Within an indirect approach, the participants are not aware that they are part of the research. The observation techniques and projective can be used in the indirect approach (Malhotra & Birks, 2007). The indirect approach is used to make sure the participants act as naturally as possible. This research is conducted via a direct approach.

The most common direct approaches are group interviews (focus groups) and in-depth interviews. The main benefits of focus groups is the synergy that happens within the group. Participants actively reveal ideas and others might “feed” from this. On the other hand, the main drawback within focus groups is the possibility of participants feeling shy or intimidated, especially with sensitive topics. This research is conducted via in-depth interviews, because not everyone might feel free to express their gaming experiences and purchases in the group. This technique is a direct, personal interview with a single participant. An in-depth interview is based on a conversation, where the researcher is asking questions and listening to the participant. The goal is to create a positive atmosphere. The atmosphere has to be very respectful and trustable (Malhotra & Birks, 2007).

The in-depth interviews can be divided into structured, semi-structured or unstructured interviews. This research uses a semi-structured interview (the interview structure and –questions can be found in appendix A). In this approach, there is an
optional list of questions and themes that can be covered. The order of the questions might vary and some questions might be interpreted differently during the interviews. Therefore, additional questions and themes might come up during the interviews. In this approach, there is a place for the respondent to express and more deeply describe their attitudes, comments and values on the topic (Saunders, Lewis & Thornhill, 2009). The usage of semi-structured framework in the interviews allows the participants to give deeper insights in their motivations towards purchasing virtual items.

3.5 Sampling technique
The sampling method relates to how the participants are approached to take part in this research. There are different types of sampling techniques (see Figure 6). They can be broadly classified as probability sampling techniques and non-probability sampling techniques. Within probability sampling techniques, the sample is selected by a chance. Within non-probability sampling techniques, the researchers have to make a personal judgment in order to choose the sample elements (Malhotra & Birks, 2007).

The non-probability sampling technique can be divided into convenience sampling, judgemental sampling, quota sampling and snowball sampling. The probability sampling techniques can be divided into simple random sampling, systematic sampling, stratified sampling, cluster sampling and other sampling techniques.

This research uses judgemental sampling in order to find the participants. Judgemental sampling means that the sample is chosen by the authors, because they believe that they are valid to take part in the research. This is the case, because the authors approached mainly friends that fall in the category of Generation Y and they are studying at Jönköping University. This technique is used, because it is convenient, inexpensive and quick (Malhotra & Birks, 2007). The size of the final sample is 31 participants studying at Jönköping University and member of Generation Y.
3.6 Data collection method

The data collection method consists of the way the information was selected and collected to execute this study. This study used the collected primary and secondary data in order to execute the study. Primary data is data which is originated, specifically to address the research problem (Malhotra & Birks, 2007). The primary data of this thesis was collected via in-depth interviews among 31 participants. The interviews took place in Jönköping’s University study rooms, group rooms and student accommodations. The time frame of the interviews was between 04.03.2016 and 20.03.2016. The sample consisted of 7 female and 24 male respondents, who belong to Generation Y, have had experience with video gaming and engaged in micro transactions. All the interviews were conducted in English, because all the participants understand the English language, even though this is not the native language for many participants.

The secondary data was collected from the previous works in this field. The main literature sources used in this paper were Hassouneh and Brengman (2011), Ho and Wu (2012), Kim, Chan and Kankanhalli (2012), Guo and Barnes (2011) and Wohn (2014), Yee (2006a, 2006b) and Lehdonvirta (2005, 2009). Jönköping University’s library database Primo and Google Scholar were used to find this data. The different keywords that were used to find these articles are: “purchasing virtual items”, “virtual items real money”, “virtual items”, “purchases in games”, “behavior in virtual worlds” and “micro transactions”. Also, the study of the references of the initial studies was used for a broader view on the topic.
3.7 Data analysis

There are several methods to analyse the data that was collected from in-depth interviews. Some characteristics of qualitative data are based on meanings expressed by words. Results are non-standardized and it requires classification into categories. Analysis can be done through conceptualization, diagrams and statistics (Saunders, Lewis & Thornhill, 2009). Several possibilities to analyse the data include explanation building, logic models, cross-case synthesis and pattern matching (Yin, 2009).

When using the abductive approach with qualitative interviews, Yin (2009) suggests to use pattern matching when analysing the data. The same technique is used in this paper. This procedure predicts the patterns of outcomes based on theoretical propositions (Saunders, Lewis & Thornhill, 2009). In order to utilize this approach, the theoretical framework has to be developed, utilizing the existing theory and testing the adequacy of the analytical framework. The transcriptions of the interviews will be used to find common patterns in the answers of the participants. In the coding process, the relevant distinctive features of participants’ perceptions and experiences were highlighted. The thematic analysis approach was used, which deals with the key themes (King & Horrocks, 2010). The data was highlighted and categorized through the five values according to the theory of consumption values.

The most relevant key themes, quotes, opinions and perspectives were highlighted during the coding process. Authors systematically summarised all interviews and compared similar traits among every transcript. The key themes of all transcripts were structured under the five consumption values. The coding of the data is an important part of the research in order to ensure the confirmability of the paper. The connections between the data and theory got created after the key themes got identified.

3.8 Research quality

There are different methods to ensure the quality of the research. The most common are representability, reliability and validity. These methods are used to ensure the quality and trustworthiness of the data (Malhotra & Birks, 2007). Representability, reliability and validity are used usually in quantitative researches. Since this research is qualitative, reliability and validity has to be adapted to qualitative research (Bryman & Bell, 2015). Guba (1985) and Guba and Lincoln (1994) have proposed two primary criteria to ensure
the quality of the qualitative researches: trustworthiness and authenticity. Trustworthiness consists of four criteria for quantitative research (Bryman & Bell, 2015).

- Credibility (which parallels internal validity)
- Transferability (which parallels external validity)
- Dependability (which parallels reliability)
- Confirmability (which parallels objectivity)

Credibility parallels with the internal validity which means that the data collected should reflect the reality. The credibility deals with the question: “How congruent are the findings with reality?” (Shenton, 2004). In order to ensure the credibility of this study, the participants should be encouraged to be honest and open (Shenton, 2004). Follow-up questions and confirmation questions should be included within the interviews. This research has been examined in a positive atmosphere, where the participants were encouraged to be honest and open about the topic. Follow-up questions and confirmation questions have been asked in order to make sure that the results are congruent.

Transferability is a criteria which shows the extent to which the findings of one study can be applied to other situations. It is usually challenging to demonstrate this, due to a relatively small sample (Shenton, 2004). However, Firestone (1993) states that the researcher can provide the readers with sufficient information about the fieldwork to enable the reader to transfer knowledge to other populations or situations. The important information about the study is clearly explained in order to increase the transferability of the study. Elements in order to ensure transferability suggested by researches are present in this study (Cole & Gardner, 1979; Marchionini & Teague, 1987). This information consists of elements such as the number of participants, the data collection methods, the number and the time of data collection and the time period, which are all included in this paper.

Dependability is a parallel to reliability in a quantitative research. Shenton (pg. 9, 2004) describes dependability as “if the work were repeated, in the same context, with the same methods and with same participants, similar results would be obtained.” Guba and Lincoln (1994) call this approach an “auditing approach”. The research process, design and methods are extensively described in order to improve the dependability
(Bryman & Bell, 2015). Furthermore, a trial interview has been performed in order to test
the interview structure as well as the capability of the interviewers.

Confirmability is concerned with the objectivity of the study. The researcher has to
ensure that the research goes objective without any biases (Shenton, 2004). In order to
ensure the objectivity of this study, the researchers have been trying to understand how
to impartially perform an in-depth interview. Also, the interviews were recorded and
transcribed in order to ensure the quality of the findings. Finally, both of the authors were
present in order to ensure the same goal and direction. One of the authors took notes each
interview and if needed, suggested additional questions.

3.9 Summary
This research is examined via an interpretivism philosophy and an abductive research
approach as a foundation for this study. The research design is exploratory because the
objective of this study is to provide insights on the nature of this phenomenon. The chosen
research method is qualitative, because qualitative research offers the researchers the
opportunity to go deeper into the motivations of players engaging in micro transactions.
Judgemental sampling is used in order to ensure that the people approached suit within
the requirements of the sample. Primary and secondary data has been collected in order
to execute this study and the data has been analysed via pattern matching. The
trustworthiness of the study was examined by four quality criteria (credibility,
transferability, dependability and confirmability) to ensure the excellence of the work.
4. Empirical findings

This chapter concisely describes the primary data collected from the in-depth interviews. The participants’ answers from the interview questions are categorized within the five different values.

4.1 Characteristics of participants
The sample of the research consists of 31 students studying at Jönköping University. All of them purchased virtual items at least once. Within this sample, there are 7 females and 24 males. The youngest participant is 19 years old and the oldest one 33. The majority of the participants prefers playing games on PC. The most popular games are League of Legends, World of Warcraft, RuneScape and Counter-Strike (more detailed information about the participants can be found in Appendix C).

4.2 Functional value
The functional value of purchasing virtual items consists of several factors. One of these factors is the advancement of character. This means that a gamer purchases a virtual item to make their in-game character stronger in order to be better within the game. Examples of virtual items that could be purchased to enhance the advancement level could be weapons, armours and elixirs. Most of the participants stated that the advancement of the character is one, if not the most, influential motivations of purchasing virtual items. Most participants perceived being competitive as the main reason they play games. This relates to the finding that most of the participants bought virtual items for advancement of the character. One participant mentioned that he believed that advancement is hard without paying virtual items with real money. Another participant (#2) mentioned: “I play for fun, but of course it is more fun if you win than lose.” Another participant (#11), when asked, explained his most important reason to buy virtual items: “just to be competitive”. Another participant (#21) explained that he does not mind spending money on virtual items in order to get competitive advantage: “Well, from the nature I am a very competitive person, so whatever I do, I want to always win, so I would say, it is definitely important, I have always tried to be the best, so if opponents are spending some money on the gems and that makes them successful in the game, it makes me want to do the same.” However, there are also some participants that do not perceive the link between purchases and advancement of the character as important. It is worth mentioning that some games, such
as League of Legends for example do not have virtual items for sale that will enhance the advancement of the character. Nevertheless, one participant (#9) that plays League of Legends stated that: “I can play more focused and pay more attention on playing the game. It gives me more concentration.” However, there are also some participants that perceive purchasing virtual items as negative because they do not want to rely on the pay-to-win principle and feel that it is cheating towards other people.

Besides the advancement of the character, saving of time by buying virtual items is also one of the main functional reasons. The majority of the participants spend money on virtual items in order to continue with their game play instead of having to wait before they are able to move on. An example can be given with Candy Crush, where a gamer has to wait to continue with a level after failing several times at that point. However, the gamers can buy themselves out of this situation. Another example could be that gamers can buy an item to revive the character, so they do not have to wait the initial given time. One participant (#12) mentioned: “When I am competitive in the middle of the game and I have to wait for one or two days to level up, I would buy the item instantly with real money.” Another participant (#29) stated: “One reason can be that you do not want to waste the time in the real life you have, so you buy either game currency or you buy some game item by real money, because you do not want to take the time to get it.” The player of Clash of Clans reported (#26): “The reason I did that (purchasing virtual items) is that if you do not make virtual purchases then the game starts moving really slow, and so to keep the game moving and keep myself engaged in the game I need to make some purchases.”

Another factor affecting the functional value is the act of buying virtual items which relates to the decision making process. The act of buying virtual items includes the safety of the mechanism as well as the information that is given about the characteristics of the item, the price of the item and the in-game value of the item. The buying process of the participants involves a lot of information search prior to the purchase. The main reason for the extensive information search comes mainly from the motivation of trying to get the best price-quality ratio. One participant (#1) mentioned: “To some extend you can always justify paying money, because if you spend a lot of hours on the game, it has to very expensive for the game not to be a cheap hobby.”

Another factor is safety. Most of the participants believed that safety does not play a role within purchasing virtual items, because the game mechanism is usually risk-free.
The main information that sought after is therefore the functionality of the items and the price of these items. However, there are also a few participants that made an impulse-purchase. One participant (#19) mentioned “It was an impulse purchase in the middle of the night, at 04:00 in the morning, I did not think straight.”

Related to the price, many participants faced a moment where they did not buy an item because of the high price. One participant (#30) mentioned: “I would usually compare the prices with food products so that I can evaluate the price; Do I want a few litres of Coca-Cola or do I want this skin in the game?” Another participant (#3) mentioned: “Once you lose the border of spending money, you spend more and more because it is convenient.”

There are also a handful of participants that never faced a moment where an item was too expensive to be purchased. One of the participants (#1) mentioned that it can be justified to pay for virtual items, because at the end it will remain a cheap hobby in comparison to other hobbies. Two other participants bought an item just because of the cheap price.

4.3 Social value
The social value within purchasing virtual items relates mostly to becoming part of a group. However, there are many different factors that relate to the social value. Purchasing virtual items to look the same as others players within the group and purchasing virtual items to raise the expected skill level to join a group are the two main reasons why participants buy virtual items. The majority of the participants are concerned how the item looks like and what kind of social value it conveys. One participant (#3) mentioned: “You are connected via Facebook and you can see who of your friends are playing a game. This challenge, with your friends, is more challenging than the game itself.” Another participant (#23) replied: “It has kind of a social status in the game; most times to stand out from the crowd, it is a big factor.” He added that having unique items or appearance shows his dedication to the game.

The last reason also relates to a functional value, because it relates to the advancement of character. But in this case, the advancement of character is necessary in order to join a group. Also peer pressure plays a role for one participant that states that he bought an item because his friends told him to. Three quotes relating to this topic: “People will socialize more with me if I have cool items”, “New items work as an ice breaker in
the game” and “It does not have to do with personal preferences, but merely with being together with a group.”

Most of the participants told their online and offline friends that they purchase an item. The main reason for this is to show off. Many of these participants also try to convince these online and offline friends to buy virtual items. Participant (#15) explained that he has suggested different items to his friends and talked about his purchases. He said: “Yes, because if it is interesting for me, it might be interesting for others. So yes, of course I am going to tell my friends, like: “I bought this pack, it is awesome”. However, there is also a group of participants that does not tell their offline friends about a purchase. These participants do not feel the need to show off to their friends. Another reason not to tell their friends is that purchasing virtual items still feels like a taboo for some participants. Participant (#24) explained: “I do not tell my friends, because my other friends do not play computer games. I think they would make fun of me.”

One participant (#1) who plays Hearthstone said that he does not tell his friends about purchases, because he does not want them to know that he made them. He considered it as cheating: “I try not to, because it feels like cheating, especially from games where you benefit from buying items. I think I tell people when I buy two packs of cards that I only purchased one, because I do not want to say that I am paying to win.”

Another factor within social value is self-expression. This is the act where gamers buy an item for the avatar to express their values, or in extreme cases even themselves. This relates to virtual items in a sense that gamers purchase a particular item that helps them express themselves within the game. Many of the participants are concerned how their avatar is presented in the virtual world. Another participant (#24) mentioned that he feels that the character is himself in a virtual world and within the real world, he wants to look like his character and vice versa; “I changed the colour of my hair, I got blue hair and I gave my character blue hair as well. I have to confess, it sounds a bit silly... sometimes I really feel like it is myself in the different world and I want him to look like me and sometimes in the real world I want to look like the character”. Another participant stated that her avatar represents her, so the avatar has to look good.

Even though the above mentioned factors play an important role for many participants, not all of them find a social value within purchasing virtual items.
4.4 Emotional value

The emotional value of purchasing virtual items is considered as all the emotions that players feel prior to the purchase, during the purchase and after the purchase. Majority of the participants stated that they experience positive emotions towards acquiring new virtual items. One participant (#24) stated that he feels better and that the avatar feels more valuable when acquiring new items. He stated: “It is quite exciting actually, I think, if I buy like a new item and I really like it, then yea, you feel actually better, you feel your character is more valuable and you improved your character and you can play better, you can work better in this world and it is really exciting.” Another participant (#25) stated that the reason for engaging in micro transactions is merely fun: “Mostly, for fun, I mean, it increased my experience of the game...when it comes to avatar outfits in the game, I would say, that mostly the outfits are more for fun...if you buy a skin and it looks fun, you’ll probably laugh and think it is fun.” Participant (#23) said that acquiring new items gives some kind of satisfaction and it feels great, to look cool, especially when other players comment on his avatar’s outfit.

Other emotions that participants experienced during the purchase of virtual items are excitement, happiness and enjoyment (#14). Participant (#28) feels proud of her character.

Besides all the positive emotions, there are also negative emotions involved within the buying process. Many participants showed regret towards the purchase. This emotion was expressed mostly with words such as “feeling stupid (#1)” and “feeling guilty (#7)”.

The reason for this regret can be divided into two categories. One group of players admitted they acted irrationally by making an impulse purchase that resulted in items they did not actually need. Another group feels that they could have gotten a better deal or they bought the wrong item. One participant (#24) explained that he felt the regret, when items did not fulfil his expectations: “…Sometimes you are not really satisfied, especially when you paid a little bit more for an item and you had some picture in your head, how it will work, how it will improve your character or how it will look on your character and in the end it does not really fulfil your expectations.” However, there are some participants that never felt the emotion of regret concerning a virtual purchase.

Another negative post-purchase emotion that is experienced by some participants is fear. Some participants said that they feel scared of losing virtual items within the game. Participant (#18) explained the emotions about losing an item: “Usually the fear comes
after you have bought it, because when you wear them and you die, you might lose them...” Some of the participants have lost virtual items for many different reasons. One of the reasons was an account ban. One of the participants (#31) expressed, that he would be very sad, if he would lose his items. Another participant (#28) expressed his anger and disappointment when he lost his virtual items.

4.5 Epistemic Value
The epistemic value relates to the virtual items that make the game more interesting because it comes along with the possibility of experiencing new content in the game. Approximately 10 of the participants acquire virtual items with epistemic value as one of the main motivations. This purchase comes mostly along with new levels, bigger maps, new items and new quests. RuneScape, HALO, Tibia and Call of Duty are games that are mentioned that come along with either new maps or advanced maps. The main reason these items are bought is that it opens up the world and brings the game more to life or back to life again. One of the participants (#24) said: “I think that actually the items, they make the game more interesting for me, they open up new worlds and they enhance the game play. It is very important that the game varies, that it does not stay the same always. And I am very willing to pay more money for items which make the game broader and bigger.”

In contradiction to these findings, there are also many participants that found little to no epistemic value within buying virtual items. Participant (#23) expressed that with different subscription models, game maps might get bigger and the player can experience a broader world, but items themselves do not give that. Another participant (#31) said: “Nothing new, it is pretty much the same thing with another twist.” Besides this, they do not want to purchase virtual items, because they would rather buy a new game when a game starts to become boring.

4.6 Conditional value
The conditional items relate mostly to items that are sold during special occasions such as Christmas. Within some games, the items lose their value after this particular event, but within most games the items retain value. When it comes to the first category, many participants were not keen on spending money on these items, because they would lose their value and it would feel like a waste of money. Another reason a participant wouldn’t
buy a holiday item is stated by participant (#19): “I do not want to play a Christmas skin during Easter.”

However, it also depends on the functionality of the items. One participant (#18) expresses that he is not into holiday items because they do not give any advantage over other players, “No, it does not give you any advantages over other people. It is just a cosmetic item, like accessory.” The participants that bought these conditional items have a different reason for this. Most of them purchase these items, because they are rare and they cannot be purchased after the special occasion. Participant (#23) said: “...it feels a little bit exclusive, and I know that players that come after me, they are not able to have them, so it makes your account more special in a way.” They want to stand out from the crowd and purchasing these virtual items can help them with this. One participant (#1) mentioned: “Because purchasing virtual items for you hero, just to look cool, is only cool if less people have them.”

The last reason a participant prefers conditional items over normal items is that the sales of these items are usually linked with discounts. One participant (#21) mentioned: “Well for Christmas time, I have to say that for gems, they have definitely like Christmas sales, so you can actually get the discounts while purchasing gems.”

Another participant (#3) mentioned that these items work as an addiction trigger. Within Clash of Clans you get gems for free during holidays and then you get used to having this virtual money. However, after the holiday, the virtual money is not for free anymore and the player craves to use this virtual money again, but now the player has to pay real money for it. He expressed himself: “…with Clash of Clans with Christmas or Easter you can get diamonds for free, so that you get used to spending it and then later when you are used to it, you have to spend money on them, it is like an addiction trigger.”
5. Analysis

*This chapter analysis the most important empirical findings. The previous research is used to shed a light on these findings.*

5.1 Functional value

The empirical findings show that most of the participants perceive being competitive as one of the main reasons of playing video games. This reflects the result that one of the main reasons for purchasing virtual items is advancement of character in order to be competitive. Lehdonvirta (2009), Ho and Wu (2012) and Yee (2006b) found in their studies that the desire to be better and more competitive in the game is the key motivator of why players engage in micro transactions. This confirms the argument that players are motivated by the functional value of advancement of character.

The empirical findings show also that saving real-life time by purchasing virtual items is perceived as one of the main motivations. Lehdonvirta’s paper (2005) explained that players engage in micro transactions to catch up with their friends. This shows that players do not want to waste real-life time on the game, but still want to be competitive and play with their friends. This aspect is related to the competitiveness and social principle.

However, the empirical findings show that some participants link the pay-to-win model to unfair competition. They perceive the possibility to advance their character by purchasing virtual items as unfair competition, because they believe that players should rely merely on their gaming skills. Lehdonvirta’s paper (2005), examined via a case study, concludes that it is often reported that players perceive purchasing virtual items for advancement as cheating. Players also have negative emotions towards having to pay in order to continue with their game play.

Therefore, it is suggested to offer advancement of character and time saving options as optional. This should also be possible to be achieved via dedication in the game.

Furthermore, the empirical findings show that most players go through an extensive information search prior to their purchase in order to ensure the best price-quality ratio. The majority of the participants answered that they are price-sensitive. However, there are also some participants that engaged in an impulse-purchase. Another factor is the safety of the transaction mechanism and this is mostly perceived as trustworthy.
Hassouneh and Brengmans’ study (2011) mentions that some of the players are very price sensitive and are looking for the best price-quality ratio. This shows the importance of providing the players with information regarding the price and functionality of the virtual items. The empirical findings show that an impulse-purchases resulted mostly in a feeling of regret. This could have been avoided by offering the players more information and being more transparent. The transparency could be raised by making it clear when players are purchasing items with real money and not using virtual currencies to detach players from the idea that they are spending real money.

5.2 Social value
The empirical findings show that players purchase virtual items in order to become part of a group. This is done via two different ways. The first way is to purchase virtual items, mostly cosmetic items, in order to get accepted by the group by following their dress code. This relates to the peer pressure where the group expects their members to follow the group culture. The second way is to purchase virtual items for advancement of character in order to reach the desired skill level to join a group. This purchase relates also to the functional value, because advancement of character is a functional aspect.

Ho and Wu (2012), Wohn (2014) and Yee (2006a) also state that social influence and desire for belonging to the group is a significant factor why players purchase virtual items. Hassouneh and Brengman (2011) mention in their study the social shoppers, who perceive the purchase of virtual items merely as a social activity. This behaviour explains that having friendships and group-belonging is very important, even within virtual worlds. The virtual items are used as an object to express friendship and/or belonging to the group. This shows that different kinds of players relate their motivation for purchasing virtual items to a social value. It does not only relate to members of Generation Y, who value the feedback of others when make purchasing decisions, but also other generations (Benckendorff, Moscardo & Pendergast, 2010).

The empirical findings also show that there are participants that want to stand out from the group via the principle of self-expression. They want to express themselves with their character in a virtual world. Rarity and customization play a role in standing out, because participants have the opportunity to buy rare items that are unique in comparison to other items. Kim, Chan and Kankanhalli (2012), Lehdonvirta (2005) Castronova (2005), Dibbell (2006) and Martin (2008) also describe the self-expression as key
motivator for purchases. Engel, Bell, Meier, Martin and Rumpel (2011) mention that self-expression is an important factor for Generation Y. Arthur, Sherman, Appel and Moore (2006) complement on this by mentioning that self-expression happens as well in virtual worlds.

This explains that the players’ motivation relate to the opportunity of self-expression. Customization can also play a role by offering the players the possibility to express themselves via their characters. This paper shows that the social value plays an important role for all kinds of players related to purchasing virtual items. However, some of the participants mention that they do not tell their social environment about a purchase, because they believe it is a taboo, and players are scared for negative social feedback on their behaviour. Previous research has not coped with this topic. This shows that this topic related to the social value is sensitive for Generation Y.

5.3 Emotional value

The empirical findings show that players are engaged with video games due to the positive emotions involved. This correlates with the positive emotions that are connected to purchasing virtual items. Most of the participants state that they develop positive emotions prior to, during and after the purchase of virtual items. Ho and Wu (2012), Guo and Barnes (2007) and Lehdonvirta (2009) state that players engage in micro transactions solely for fun, perceived enjoyment and hedonic value. Hassouneh and Brengman (2011) identified the type of virtual shoppers, who are shopping for fun. These players are drawn to the aesthetical value of items. This shows that purchasing virtual items is greatly connected to the emotional value. Players purchase virtual items for hedonic reasons.

However, there are also participants that face negative emotions. These emotions are faced after a purchase due to disappointment to the expectations that they had. This is related to executing impulse-purchases where the information search has not been extensive enough to ensure the best price-quality ratio. This aspect of regret related to purchasing virtual items is not reported in previous research. This shows that Generation Y experiences negative emotions when their behaviour does not result into their expectations of the outcome. This might be a reason why participants examine extensive information search prior to a purchase of virtual items.
5.4 Epistemic value

The empirical findings show that experiencing new content and new experiences is one of the main motivations for players to purchase virtual items. Nevertheless, there are also some participants that do not perceive any epistemic value linked to the purchase of virtual items. Hamari and Lehdonvirta (2010), Lehdonvirta (2009), Yee (2006a) and Wohn (2014) confirm that players engage in purchasing virtual items that offer variety, novelty and/or any new experiences. The wider exploration and discovery of virtual world can be attained by purchasing some virtual items. Hassouneh and Brengman (2011) found a trait that some players shop for exploration. This shows that players have a need to explore and try and experience new things in the video game. The fact that some players do not perceive any epistemic value can possibly be explained by saying that some games do not offer the possibility to open up the world by purchasing virtual items.

5.5 Conditional value

The empirical findings show that players perceive the conditional value in the seasonal items or in “limited edition” items. There are two underlying reasons for this. The first reason relates to the purchase of seasonal items, because they are perceived as rare items. These items assist a player to join a group or stand out from a group via for example self-expression. This value is therefore related to the social value. The following reason relates to the discounts on seasonal items. Some players state that they purchase seasonal items, because they are discounted. This relates to the functional value. The previous research does not describe the conditional value, probably because the definition of the conditional value mentions that it is related to the functional and social value.
6. Conclusions and discussion

This chapter wraps the paper up. The research questions are answered related to the purpose. In addition, the theoretical- and managerial implications are given as well as the limitations and future research.

6.1 Research questions

The purpose of this research was to give insights in the players’ motivations for purchasing virtual items. The main research question and five research sub-questions are answered in order to provide insight on the given purpose.

RQ1: “What is the players’ motivation for purchasing virtual items?”

The main motivation for purchasing virtual items is the customization of character in order to become part of a group and for self-expression. The advancement of character and time saving options are also motivations related to purchasing virtual items, but advancement of character is also perceived as unfair competition and there are negative emotions involved with having to pay to continue with the gameplay.

RQ1.1: What is the role of functional value on purchasing virtual items?

The functional value plays an important role within the players’ motivation for purchasing virtual items. However, cautiousness is required, because the advancement of character and the saving of real-life time are respectively perceived as unfair competition and negative. The players want the transaction mechanism to be transparent in order to make a purchase decision after extensive information search has been done.

RQ1.2: What is the role of social value on purchasing virtual items?

The social value plays the most important role within the players’ motivation for purchasing virtual items. The desire to belong to a group and the desire for self-expression are confirmed to increase the likelihood of purchasing virtual items. This opportunities are offered through customization of character.
**RQ1.3:** *What is the role of emotional value on purchasing virtual items?*

The emotional value is linked to all the other values, because every purchase involves a feeling. Customization of character involves merely positive emotions. The feelings and the perceived enjoyment are closely related to purchasing virtual items.

**RQ1.4:** *What is the role of epistemic value on purchasing virtual items?*

The epistemic value is less significant related to the purchase of virtual items, because many players do not perceive the epistemic value in virtual items.

**RQ1.5:** *What is the role of conditional value on purchasing virtual items?*

The conditional value is directly related to the functional-, social- and emotional value, even though it is experienced in a different context.

### 6.2 Theoretical implications

This paper contributed to the academic field by examining the players’ motivation towards purchasing virtual items among generation Y. The theory of consumption values has been applied towards this paper. This paper gave an overview between the link of micro transactions, generation Y and the theory of consumption values.

### 6.3 Managerial implications

The main focus of a gaming company should be involved around micro transactions for cosmetic upgrades. Players have positive emotions towards cosmetic items and through customization, the players can express themselves. The advancement of character should not be the main focus for a gaming company, because this pay-to-win model is many times perceived as unfair competition. A suggestion is to make give players the opportunity to earn these items in the game with their dedication.

Also, the video gaming industry should give players the choice of purchasing virtual items instead of forcing them to purchase these virtual items in order to have a decent gameplay. The reason free to play games are so popular nowadays is simply because they are convenient and free to play. Therefore, it is suggested not to put every item for sale but also give some of these items away for free.

Finally, the transaction mechanism should be transparent, because players prefer an extensive information search prior to a purchase. Therefore, the video gaming industry
should make it clear when a player purchases a virtual item. A suggestion is to move on from the virtual currency to detach players from the idea that they are spending real money.

6.4 Limitations & future research

A limitation of this paper is the sample, which consisted of merely Generation Y students studying at Jönköping University. This limits the research, because Generation Y does not represent the whole market for micro transactions. The suggestion for future research is to conduct this type of research towards a more diverse sample and among different generations.

The second limitation consists of the research area. This paper’s research is spread over all kinds of video games. Therefore, there is no focus which would have resulted into conclusions directly related to one or two specific video games. Further research suggests to conduct this type of research towards one or two specific games.

Finally, this paper examines the players’ motivation for purchasing virtual items. This is mainly related to the purchase intention and not to the purchase behavior. The suggestion for further research is to merge a qualitative study together with actual log data in order to explain the actual purchase behavior.
Reference list


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Appendices

Appendix A - Interview structure and questions

Word of welcome and introduction:
Thanks for joining the interview. We are Carl and Kevin and we are currently studying International Marketing. We would like to ask you some questions for our thesis.

General questions:
Games played: You told us you are playing or have played video games, which games or which kind of games are these?
Devices: On which devices (mobile, consoles or PC) do you play these games?
Time spent on gaming: How much time per week do you spend playing video games?

Money related:
On a game: Did you ever spent money on buying a game?
Within a game: Did you ever spent money within a game by purchasing virtual items?
Kind of virtual items: Which kind of virtual items do you spend money on (for example clothing, weapons, poisons, less waiting time, virtual money)

Functional:
Advanced character: Stronger or faster for example
Price of virtual items: How does price of the items influence your decision? Do most items offer value for money?
Convenience of buying virtual items: Safety / Information about costs / Information about values

Social:
Influence by friends: Become part of a group (maintain social relationships and make new friends) / different avatar than friends / share with friends that you bought? / compare items with your friends?
Self-presentation: Via the avatar
Emotional:
Feeling: How do you feel after purchasing? (Add value to the enjoyment of the game?)
How does it make you feel if you lose a virtual item?

Epistemic:
Does buying virtual items come with new experiences? How important is this?
Can buying a new virtual item make the game interesting again where it was starting to become boring.

Conditional:
Event/holidays: Purchasing an item that comes along with the event. What is your opinion about items that are created for a specific event?
Worth of items: Did you ever buy a virtual item that could be used for just a particular amount of time and became useless after this?
Appendix B - Summaries per interview

#1

Games played:
He played and plays mostly online games (Need for Speed, Age of Empires, Warcraft 3, Starcraft 2, World of Warcraft, DOTA, Heroes of New Earth, Heroes of the Storm, Hearthstone and more.

Time spent on games:
Approximately 3 or 4 hours per week

Money spent on games:
Some of the games he paid for, some of the games were free. He played the games he had to pay for more.

Money spent on virtual items:
Monthly fee → World of Warcraft
Purchased 3/4 new heroes → Heroes of the Storm
Purchased cards → Hearthstone

Functional:
He purchased cards, because he wanted to be competitive and better in the game. With this cards he could break his previous limit. As being competitive is one of his most important reason of playing a game, the virtual items should assist him in this. He says that winning feels good. Contradictive to this is that he feels that buying these items is like cheating, because it gives an advantage over other players. Another main reason of purchasing these items is that it comes along with less waiting time. He also states that the price of the items influences the likelihood of purchasing them. One can justify the paying, because it is a cheap hobby, so he thinks it is still reasonable to buy items, but not the most expensive items. Within this, he buys only items he needs, he never buys an item just because it is cheap.

Social:
He does not tell his friends that he bought these items, because once again it feels like cheating. One of the main reasons for playing video games is the social aspect, but purchasing these items does not relate to the social part at all.
**Emotional:**
Initially he feels good after purchasing an item, but over time he states that he might feel stupid, because of the money spent.

**Epistemic:**
When he gets bored of the game, he might consider buying these items, but he usually decides to get a new game.

**Conditional:**
He never encountered the situation where they sell items with a conditional value, but he feels that he would buy these kind of items because they are rarer for the reason that they are only available in a certain amount of time.
Games played:
He played many offline as well as online games like Age of Empires, Tetris, Minesweeper, Solitaire, Modern Warfare, racing games, World of Warcraft, GTA and Battle Field. These games are mostly played on the PC, but Clash of Clans is played on the telephone.

Time spent on games:
Money spent on games:
Money spent on virtual items:
He bought some virtual items, but he is scared that he might get addicted once he buys too much.

Functional:
One of the reasons he buys the items is because it makes the game more convenient to play. Buying the items results into less waiting time, because he can revive himself with the money for example. He also buys items to compete with friends and be advantage, because he believes that advancement is hard without paying real money.

Social:
Nowadays, it is possible to connect via social media which makes it easier to see everything about the gaming of your friends. This strengthens the competition with friends and therefore he buys items to show off. To be in a clan, he needs to have a certain level and the items can assist him in this.

Emotional:
Buying the items is initially perceived as positive, but later also as boring because it takes the challenge away.

Epistemic:

Conditional:
Games played:
He played mostly the online PC-game League of Legends. Besides this, he played Battle Field and other shooters and racing games.

Time spent on games:
He spends approximately 2 to 5 hours per week

Money spent on games:
He paid for some games, mostly when they were in discount. But he also plays free to play games.

Money spent on virtual items:
He buys mostly clothing, which is also called skins.

Functional:
He believes that competitiveness is not the most important aspect, so he mostly plays for fun. The price of the items has to be reasonable. He picks the skins he likes, but he always checks the price of the items before purchasing them.

Social:
The main reason he buys items is to look the same as his friends or his clan in the game. This is cool and differentiates the friends and/or clan from others. However, he does not buy the items to make new friends. He shows them to others and is not ashamed buying it.

Emotional:
He mostly buys items for customization and this does not make the character stronger, but just makes the character looks cooler. This makes him feel excited and gives him tension and a kick. He likes the fact that he can look however he wants in the game.

Epistemic:
Purchasing a new item does not make the game more interesting or such.

Conditional:
He mentions that limited edition items could be fun for collector. He used to own a Christmas skin, which shows expertise and uniqueness. Therefore he would buy them, because it makes him stand out from other players.
Games played:
He played PC games as well as games on the PlayStation.

Time spent on games:
Approximately 14 hour per week.

Money spent on games:
He has bought many games, but also played free to play games

Money spent on virtual items:
Functional:
He buys these items to have advantage over other players. So one of the reasons is that the virtual items should come with a higher skill level. These items should not be too expensive though.

Social:
He buys the same items as his friends and/or his clans to have the same outfit. This makes it easy to see friends with the same outfit and he thinks it is cool. Therefore, he suggests buying outfits to his friends and when he buys something, he shows this with proud. However, whatever happens in the game, stays within the game and is not shared with his offline friends.

Emotional:
The emotions are mostly positive, even though he has also regretted buying some items, because he felt they were a waste of his money. He rather buys items which he already paid for, because he is more engaged with that game and wants to make the most out of it.

Epistemic:
He buys these items in order to get access to new levels. These items are mostly bought within single player games and they come along with extra levels and extra items. Therefore, the game becomes interesting again. This reason is perceives as more important than buying outfits with friends.
Conditional:
He believes that having a conditional item like a Christmas hat is cool, because he feels he is part of the community. When he is seeing someone wearing this hat the next month, he feels connected to that player because they have the same item. He never bought an item that loses the value after it is used though.
Games played:
He played games on his computer like Counter Strike and on his phone like Clash of Clans.

Time spent on games:
8 Hours per week approximately.

Money spent on games:

Money spent on virtual items:
He bought 5 times virtual items and they cost approximately 600 krono each time.

Functional:
The reason buying these items consisted mostly of upgrading the village and making your clan stronger. An important aspect with this was the decrease of waiting time.

Social:
Another important factor is the social value. Buying virtual items makes it easier to compete with clans. Besides this, the game has the possibility to chat with friends and play with friends. Updating the village can be used for showing off towards friends. Interaction with friends is very important.

Emotional:
Buying virtual items makes him feel good and does not come with regrets. Also makes the game interesting.

Epistemic:
The game adds new champions, buildings etcetera. He buys these features, because this new items make the game less boring.

Conditional:
There is no conditional value within the game.
Games played:
WarFrame and Champions: “Cities of Heroes” are the games he played on PC.

Time spent on games:
Approximately 4 hours per week.

Money spent on games:
He has bought games on Steam, which comes with good discounts. Besides this, he also plays free to play games.

Money spent on virtual items:
Within the game called WarFrame he spent money to get a premium currency in the game to buy more weapon space and experience boosters.

Functional:
The main reason for him buying these items is the less waiting time because of experience boosters for example. Besides this, he buys weapon space to make the game more convenient and one of the results of this is a better competitiveness. However, he does not perceive advantage over others as very important. It occurred that he did not buy an item because it was too expensive.

Social:
He never bought an item because of a social group.

Emotional:
Another competitiveness of more weapon space is the convenience of playing the game which comes with less stress. Afterwards, he mostly feels that buying more weapon space is a waste of money. Buying experience boosters for less waiting time is perceives as neutral emotion.

Epistemic:
New items do not make the game necessarily more interesting.

Conditional:
The conditional items like Easter bunny ears are purchased with virtual currency and not with real money. But if he had to pay them with real money, he would have perceived them as fun, but he wouldn’t buy them. It does not come along with an advantage he would spend money on.
**Games played:**
She played games on all kind of devices and the games consist of World of Warcraft, Pokémon, Supersmash Brothers, Mortal Combat, Fire emblem and many more.

**Time spent on games:**
She spends a lot of time on games.

**Money spent on games:**
Her parents bought some games for her, but now she starts also buying her own games.

**Money spent on virtual items:**
She purchases different kinds of these items. For example card at Hearthstone.

**Functional:**
The main reason for her is to become better in the game and have less waiting time. Because of buying virtual items, she can become a better player. When it comes to the moment of purchase, she reads the guides and wants to know how the system works. Information and safety is very important for her. She mostly chooses the cheapest options when it comes to purchasing a certain type of item.

**Social:**
She does not buy items to become part of a group. She plays with online friends that she will never see after the game anymore. So it is mostly for the individual experience. When her friends ask her how she bought something, she will tell it is with real money, but she does not necessarily feel proud of it.

**Emotional:**
Sometimes she feels guilty buying an item, also because people perceive buying virtual items sometimes as cheating. But at the end she feels good about it. She would pay more for a game she already paid for than for a free to play game with the reason that she is more engaged in that game.

**Epistemic:**
When the game starts to become boring, she takes a break first from the game. After she cannot get through with the game, she spends some money on it in order to continue and get access to new levels.
Conditional:
She does not buy holiday items, because she believes that if an item does not help you process in the game, that the item does not have any value. These items are mostly not sold in a conditional way.
#8

**Games played:**
Mostly online games like RuneScape, Dota, League on Legends, offline games on console

**Time spent on games:**
15 Hours per week

**Money spent on games:**
Yes

**Money spent on virtual items:**
Yes, membership items, mainly customization items. Also seasonal promotion buying tickets with which you can win stuff.

**Functional:**
The items she buys do not make the avatar stronger, so this does not play a role within her buying decision. However, the price of the items play a role in a sense that when an item is really cheap, she might buy it even though she does not need it. Also, it is very important for her to have the safety guaranteed and a lot of information provided before she purchases an item. She is more likely to spend money on free to play games, because she feels it is too expensive to pay for a game and then also pay within the game.

**Social:**
She never bought items to become part of a group or clan. However, she tells her online friends, which are basically also her offline friends, once she bought these items.

**Emotional:**
She likes the customization of the character and also the pets she can buy, which will follow her character in the game. After a purchase she feels happy and satisfied. Sales never made her feel unhappy.

**Epistemic:**
Within the games she played, the purchase of these items do not come along with new levels or new possibilities. Therefore a boring game cannot be turned into an interesting game with purchasing these items.
Conditional:
She likes conditional items, because she is a collector and wants to have all different kinds of items. Of course the rare items offer her more value then.
#9

**Games played:**
He plays mostly the online PC game League of Legends and World of Warcraft. Besides that, Angry Birds on his mobile phone.

**Time spent on games:**
12 Hours per week approximately

**Money spent on games:**
He bought World of Warcraft

**Money spent on virtual items:**
Within World of Warcraft there are no virtual items to be purchases, but within League of Legends, he purchased different skins.

**Functional:**
The skins he bought do not come along with advancement of the character. However, once he buys a skin, it gives him a better focus on the game and therefore he can concentrate better and play better. There are prices of skins between 100 and 300 krono. Even the price of 300 krono is not too much for him, if the skin looks good. Getting product information is very important for him, but safety is not that important.

**Social:**
The main reason is the show off to his friends and also suggests the friends to purchase the item as well. He tells this mostly to his offline friends.

**Emotional:**
After a purchasement he feels distinguished which is a positive emotion for him. It also comes along with fun and satisfaction. However, sometimes he regretted a purchase. Mostly when he buys an item for a certain character and then he does not like the character and therefore not play with the character anymore.

**Epistemic:**
His game do not involve epistemic values.

**Conditional:**
#10

**Games played:**
Online PC games World of Warcraft and Perfect World

**Time spent on games:**
20 Hours per week

**Money spent on games:**
No

**Money spent on virtual items:**
Yes, mostly weapons.

**Functional:**
She bought the weapons, to get better in the game, especially versus NPC’s instead of other gamers. Price plays an important role, she wouldn’t buy items that are too expensive. Information is important, because she wants to know if she buys the most suitable item to not get disappointed.

**Social:**
She buys items and does not tell her friends, but she wants to surprise them.

**Emotional:**
Motivated. Also regretted one time because she found out she did not buy the most suitable item.

**Epistemic:**
She buys items to move on with the game, because she can finally beat the enemy’s.

**Conditional:**
She never bought seasonal items, because she questions the quality of them.
#11

**Games played:**
PC: League of Legends, RuneScape, Counter Strike

**Time spent on games:**
Approximately 25 hours per week

**Money spent on games:**

**Money spent on virtual items:**
He mostly buys weapons and levels.4000-5000 krono in his life.

**Functional:**
The main reason is being competitive. He looks for best price/quality ratio. He thinks information is important and therefore he does research before purchasing a product.

**Social:**
He never tells his friends about his purchases.

**Emotional:**
He feels excited after buying an item. Sometimes he feels the fear of losing items. Sometimes he buys items to get less boring.

**Epistemic:**

**Conditional:**
He thinks these items raise in value over time. He does not use items that are just necessary for one certain activity, because he does not have space in his inventory for that.
Games played:
Online games like Counter Strike, Call of Duty and Grand Theft Auto. Either on PC or consoles.

Time spent on games:
Approximately 8 to 10 hours per week.

Money spent on games:
He bought games like Counter Strike

Money spent on virtual items:
Within Grand Theft Auto he mostly purchased items for less waiting time and for Counter Strike mostly weapons.

Functional:
The functional value is for him the most important one. He is looking for a good price-quality ratio and the main goal with purchasing items is getting better in the game. However, if he needs some item on spot, he will not look too much at the money he has to spend. But overall, he looks for information before he purchases an item in order to maintain the best price-quality ratio.

Social:
Another reason for him to purchase these items is to make friends. Once he buys an item, he will tell his online and offline friends about the purchase and promote them as well to buy it.

Emotional:
He feels great after a purchase, because with this item he gets better in the game. He never felt regrets, because of buying these items. He prefers purchasing virtual items within a game he already paid for, because he is more engaged to that game and want to make the most out of it.

Epistemic:
He would be willing to buy items that open up the game like new levels for example. He thinks this is important and can make the game more interesting again.

Conditional:
He likes conditional items for the reason that they are usually discounted. He does not buy them because he feels like part of a group or that he has spare items. Easter items.
#13

**Games played:**
PC games Maple Story and Tales weaver, Diablo 3. Mobile game Pantalon (Cacao talk – Many games within that messenger in Asia)

**Time spent on games:**
A lot

**Money spent on games:**
She never paid for a game, she just played free to play games.

**Money spent on virtual items:**
Yes, she usually bought clothes and decoration for the weapons.

**Functional:**
She does not buy items to be more competitive. She is not scared for her transaction safety, because she trusts the game in this.

**Social:**
With Cacao comparing scores with friends. She buys clothes usually to express her own personality!!!!! She does not tell friends when she buys items. Friends notice the purchases, but she buys the items mostly for herself.

**Emotional:**
Only positive emotions after a purchase, pleasure.

**Epistemic:**
Makes the game more interesting.

**Conditional:**
#14

**Games played:**
Online PC games RuneScape, League of Legends, World of Warcraft and Counter Strike, Minecraft

**Time spent on games:**
25-30 hours per week

**Money spent on games:**
He paid for World of Warcraft and Counter Strike

**Money spent on virtual items:**
In RuneScape gold, in League of Legends and Counter Strike he bought skins.

**Functional:**
The reason he buys gold in RuneScape is to be more competitive. He always looks at the prices. In RuneScape he buys money to make more money (gambling reasons). But he only buys items if he can afford it. He buys items at RuneScape from guys he can trust and within companies, he trust the companies so he does not see any problem in this. He would probably spend more money on free to play games, because he already paid for paid games and otherwise it gets too expensive.

**Social:**
Because his friends bought items, he also buys items. Within Counter Strike he shows his new items to his friends.

**Emotional:**
He buys skins for personal enjoyment reasons. After all he mostly feels like “Why did I spend so much money on this useless piece of skin?”

**Epistemic:**
Nope.

**Conditional:**
He purchases some skins during holidays, because they look nice. Rare items however, give him more enjoyment in the game.
#15

**Games played:**
Mainly games on consoles like the Xbox, but besides that also some mobile free to play games. He does not spend much time on PC games.

**Time spent on games:**
Approximately 23 hours per week

**Money spent on games:**
He paid for the game Halo on the Xbox

**Money spent on virtual items:**
Within Halo, he purchased packages in which he might find weapons, features, armour or cards to broaden up the game.

**Functional:**
The weapons that are purchases do not make the player better in the game. Therefore, the virtual items do not relate to competitiveness, but the appearance of the character is important though. The packages that are bought include weapons, but this is not his main interest. Due to the fact that he is a student, he did not buy some items because of the high price. Therefore, when he buys a product, the information process is long. He looks up information about the item and wants to know everything about it. He would rather pay for a free-to-play game, because he did not spend initial money on this.

**Social:**
There is no social value involved, because the items purchased are good for his own experience, but does not relate to being part of a group. Though, he might tell friends about his recent purchases.

**Emotional:**
In the beginning, he feels interested and good. After the purchase, he sometimes feels regret, because the purchase was a mistake. Especially because you do not know what you will find in a package.

**Epistemic:**
The main reason he buys packages is to get maps that are important in broadening up the game.
**Conditional:**
He does not care about holiday items, since they have no extra value for him.
#16

Games played:
Online PC games like World of Warcraft, League of Legends and Atlantis (Korean MMORPG).

Time spent on games:
He does not play anymore, but he used to play 20 hours per week (around 2011).

Money spent on games:
He paid 15 euro’s per month to play World of Warcraft

Money spent on virtual items:
Within League of Legends he bought customization items (skins) and for Atlantis he bought a lottery box, which he could win items that make him better at the game.

Functional:
He bought the lottery box, because he wanted to advance his power. Therefore, he does not have to play the game as much to be strong, he can do it via stronger items. The price of an item is very important, because the items do not last forever. He would never spend more than 10 euro’s on an item. He does research, before he buys an item. He does not do impulsive purchases. He would rather purchase these items in free to play games, because there is no reason to complain about the money spent. In games which you have to pay for, it would be too much to pay also for virtual items. Normally he would buy an item to change his appearance, because advanced power feels like cheating.

Social:
Also buys skins to show off to friends. Once he buys items, he tells his friends and shows his cool items. He believes that people will socialize more with him if he looks cool. Items can therefore help him to meet new people. “New items are an ice breaker in the game.” He gets people to play with him, because of these items.

Emotional:
Skin change appearance, special (stand out), for himself, some skins are cool. He is happy and excited after a purchase, but he will also get a period of regret and at the end the feeling is neutral. The regret mostly comes when he buys a lottery box and he does not get the item he wants. The game gets boring after you got all the items and reached the top. He plays the game mostly for fun and therefore also purchases the items for this cause.
**Epistemic:**

The purchase of new items is giving him extra motivation to play and comes with something new. There should always be some items to acquire for advanced game play, it is boring when you have everything and are on top of the world.

**Conditional:**

It is exciting to participate into these items and the items are rare. He thinks these items are really cool and it makes him want to play the game more. Because of these items, he plays the game more than he was supposed to.
#17

**Games played:**
Online PC game RuneScape, Colin McCrae. He also played different games on PlayStation like Grand Theft Auto

**Time spent on games:**
10 Hours per week approximately

**Money spent on games:**
Yes, on the console games

**Money spent on virtual items:**
He paid for membership and for more and fast virtual currency.

**Functional:**
He buys these items for advantage, he wants to be better and faster. With buying in-game currency he does not have the waiting time. With the in-game currency he bought in-game items that make the character stronger. This is important for him when it comes to gaming, being stronger and competitive. He looks at the price of an item, before he buys it. You can get scammed really easily, so safety is very important for him. He would rather spend money on items, because the game is free to play and therefore he feels he has money left to buy items. He looks for information before he purchases (to prevent scam).

**Social:**
There is a difference between buying the items and putting effort for the items. It is more or less a taboo telling friends that you did in-game virtual purchases.

**Emotional:**
Obviously good. You just feel scared that you get scammed during the purchase. Because of buying virtual items, he does not get the full experience. Makes the game play maybe too easy.

**Epistemic:**
If you have membership, the map gets bigger. Free to play version gets pointless after you paid for membership. So it comes with new experiences. There will also be new items and new quests that come along with the membership.
Conditional:
Conditional items get discounted within this game during holidays and therefore they are interesting. He feels negative about items that lose its value after some time.
#18

**Games played:**
GTA, Skyrim, World of Warcraft, RuneScape, Tera.
He has not played mobile games, he mostly games on PC and console.

**Time spent on games:**
About 20h/week.

**Money spent on games:**
Yes, he has purchased Doom rider, GTA5, Rocket League – these are PC games.

**Money spent on virtual items:** He has bought memberships, upgrades and cosmetical items in World of Warcraft, Tera and RuneScape.

**Biggest reason why acquired items:** He wants to be the best in the game, he like to have advantage over other players or to get some certain skill.

**Functional:**
He uses different items in order to save time, to get competitive advantage and he enjoys to get an adrenaline rush, when he accomplishes new level. Price has important role, but he does not buy, if it costs more than 20 EUR. He does some research also with the item he really wants to buy.

**Social:**
He does not feel that social part influences him. He does merely for his own fun, adrenaline rush and competitiveness.

**Emotional:**
He feels good, when he buys items and beats other players with these items. When acquiring cosmetical items he just likes them, because they look good and make him satisfied.

**Epistemic:**
He likes to acquire items that help him to progress and move to next thing. He likes achievement that comes along with the items.

**Conditional:**
He is not interested into conditional holiday items, because they do not give any advantage over other players.
He would choose Free-to-play game, and then make virtual purchases there if needed.
#19

**Games played:**
Online PC games Counter Strike, League of Legends, Dota 2
Used to play Hearthstone on mobile device.

**Time spent on games:**
2 Hours per week nowadays, but before 20 hours per week.

**Money spent on games:**
Yes, Counter Strike

**Money spent on virtual items:**
Yes, cosmetic items to his favourite champion or favourite heroes. Champions at League of Legends.

**Functional:**
No, never bought item for advancement. Less waiting time by buying champions (no need to buy them with virtual cash). He buys stuff on sale. Also had a moment where he did not purchase because it was too expensive. He does impulse purchase. He rather spends money on a free to play game, because he feels that a paid game should be free after one purchases the game itself.

**Social:**
Just for himself, not related to any other people. He does not brag about these items. No self-expression. Just want the character to look cool.

**Emotional:**
Cosmetic items look cool. The emotion is mostly positive, but he also regretted one purchase. This regret came with the costs of 179 krono. This was an impulse purchase and he did not think straight. He prefers rare items that almost no one has, to feel special.

**Epistemic:**
At RuneScape he had a membership that made the map bigger. And he bought maps at HALO and Call of Duty. This is important for him. It makes more to play around with.

**Conditional:**
Nice for the people that can buy it. He does not buy them, because he does not want to play Christmas skin throughout the rest of the year.
Games played:
League of Legends, World of Warcraft, Candy Crush. She has played on PC most games, she has not used console games.

Time spent on games:
2-3h/week

Money spent on games:
Yes she has acquired the games.

Money spent on virtual items:
She has bought some accessory items.

Functional:
For her in the game, it is important that she wants to beat the friends. Price is important as well. About the purchases, it is hard to say if they are spontaneous or she does research.

Social:
Social aspect for her is important. She tells to her friend when she has acquired some new items. Skins she has bought in order to stand out from the game. She likes to feel special.

Emotional:
She feels emotionally good, when the item helps her to win. If the item does not serve the purpose she expected she feels regret. She also feels regret, when she realizes that actually she did not need the item, that she could have passed the mission without that item also.

Epistemic:
She thinks that virtual items give some degree of adventure to the game, but not too much.

Conditional:
She is not familiar with these types of items
#21

Games played:
Clash of Clans and FIFA, He has played Clash of clans on mobile and FIFA on the PC.

Time spent on games:
He spends about 12-20h/week on gaming.

Money spent on games:
Not mentioned.

Money spent on virtual items:
Yes

Functional:
He wants to win. He admits that games can be very addictive. He tries to be the best in the game. When it comes to price, he does not mind it so much, because the top 100 players spend a lot of money for example in the Clash of Clans and he wants to be one of the best also. He does not think when he makes a purchase. With safety and trust issue, he just trust the company, he sees that company has caused no problems to anyone and he trust the safety and transaction.

Social:
He tells to his friends, when he acquired something. He admits there is a degree of showing off. He can show in the game that, he is more professional or advantaged.

Emotional:
He feels totally good and no never regrets about the buying.

Epistemic:
He admits, the some items make the game more interesting and give new adventure to the game.

Conditional:
He has not encountered that.
He prefers F2P games, because if he really likes the game, he has possibility to buy some extra items. Games where he has to pay in order to game, he would not buy them so willingly. In these category he prefers game, where he has to pay for the game only once. With monthly payments he does not like.
#22

**Games played:**
World of Warcraft on PC. Forza, Taken and Brutal Technique on Xbox.

**Time spent on games:**
Few days in a week, about 15-20 H/week

**Money spent on games:**
Have bought the different games and payed for fees.

**Money spent on virtual items:**
She has, but does not remember exactly what items.

**Functional:**
For her it is important to be better and stronger in the game.
She buys the items if they are not too expensive, she does planned purchases and does research before buying items.

**Social:**
She talks to friend when she buys some items.

**Emotional:**
She feels good about the purchases, she has never had any regret.

**Epistemic:**
She buys virtual items, because with them she might discover the game world more.

**Conditional:**
She has not noticed the items like that and no interest into those.
#23

**Games played:**
Habbo Hotel, RuneScape, World of Warcraft, Counter Strike, StarCraft 2, and League of Legends – he has played mostly only PC.

**Time spent on games:**
Time now about 20h/week, few years ago it was about ca 60h/week.

**Money spent on games:**
Yes he has spent a lot.

**Money spent on virtual items:**
Yes- about 5000 SEK total.

**Main reason:** For him it is important how the virtual items look like, no functional value, mainly the appearance and aesthetics. He like to show off to other people. Within Habbo Hotel and RuneScape he has bought virtual currency and furniture for be more competitive.

**Functional:**
To be more competitive in RuneScape and Habbo Hotel he has done purchases. Main reason is that he would have the faster progress. Price does not matter. If item costs 10 EUR he would buy it anyways, it is not so much money, overall he has spent about 5000 SEK. Security issue is important. He has been hacked and got scammed, but usually he trust and does some research about items and so.

In Hearthstone he has acquired some special cards to get more diversity and to be more competitive. With functional items he does some research, with cool items, he does not, very spontaneous.

**Social:**
Yes, he tells to people, and he admits he buys skins and other items in order to get quicker in the game play, it is because of social status. The social presence is a big factor to him. Good appearance and items show the dedication to the game, others can see it, and he can stand out. For him appearance of avatar is important, though it has no functional value.

**Emotional:**
Acquiring new items gives satisfaction, if friends say that some appurtenance is good, it makes him feel good.
He once got banned from the game and he lost all his items, it felt like he was being robbed. He went through a mental breakdown. Sometimes he feels regret, that he bought something spontaneously and then he feels a little bit regret.

**Epistemic:**

He likes items that he could get a bigger world, more diversity and play in a broader world,

In Hearthstone he has acquired some special cards to get more diversity

**Conditional:**

He knows these kinds of items. He has bought some skins, but he has never used. He feels that if you acquire them they are rare and other player do not have them, it gives social value.

He prefers P2P, because you can pay for the skins mostly like in the League of Legends and there is no pay to win.

He has played F2P, Asian ones, where is the idea of pay-to-win, he thinks it is cheating and some people have advantage over others.
#24

Games played:
PC Online RuneScape. No mobile games, but sometimes at Nintendo 64

Time spent on games:
14 Hours per week

Money spent on games:
World of Warcraft.

Money spent on virtual items:
Yes, RuneScape. Fashion items (character cooler and different), he likes to change character time by time. But mostly items to make him better, stronger and reduce waiting time. Which helps to process faster and better within the game.

Functional:
Main purpose is better and stronger character. Yes, he faced a moment where item was too expensive (mostly rare items). He bought an item, because it was in discount, even though he did not plan to buy it additionally. Normal buying process is based on a lot of information search prior to the purchase, but sometimes he does an impulse purchase. He is more likely to purchase virtual items within free-to-play games, because it feels weird spending money on a game you already paid for.

Social:
Yes, when you join a clan, you should have to buy some items in order to become part of the group. Does not talk to offline friends about purchases. Self-expression: Bought new jacket in real world and also character new jacket in virtual world. Feels like the character is himself in a different world and as well in the real world he wants to look like the character.

Emotional:
Exciting. He feels better, character feels more valuable. He regretted some impulse purchases where the outcome of the purchase was not as good as expected. Does not fulfil his expectations.

Epistemic:
Yes, this is one of the most important parts. The items make the game more interesting and opens new worlds. It is important that the game varies and therefore he is willing to pay for these kind of items. If he is engaged with a game and played it already for a long
time, he would buy these kind of items to enhance the game and make it interesting again.

**Conditional:**
This relates to social value in a sense that he would buy Christmas outfits once the rest of the group also has Christmas items in order to become part of the group. On the other hand, it makes the item more valuable, because you cannot buy it every day. This relates to the impulse purchase. Also relates to self-expression, because it feels good to celebrate Christmas in the real world as well as in the virtual world. This makes the game more realistic.
Games played:
League of Legends, Halo 1, 2, 3, 4; Battlefield 3, 4; Tibia, Skyrim
He has played on console as well, but mostly he games on PC.

Time spent on games:
2-3h per day, about 10h/ week.

Money spent on games:
Yes, he has purchased for example Halo and Battlefield, overall at least 20 000 SEK

Money spent on virtual items:
Yes he has bought. In Tibia, League of Legends and Halo. In League of Legends only skins. In Halo he has bought maps. In Tibia other spells, maps, and premium user for being more competitive. Total cost about 600 SEK
Main reason is to have fun and get wide range of experience.

Functional:
In Tibia he has bought items for he could get access to other spells and stuff. He does spontaneous purchases. He does to some extent research, but mostly all purchases are spontaneous. The reason he has bought things is to get better faster and quicker. Also to get to the new levels.

Social:
He feels, there is no big element of social thing, but in Halo he has bought maps also which his friend have bought, that they could play together. In League of Legends he says that he has bought cool skins to stand out and friends can give comments on different skins he has.

Emotional:
Biggest reason is for fun, acquiring new skins is funny, they look funny for example some swimsuit skins. With playing also, there is only competitive side in the game of Tibia, other games it only for fun. He has good emotions when playing and getting new experiences with the help of new items.

Epistemic:
In Tibia he has bought items that maps would get bigger, it gives more excitement and definitely new skins and appearance of avatar makes gameplay more interesting again.
Conditional:

With other special limited skins, he has not bought, if they are cheap and he really likes them, he would get those. But so far he has not bought any. In the Tibia he has bought keys from other players, in order to pass some quest or mission. He has valued they key very much, key was important only for one quest and he has paid real money to get it. Usually he does not like purchase and he plays and buys items only for adventure and fun.

He would choose F2P game model, because then you will know what you get from the game. Generally he does not like the idea or pay-to-win, he likes League of Legends because of that, there skins have no effect on real skills or strategy.
#26

**Games played:**
Clash of Clans on the mobile.

**Time spent on games:**
3-4h/week

**Money spent on games:**
Yes, has bought some console games like GTA5

**Money spent on virtual items:**
He has bought gems, in the Clash of Clans, the about should be less than 500 USD

**Main reason** is that the game is otherwise too slow, he wants to keep engaged and with upgrades game is faster, then game is not so boring and it is more active.

**Functional:**
For him being the best and beating other people is most important factor.

**Social:**
He has many friends, who play this game also. This is a friendly competition. When he uses gems to get advantage it is kind of bragging also, but since this is kind a group play also, it is important to help your clan and belong to the group. In order to belong to the group he buys items.

**Emotional:**
He feels good when he accomplishes new levels and new thing thanks to virtual items. It is kind of adrenaline rush also. When he gets attacked or something happens, that is not fun.

**Epistemic:**
He likes that when he’s game gets quicker he has access to the new weapons, new updates and new army.

**Conditional:**
He does not remember or does not understand the question in his experience.
He prefers F2P games on the mobile, because they do not involve commitment in the be-ginning, but, there is possibility to buy virtual items.
With console games or other games, he prefers P2P, so it depends on the game and game type. He plays mobile games for killing time, for entertainment in some daily situation when he needs to wait.
Games played:
World of Warcraft, DOTA, Counter Strike, Age of Empires 2, RuneScape,
Mostly he has played on PC, few mobile games also, but they are just for entertainment, he has no console.

Time spent on games:
3-4h/day, so it makes about 21-28h/week.

Money spent on games:
Yes he has bought. He has bought a lot of games from Steam, he does not know the amount of games.

Money spent on virtual items:
He has bought skins, cosmetical items and clothes in the games like Counter Strike, Team fortress 2 and DOTA.
The biggest reason for him is the self-expression through the avatar. It creates good emotions and he feels unique also.

Functional:
He has no experience with these items like weapons and so, because he has bought only cosmetical items and skins for the avatar. But he would buy, if the price would be 1 USD and the benefits of item is high, otherwise not. Price is important to him, but if he likes the appearance, he will buy it. It depends if the item is perishable or not. He does some re-search about items and skins before about different prices

Social:
In some games there is roleplaying aspect, but he does not feel that it affects him. For him the avatar’s customization is most important. Sometimes to impress others and he likes to collect the set of some accessories.

Emotional:
He feels good, when he has new items. He has felt the fear of losing item also, when he has had item for a long time or item is special, then he feels really bad it he would lose it.

Epistemic:
He does not feel, that items he has acquired give anything to the epistemic value, there is not more adventure for him.
**Conditional:**

He is familiar with cosmetic items, the holiday items. They are rarer than other items. He has bought some of those and he has worn them only during the holiday, after that event, he does not use those. He collects these mostly because to show off. And he feels good when the collection is complete.

He prefers F2P games, where he can buy items, if needed. He does not like games with monthly fee. He thinks it is too much, but everything highly depends on the game type and game itself.
Games played:
Monster training, it is a mobile game.

Time spent on games:
14-20h/week

Money spent on games:
Yes she has purchased different games. Total amount about 300-400 SEK.

Money spent on virtual items:
She has bought different virtual items such as decorations, hair, weapons etc. cost approx. 100-250 SEK.

The biggest reason of buying virtual items is that in the beginning of game she has basic items, and avatar is very ugly. When she get new items, the avatar get better by appearance that is fun and satisfies her and her avatar is better in fighting to defeat others -competitive.

Functional:
If her avatar is weak, then that is boring. She wants to win, then game is interesting. She does not like to lose, winning is important. Price to her it is the most important factor. She does a lot of research, she looks in web and she uses the forum, to ask other players, what she should buy. Also in the game chat she talk with other about her plans of purchase.

Social:
She likes to compete with others in the game, she tells to others about her purchases and she likes to belong to the group with the cosmetical items. Mainly she likes to look good, because the avatar is represents her in the game, she want to look good among others.

Emotional:
She feels proud, when she acquires new items. Items keep her focus and she want to play more and more. Game is not boring, when she has new items. Different appearance gives different experience to her. She never regrets of buying the items. It she has lost the items, then she is angry, sad and disappointed. Usually for a while, she acquires new items.
Epistemic:
The basic game without items is boring, she likes to acquire items, to make game better. It is boring if she loses. She is focused and likes to play game more.

Conditional:
She think that holiday items are cute and pretty, but she has not bought because of the price. She cannot recall some special items that are needed in some special situation. She prefers P2P games, because then she is more committed to play the game.
**Games played:**
Counter Strike, Age of Empires, World of Warcraft, RuneScape, League of Legends, he plays mostly on PC. On the mobile he plays chess and pool game also.

**Time spent on games:**
4-5h/day, it makes 32-35h/week

**Money spent on games:**
Yes, he has bought, non-online games about 150 EUR, online games at least 400 EUR.
Examples: RuneScape, World of Warcraft, Counter Strike

**Money spent on virtual items:**
He has bought currency and rare items mostly in the games such as RuneScape and in League of Legends skins.

The biggest reason to buying is that he does not like waiting for them to get some item, it is a time saving to buy something. Second reason is that emotionally he feels good and positive after purchase, he sees the item and it is aesthetically pleasing.

**Functional:**
He has bought money only. Importance depends from the type of the game. But of course he acquires gold to be better. Of course he wants to win.
Price is very important for him, he compares prices, whether buy some skin or buy Coca Cola for example. He does research also, research depends on real-life economic situation. It situation is good, he does purchases more easily and does not consider so much, if he can afford it. The safety is important to him, he trust the firms and transactions, if buying on the black-market, he check the feedback from other players.

**Social:**
He accept that with different items, he get the social status in the game. He told, that you are someone even if you are in the virtual world. He has bragged to friend about purchases and acquired some items to belong to the group. Self-Presentation through avatar is very important to him.

**Emotional:**
Acquiring new items is very positive, and if he has lost items, he had felt angry and sad, he has had any regrets about purchasing items.
Epistemic:
He had done purchases in order to keep game more interesting, he can experience new content of the game and game comes more open with new quests, levels and places.

Conditional:
He is not oriented to these items, but in the past he had done few purchases of those. He prefers F2P games, because you see what you get, he can try the game and then if he likes it, he can do virtual purchases.
#30

**Games played:**
RuneScape, World of Warcraft, Skyrim, Civilisation 5, Far Cry 3, Dwarf Fortress, Rymdkapsel, and Sorcery. Mostly played on PC, some on mobile also such as Rymdkapsel, Sorcery.

**Time spent on games:**
About 14h/week

**Money spent on games:**
Yes, he has bought from Steam environment many games such as Civilization 5, BioShock, Assassins Creed, and Far Cry 3. Total amount at least 1000 EUR.

**Money spent on virtual items:**
Yes, he has bought membership upgrades in RuneScape and some extra items and currencies in mobile games, Total cost about 200€.

**The biggest reason** for buying is curiosity and getting new experience. He wants to experience extra content and, extra skills, he wants to be part of more interesting gameplay. In some occasions also he want to save the time, then he buys some items.

**Functional:**
Functionality sometimes is important and sometimes note, it depends on the game. But of course everyone wants to win, he would like to get best sword and best shield etc. He is picky about the price and it is important to him. He does some research also before buying an item.

**Social:**
It is important to him, that he has at least few real life friends, with whom he can discuss about the game. Having a friend is very important and necessary also. He admits, that having flashy items, it is all the time about showing off a bit. He want to get cooler armour. For him it is important that avatar is cool to him and representable to others. That his avatar expresses the dedication and shows that he is a badass.

**Emotional:**
Different items trigger different emotions. More valuable he items, trigger more positive emotions He has lost items and he has felt very frustrated about it.
**Epistemic:**
He has bought items because of experience new content and because of curiosity. But mostly items do not make game super more interesting, just a little bit.

**Conditional:**
Yes, he has encounter with these items, but he has not purchased, because they are cosmetical items and have no functional value. If it would be some special functional items for the quest, it depends about the size and importance of the quest. But rather, he would not buy, if item has value only that situation.

He would prefer F2P game, because he get free content and he can get addicted to the game and them he has choice to purchase items. But he does not like the idea of Pay-to-win. He thinks it is unfair.

If game is really good, he would maybe consider P2P game also.
Games played:
RuneScape, World of Warcraft, League of Legends, Counter Strike.
Mostly all games are on PC, mobile games he does not recall. On PS and Xbox he has played Call of duty and Halo 2.

Time spent on games:
He spends about 70h/week on games.

Money spent on games:
Yes, for World of Warcraft and RuneScape memberships, 40 000- 50 000 SEK.

Money spent on virtual items:
He has bought mostly cosmetical items that have no competitive value. In the games like League of Legends and Blade and Soul. Total value about 10 000 SEK.
The biggest reason is that he likes to have a special look, different than others. He likes nice design and aesthetically pleasing.

Functional:
He has not acquired any items that have function value, for example sword, shields etc., because he does not like the idea of pay to win. He thinks that it is unfair.
Price is important, but if he really likes the item, he will get it, even if it is a more expensive item. He uses e-Card to do transactions, so he believes transactions are safe and he has had no problems. He does some research all the time, he compares different items and chooses one then.

Social:
He does not really feel that there is social influence. Of course he feels happy, when someone comment or sees his new item or skin. He likes to stand out from the crown.

Emotional:
Emotionally he feels good he has never lost any item, but if his account would be banned, and he loses all items, he would be very sad.

Epistemic:
He agrees, that every item give some adventure, but to his experience, the effect is very small when it comes to his experience, and he mostly does not do.
**Conditional:**

He has acquired items and he like to have them, because limited editions of items. They are special and it is fun to get it. He can stand out with them.

He prefers P2P games, where he can buy virtual items also, because P2P games usually offer better content and more benefits and these games are better done.
### Appendix C - Characteristics of the participants

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Age</th>
<th>Gender</th>
<th>Games Played</th>
<th>Time of interview</th>
<th>Date of the interview</th>
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<tbody>
<tr>
<td>PA#1</td>
<td>28</td>
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<td>Need for Speed, Age of Empires, Warcraft 3, StarCraft 2, World of Warcraft, DOTA, Heroes of the New Earth, Heroes of the Storm and Hearthstone</td>
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<td>PA#2</td>
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<td>PA#4</td>
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