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**RESISTANCE AGAINST MICROTRANSACTIONS IN  
PC GAMES**



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# TIIVISTELMÄ

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Tietojärjestelmien käyttöönotossa yksi isoimmista haasteista on vastustus järjestelmän käyttöönottoa kohtaan. Vastustus on yleensä määritelty hyväksymisen vastakohtana ilman tarkempaa tutkimista siitä mitä vastustus on ja miten se esiintyy. Tämän pro gradu -tutkimuksen tarkoituksena on soveltaa olemassa olevia vastustamiseen liittyviä teorioita PC peleissä esiintyvien mikromaksujen vastustamisen tutkimiseen. Mikromaksut ovat pienellä rahallisella maksulla ostettavia digitaalisia hyödykkeitä. Tämän ilmiön tutkiminen vaatii vastustamisen tutkimista kuluttajien keskuudessa, jota ei ole juurikaan tutkittu tietojärjestelmätieteiden tutkimuksissa.

Pro gradu -tutkimuksessa hyödynnettiin laadullisia tutkimusmenetelmiä. Tarvittava data hankittiin puolistrukturoiduilla haastatteluilla. Keskeiset löydökset viittaavat siihen, että vastustukseen liittyvät teoriat auttavat ymmärtämään vastustusta myös kuluttajakontekstissa, mutta jotta ne sopisivat täysin, osa käsitteistä vaati muutoksia.

Muutettavat käsitteet liittyivät järjestelmän tehokkuuteen ja järjestelmää käyttävään organisaatioon. Järjestelmän tehokkuuden vaikutus pitäisi vastata käyttäjän saamaa hedonistista arvoa. Organisaatioihin liittyvät käsitteet taas kuluttajakontekstissa vastaa yhteisöjä ja yksilöitä, jotka käyttävät samaa järjestelmää. Tutkielmassa tunnistettiin myös joitain syitä mikromaksujen hyväksymiselle. Joskus mikromaksujen ostaminen voi olla tapa tukea pelin kehittäjiä. Mikromaksujen vastustus johtui riittämättömästä organisaation tuesta, mikromaksuista, joiden avulla pystyi saamaan etuja verrattuna muihin pelaajiin tai siitä ettei pelaaja kokenut hyötyvänsä tarpeeksi mikromaksuista.

Asiasanat: Mikromaksut, Vastustus, Motivaatio pelaamiseen

## ABSTRACT

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User resistance is one of the key issues when implementing new information system. The resistance is usually identified to be opposite of acceptance without further investigating what the resistance is and how it functions. The goal of this thesis is to apply some of the existing theories of user resistance to context of resistance towards microtransactions in PC games. Microtransactions are small payments that provide user some form of digital value in exchange. This requires analyzing the phenomena in consumer context which has been hardly researched within information system sciences.

This thesis will use qualitative research methods and the data will be acquired through semi-structured interviews. The main findings are that the user resistance theories help in understanding the resistance in consumer context but in order to fully apply some of the constructs require modifications.

The required modifications were the efficiency of the system and concept of organization. The efficiency of the system needs to reflect the gained hedonistic value. The concept of organization in consumer context applies to communities and individuals using the same system. Some reasons for acceptance of microtransactions were also identified and surprisingly sometimes buying the microtransactions can be a way of supporting and showing appreciation to the developers of the game. Reasons for resistance refer to lacking organizational support, pay to win microtransactions or not receiving enough benefits from microtransactions.

Keywords: Microtransaction, User resistance, Motivation to play

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## 1 INTRODUCTION

Microtransactions are relatively cheap one-time purchases within games. Usually these are a part of the game as a service monetization model which has been becoming popular. Prices of microtransactions can be around 2 euros to 15 euros with some exceptions. Often these are virtual items for players' in game character, virtual currency that can be used only within game or boosts that enhance the players progression for limited time. Microtransactions are becoming more popular within game industry as they have been proven to be significant source of income when done properly (Superdata Research, 2017). Microtransactions provide income from user who already has the product and in doing so enable games as service model where product gets content upgrades at steady pace. This in turn is good for the longevity of the product as users are more engaged and play the same game for longer periods.

As companies try out different ways to implement microtransactions some implementations have received resistance from their communities. One of such case was Star Wars: Battlefront II in year 2018. Multiplayer portion of the game included loot boxes and players could unlock new characters and items through earning them or buying them with money. Loot boxes are microtransactions in form of digital box which includes predefined number of items, but the buyer does not know what the items are before buying and opening the box. Implementation of such loot boxes is not uncommon as they are used in numerous popular games such as Overwatch and League of Legends. In Star Wars: Battlefront II case the whole progression system was gated behind loot boxes and it was perceived to be harmful as earning those boxes through playing required considerable amount of time or money. Because of the community backlash the loot boxes were eventually removed from the game before its official launch. Loot boxes have also garnered some attention from governments regarding to question if they fall under gambling category or not. Within Belgium loot boxes were defined to be gambling and thus falling under gambling related legislation (Gerken, 2018). This resulted in situation in which they were removed from games such as Overwatch within that region.

There are also situations where single player progression has been made easier through microtransactions in games such as *Lord of the Rings: Shadow of the Mordor* and *Assassins Creed: Odyssey*. These microtransactions can for example boost the experience and money gain within the game. Community backlash in these cases did not result in such drastic actions as in *Star Wars II: Battlefront* yet still some perceived that the progression within the game felt more designed for the case where the player had purchased microtransactions (Stephen Totilo, 2018). This results in a situation where buying the microtransaction that helps players progression can make the game feel more fun. The studio developing the game, Ubisoft, stated that these microtransactions were not considered when balancing the difficulty or economy of the game as some players perceived that the game had been balanced in a way that players became frustrated and more likely to buy microtransactions (Stephen Totilo, 2018).

The goal of this research is to explain the reasons behind user resistance against the microtransactions within pc games. The study will not try to answer whether microtransactions are good or not. Research will be done by investigating the current user resistance literature and finding out the most relevant theories related to the case. These theories will be then used to form interview script. Empirical research will be done through these interviews and their analyzation.

In addition to finding and defining the relevant user resistance theories the literature review will explore definition of game and introduce existing theories that may explain user reactions such as theories related to fairness theory and psychological contract breach. Precise theory that explains user resistance towards microtransactions does not exist. Thus, analysis of the interviews will be based on existing theories related to user resistance, player motivation and user reaction.

Often within information system sciences the user resistance is researched within organization context where information system has been implemented or is being implemented. It has also been noted that acceptance literature is more common than literature dealing with resistance (Tim Klaus & Ellis Blanton, 2009). Within acceptance literature resistance is often just referred as opposition of acceptance and it is not clearly defined (Lapointe & Rivard, 2005). Even though resistance can have valid reasons to go from passive resistance to active (Keen, 1981) this research will not try to answer whether resistance towards microtransactions is justified or not. The focus is on capturing and understanding the phenomena while providing theoretical contribution in expanding user resistance theories to consumer context.

In order to better understand the reason behind the resistance the research will not focus on a singular case. The goal will be to record what kind of experiences participants have had with microtransactions and what triggered their resistance in addition to what kind of resistance reaction they had. Resistance will be investigated through theories that explain how status quo bias and different triggers may affect resistance along with framework that defines how user resistance reactions can be classified. Yet it is worth noting that those theories relate only to organizational context so the frameworks are not likely to in-



clude all of the relevant constructs. Just as Unified Theory of Acceptance (UTAUT) was once shifted to consumer perspective in UTAUT2 framework and the hedonistic motivation, price value and habit to use the system were introduced to existing theory (Venkatesh, Thong & Xu, 2012). It may be that something similar will emerge within this research as resistance theories are applied to consumer context. Afterall, it could be stated that the motivation to use different information systems within working environment is more likely to be weighted by the fact if the new system is effective or not. Whereas information systems that aim to entertain their users, such as games, can include wide array of motivations to use them.

Motivations to play games can range from making new friends, to dominating other players all the way to avoiding real-life problems (Nick Yee, 2006). It is yet unclear if these motivations affect the user resistance but they are taken into account. Resistance can manifest in wide array of different forms all the way from sabotage to just ignoring the system. Theory related to classifying these reactions will be introduced and used in categorizing answers. In the end the research will provide a new body of work to user resistance literature which is conducted in a case that has few if any existing studies within information system research. The goal is to get answers why this happens while also extending the existing user resistance theory to consumer context.

Research Question: Why user resistance behaviors occur against micro-transactions in PC games?

## 2 USER RESISTANCE

This chapter focuses on explaining what user resistance is through existing research. It starts by providing definition of user resistance and continues to specification of the underlying resistance constructs which were identified in research by Kim and Kankanhalli (2009). This provides understanding of why resistance occurs on individual level at specified point in time. The model does not answer how users resist system, how resistance occurs in group level or how it may change as time passes. These questions will be answered in sub-chapters 4.3 and 4.4. In 4.3 the framework by Bovey and Hede (2001) is introduced in order to explain how user may resist the system. Framework also provides examples of acceptance behaviors but they are ignored in this study as researching acceptance is defined to be out of scope. Final user resistance sub-chapter 4.4 focuses on examining the phenomena on group level and explaining how it may change as time passes. This is mainly explained through framework by Lapointe and Rivard (2005).

### 2.1 Definition of user resistance

Within the article *A Multilevel Model of Resistance to Information Technology* (Lapointe and Rivard, 2005) different definitions of resistance are analyzed through semantic analysis in order to define the underlying constructs. Their own definition of the phenomena is not provided. Still the identified constructs and their behavior is important in understanding how phenomena changes as time passes since there are only few papers that have researched the phenomena in longitudinal perspective.

As the research will be conducted on relatively new games as a service model's (Super Data Research, 2017) monetization model user resistance theory that incorporates status quo bias can provide useful. Hence the known user resistance constructs will be defined through research by Kim and Kankanhalli (2009). The definition they provided is broad enough to fit the topic of this pa-

per. The used definition of user resistance is opposition of a user to change associated with a new IS implementation. Within the context of this paper IS implementation is identified as new pc game that includes microtransactions or existing pc game that is implementing microtransaction system.

## 2.2 Constructs within user resistance

In user resistance literature the study by Kim & Kankanhalli (2009) can be identified as influential. It incorporated status quo bias perspective (Samuelson & Zackhauser 1988) to equity implementation model and constructs from acceptance literature (Figure 1). As of 19.11.2018 the study has been referred 761 times. As the study is widely accepted and used the constructs from it will be used as basis for identifying user resistance. Following section will cover what the constructs are and how they were defined, while introducing some critique against the model. Constructs are at first presented as they were in original theory. Later under the topic “Resistance through product review” some constructs will be theorized further and examined how those could fit the resistance against microtransactions.

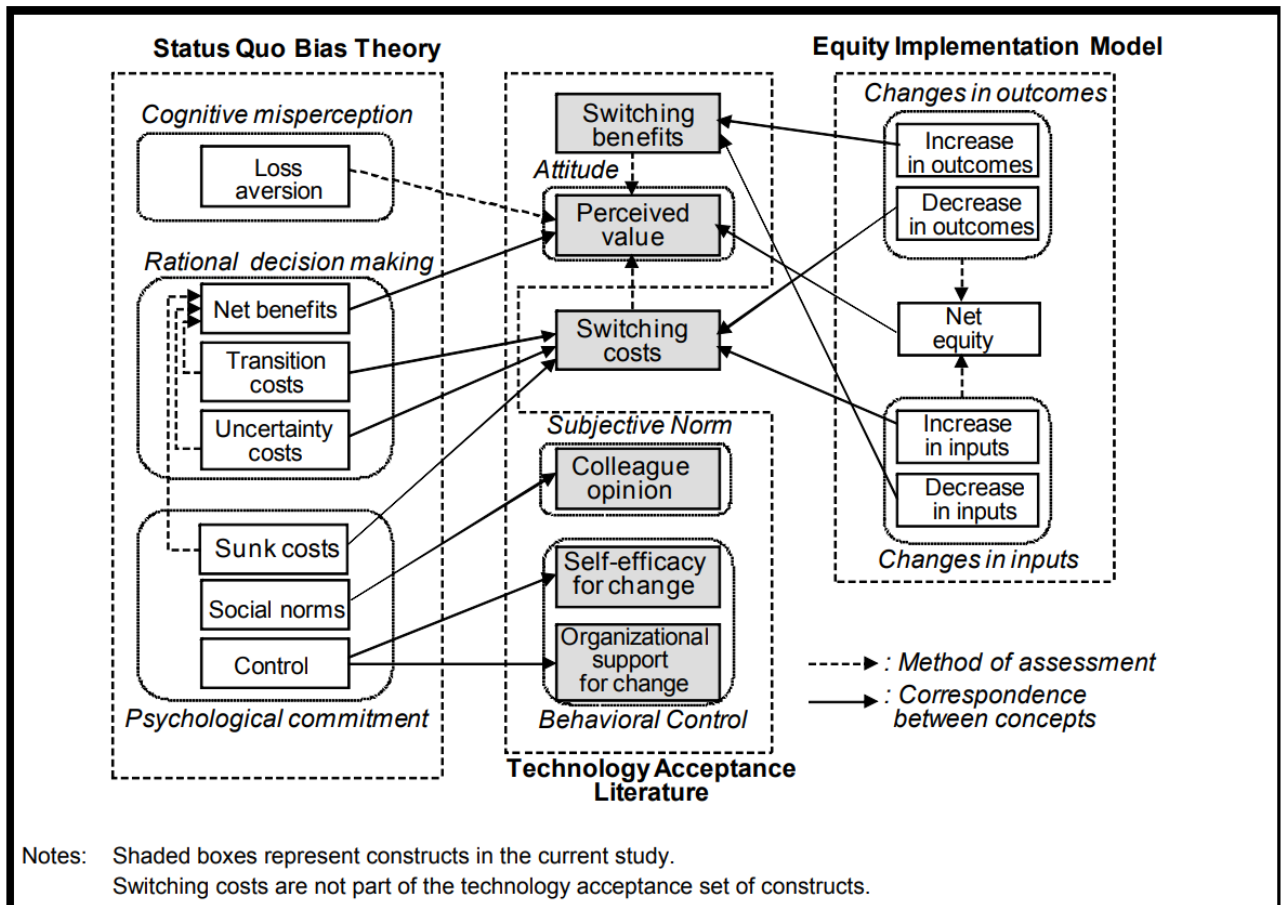


Figure 1. Integrative Framework (Kim and Kankanhalli, 2009)

Switching benefits “correspond to increase in outcomes (e.g., improved quality of work) and decrease in inputs (e.g., performing tasks more quickly) from EIM.” (Kim & Kankanhalli, 2009, p.571). EIM refers to Equity Implementation Model as seen in Figure 1. Basically, this answers to question if the new system performs better and will it require lesser inputs to do the same thing as before.

Perceived value corresponds to net benefits from Status Quo Bias Theory (SQBT). Loss aversion from SQBT is used as a method of assessment. “User assesses relative costs and benefits of change before making switch to a new alternative” (Kim & Kankanhalli, 2009, p.569) Loss aversion on other hand is cognitive misperception which explains that losses are perceived larger than gains while assessing value (Kahneman and Tversky 1979).

Switching costs corresponds to transition costs, uncertainty costs and sunk costs from SQBT and decrease in outcomes and increase in inputs from EIM. Switching costs is new construct that has not been used earlier in acceptance literature (Kim & Kankanhalli, 2009).

Colleague opinion corresponds to social norms from SQBT. In Kim & Kankanhalli’s (2009) paper social norms are defined as “norms prevailing in the work environment about the change”. Colleague’s opinion “may influence people to accept or resist a system”. (Kim & Kankanhalli, 2009, p.569)

Self-efficacy for change consists of control from SQBT. Control is defined through Samuelson and Zeckhauser’s (1988) research as individuals desires to direct or determine their own situation. Self-efficacy for change is defined with the help of Bandura (1995) as “an individual’s confidence in his or her own ability to adapt to the new situation” (Kim & Kankanhalli, 2009, p.573)

Organizational support for change corresponds to same control construct as self-efficacy for change. Difference is that self-efficacy for change is considered as internal factor that can influence the feelings of control and organizational support is external. Provided example of organizational support is training and resources that are allocated towards making usage of new IS easier (Kim & Kankanhalli, 2009, p.573).

Many user resistance research articles have cited Kim & Kankanhalli’s research but did not use Status Quo Bias Perspective as theoretical foundation. The core of SQBT which is bias in decision-making was ignored and cost-benefit analysis had become the focus. (Kyootai Lee & Kailash Joshi, 2017) Some aspects of SQBT such as anchoring effect were not found in any studies. Anchoring effect explains that “status quo choice acts as a psychological anchor” (Samuelson & Zeckhauser, 1988, p.41). which means “the stronger the individual’s previous commitment to the status quo, the stronger the anchoring effect” (Samuelson & Zeckhauser, p.41).

The reason may be because in Kim and Kankanhalli’s (2009) framework control was corresponded directly to self-efficacy for change and organizational support for change which does not fully cover the control as it was explained in SQBT (Lee & Yoshi, 2017). In original SQBT control is defined as “illusion of control” which explains if the user feels that he or she is in control of the situa-

tion (Samuelson & Zackhauser, 1988, p. 40). Self-efficacy for change is defined as an individual's confidence in his or her own ability to adapt to the new situation (Bandura 1995) which can enhance feelings of control (Kim & Kankanhalli, 2009). As an example of the differences Kyootai and Lee (2017, p.747) illustrate that if managers are given freedom of choosing their mobile phones and carriers, they have control over their choices, but self-efficacy would dictate what specific features (e.g. calendar or video apps) they use. The model in itself is useful in researching user resistance, yet it is important to remember that control does not always correspond to self-efficacy and how anchoring effects affect user resistance has not been researched.

### 2.3 Behavioral intentions towards change

Resistance can occur in several different forms. Framework through which these can be identified is proposed by Bovey and Hede (2001). The framework includes items that explain acceptance behavior as well as resistance behavior. This framework can be used during interviews in identifying what kind of resistance microtransactions face.

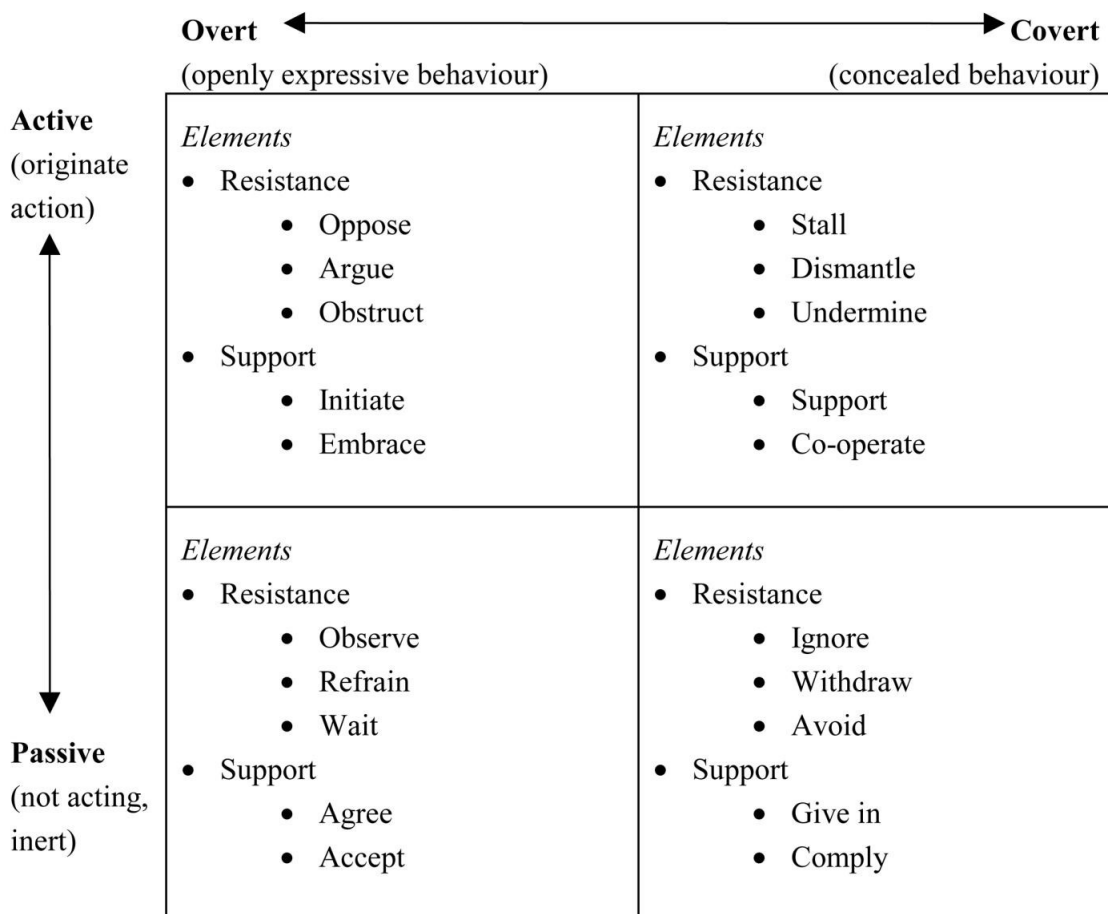


Figure 2. Framework for measuring behavioural intentions (Boevey & Hede, 2001)

The framework divides the intention with the help of two scales as seen in figure 2. Intention can be passive or active and overt or covert. Framework is provided as an aid from which the measured items were derived. The framework is in line with the definition of resistance to change by Hirscheim and Newman (1988) which states that resistance may “manifest itself in a visible, overt fashion (such as through sabotage or direct opposition) or may be less obvious and covert (such as relying on inertia to stall and ultimately kill a project). It could occur fairly quickly, remain latent for a short period of time and then emerge, or lay dormant for a considerable time only to appear later.” Hirscheim and Newman (1988, p.398)

When comparing these forms of resistance to the context of implementation of microtransactions some forms may be hard to identify. As it has not been proved the following is speculation that can provide useful insights for hypotheses. Overt active resistance is defined as opposing, arguing or obstructing the change (Figure 1) this could be perceived as situation in which user argues against the upcoming or current microtransactions through forums, review sites or face to face with other users.

Passive overt resistance is defined as reacting to change by observing, refraining or waiting (Figure 1). This could be situation in which user observes the situation and how other users react to microtransactions before his own decision.

Covert active resistance is harder to define within this context. What is concealed and what is not in consumer context? In the framework this form of resistance is defined as stalling, dismantling or undermining the change (Figure 1). It might be that the difference between overt and covert active resistance is the channel through which the user resists the change. Discussion that is between users and happens through private channels or face to face might be considered as concealed behavior through implementors perspective. If participant in that discussion tries to undermine the upcoming implementation it could be classified as covert and active resistance.

Covert passive resistance is defined as ignoring, withdrawing or avoiding the change (Figure 1). This situation could be one where user notices the upcoming implementation of microtransactions and decides to ignore the whole IS because of those or withdrawing from current IS where the microtransactions are coming. Difference compared to overt passive is that user will stop observing the upcoming change.

The definition by Hirscheim and Newman (1988) also introduces new attribute, time, that affects resistance and has not been examined within this thesis. There are only few articles that research user resistance within longitudinal perspective. One of them is article A Multilevel Model of Resistance to Information Technology by Lapointe and Rivard (2005). The research includes a different way of classifying resistance that shares similarities to the one by Bove and Hede (2001). Used classification is by Coetsee (1993,1999) and it classifies resistance as apathy, passive resistance, active resistance and aggressive re-

sistance. The biggest difference is that it does not classify if resistance is concealed or openly expressed. The focus is on how intense the reaction is.

## 2.4 Time, triggers and object of resistance

Resistance does not stay the same as time passes and events occur (Lapointe & Rivard, 2005). Below is a model (Figure 3) that explains longitudinal perspective of resistance. The components related to model will be explained in this chapter. This theory is included as it crucial to understand how the resistance can occur and how the interview participants may exhibit resistance.

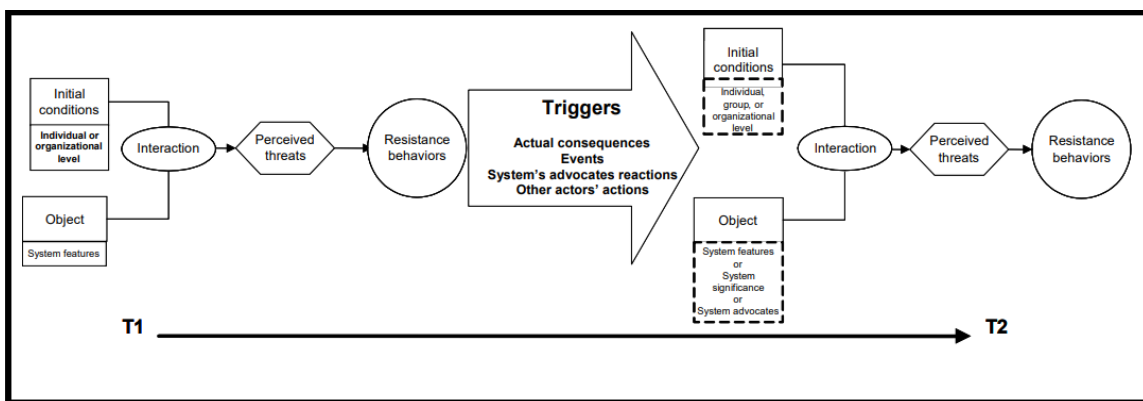


Figure 3. Longitudinal Perspective (Lapointe & Rivard, 2005)

The research investigated four different models of resistance (Markus 1983, Joshi 1991, Marakas & Hornik 1996 and Martinko et al. 1996) in order to form multilevel perspective of resistance (Lapointe & Rivard, 2005). They chose to focus on group level, but the model acknowledges the possibility that “individual or unit-level constructs may influence group resistance” (Lapointe & Rivard, 2005 p.469). This way of researching resistance is not suitable for this research as researcher lacks the resources to get rich and longitudinal data set which is required for this method (Lapointe & Rivard, 2005).

Initial conditions can be active or inactive at start and triggers can activate inactive initial conditions. Provided example of initial condition is “distribution of power between the hospital’s administration and physicians” which in their research remained inactive in two cases and became active in one (Lapointe & Rivard, 2005). The interaction between initial conditions and object forms perceived threats. Resistance can shift from system to its advocates and to systems significance (Lapointe & Rivard, 2005).

Their research also pointed out that at initial stage the group resistance behaviors emerge from individual behaviors and their conditions. In later stages they emerge from convergence of individual behaviors (Lapointe & Rivard, 2005). Example of this convergence is observed when physicians formed coalitions.

tions to resist the system. Earlier the individual reactions against the system varied and were nonuniform (Lapointe & Rivard, 2005).



## 3 GAME

Within this chapter the definitions of game, microtransaction and motivation to play will be introduced through existing research. Especially motivation is crucial as using the system is not mandatory as opposed to organizational context where everyone is required to use the system. In the final subchapter 3.4 an example of user resistance through product review is analyzed through the current understanding of the subject and examined theories. It is worth noting that the research will only focus on games released on pc platform and it is required that the game has microtransactions in its monetization model.

### 3.1 Definition of game

It was already stated that game needs to have microtransactions and to be released on pc platform in order to be eligible for this study. Which defines game as a product that is sold in certain market. The concept needs to be further identified so that possible attributes of resistance e.g. initial conditions could be identified. In consumer context the users are more varied as opposed to more confined organization context. In organization environment workers use IS to work and the construct perceived value is related to how the system is perceived to affect work (Kim and Kankanhalli, 2005). This was corresponded to EIM that compared system inputs and outcomes related to work efficiency. This can be problematic regarding games as players can have different motivations to play so constructs such as inputs and outcomes can vary from player to player. Some may see that the gained output was the fun time that they had with other players even though they did not progress much. Their teammate on other hand may be frustrated that they did not progress as much as they could have.

Jaakko Stenros (2017) reviewed 60 different definitions of games that were introduced since 1930s. The article compares the definitions and aspects of which they agree and disagree on. The most fitting definition is an old one but

as it was stated in the article it is also one that workers in the gaming field have agreed on (Jaakko Stenros, 2017) and it provides a starting point for discussion on why microtransactions can be seen negatively by users. According to Stenros (2017, p.499), Ellington, Addinall & Percival (1982, p.9) state that the definition of game which is widely accepted is by Clark C. Abt in 1968: “any contest (play) among adversaries (players) operating under constraints (rules) for an objective (winning, victory pay-off).”

The definition is quite wide yet fitting for this research as research will include games from different genres and the mentioned definition fits them all. The definition includes some features of games such as players, rules and objective.

### **3.2 Microtransaction**

Microtransactions are small content updates that are priced relatively low and are part of the monetization plan in games in games as a service model. Games as a service model aims to situation in which publisher releases fewer titles over time and keeps players engaged through regular updates and add-ons (SuperData, 2017). It is worth noting that games as a service model has tripled the industry value (SuperData, 2017).

Overwatch is a competitive first-person shooter game in which two teams that consist of six players compete against each other. The company behind the product describes it as team-based shooter game. Overwatch includes loot boxes as part of its' monetization design. There haven't been huge community uproars against the loot boxes, but government of Belgium defined the loot boxes as gambling and therefore illegal in their current form (Tom Gerken, 2018). Loot boxes in Overwatch contain four randomized items of varying rarity.



Figure 4. Loot boxes within in-game shop (screen capture from Overwatch)

Some of the items are more valuable than others and the likelihood of getting more valuable item is smaller than getting more common item. Within the game the rarity is identified through defined rarity tiers. Tier names are common, rare, epic and legendary. Item tiers can also be identified by their color coding. Different tier items have their name written with different color and effects are also within that color when the box opens so user identifies immediately if he has gotten a valuable item or not.



Figure 5. Halloween skin for Doomfist character (screen capture from Overwatch)

Some of the items are also tied to in-game events and cannot be gotten outside of the specified event. Example of such event can be seen in Figure 5. The skin called “Swamp Monster” can be only gotten during Halloween. Loot boxes can also be obtained through earning levels for player account. Earning levels is done through playing the game and does not include any extra cost. In this particular game the microtransactions only change cosmetic artifacts within the game. The overall consensus of the microtransactions has not been researched but through searching the forums and talking to players of the game it seems that users have accepted this method of microtransactions, but it needs to be validated.

### 3.2.1 Microtransaction categories

Microtransactions could be categorized at least through two different perspectives. One is by classifying them through what kind of asset user receives by buying them (Duverge, 2016) and one is by classifying what motivates users’ decision to buy them (Villi Lehdonvirta, 2009). Both of these categorizations are important as they provide insights on different aspects of microtransactions. This chapter will further explain the microtransaction categorization by Duverge (2016) and it will be followed by chapter that introduces the categorization by Lehdonvirta (2009).

Microtransactions can be categorized to four different categories which are in-game currencies, random chance purchases, in-game items and expiration (Duverge, 2016). Next the categories will be further explained, and some examples of every category will be provided. The loot boxes that have been mentioned belong to category random chance purchases.

Random chance purchases are classified as purchased that include random chance to get certain items. Player pays certain amount of money to receive a “box” which includes defined number of in-game items, but the actual items are randomized. What the actual items are shifts from game to game. In games like Overwatch the included items are purely cosmetic and don’t influence the actual gameplay. In other games loot boxes can be a way to obtain more playable characters. Random chance purchases may be paired with the option to get them by playing the game or by purchasing them with money.

Related to in-game currencies (Duverge, 2016) mentions that the goal of in-game currency is to “hide the true value of what players may purchase and to make larger quantities seem like the better deal”. Which has a valid point behind it but I would like to point out that in-game currencies also provide option for the company to reward players with in-game currency which would not be possible otherwise. By rewarding just enough in-game currency the player might need to purchase smaller amounts of currency in order to get the item he or she wants while it provides some players option to gain such items without paying real money. Those players invest into the game with their time as gaining enough in-game currency to gain the item player wants may require

that the player is lucky or invests respectable amount of time in playing the game.

Category of in-game item microtransactions are often referred as better than free items that player may acquire by playing and they can make game easier (Duverge, 2016). These items can be referred as pay to win items as they offer power through real money purchases. Items that are cosmetic or small additions such as bigger stash for items are often seen as better way of implementing in-game item microtransactions. This point has not been studied so it is only the observation that has been acquired by reading game related media and forums.

Expiration relates to items or features that can be used only certain amount of times and after it expires game can ask if the user wants to buy more or just continue (Duverge, 2016). It was also stated that this is in many single player games, yet it is not that common within pc games. From my observations it is more common in multiplayer pc games where it may be possible to buy "boost" for limited time that can increase how fast player levels up or how much in-game currency he or she earns during that boost. Such boost items are common in MOBA (Mobile Online Battle Arena) games such as League of Legends and Heroes of the Storm.

### **3.2.2 Motivations to buy virtual assets**

Vili Lehdonvirta (2019) analysed 14 virtual asset platforms in order to provide set of item attributes that explain why consumers buy virtual assets. These item attributes were categorized by their functional, hedonic and social attributes (Vili Lehdonvirta, 2009). Within this subchapter the findings of the said article are presented as the motivation to buy virtual assets is topical for this research. It is worth noting that the article in itself does not mention microtransactions, but the findings can still be applied to them as microtransactions are virtual assets that are sold to consumers and as such the motivations to acquire them are comparable.

Functional attributes	Performance Functionality
Hedonic attributes	Visual appearance and sounds Background fiction Provenance Customisability Cultural references Branding
Social attributes	Rarity

Table 1. Virtual item attributes acting as purchase drivers by Vili Lehdonvirta (2009)

Functional attributes of virtual goods refer to how virtual asset performs and functions within the context of the game. The attribute is a positional attribute meaning that if every item is of high performance then none is (Vili Lehdonvirta, 2009). One example is that in order to perceive weapon such as sword as sharp and efficient there needs to be more blunt ones that perform worse. Microtransactions that enhance characters performance can be referred as “pay to win” purchases. These kind of microtransactions could be seen as hurtful for the game when one player can triumph over another just by spending more money on game. Selling this kind of virtual goods was met with mixed success (Vili Lehdonvirta, 2009). One case that was mentioned was when Electronic Arts tried to sell powerful characters for money in MMORPG (Massively Multiplayer Online Role-playing Game) Ultima Online. In this case players responded negatively and as the option to buy characters launched it ended up only selling mediocre avatars as opposed to powerful ones (Vili Lehdonvirta, 2009). Virtual goods that are bought for functionality give players new functions, convenience or gameplay options (Vili Lehdonvirta, 2009). Example of such microtransaction is new stash tabs in popular action RPG (Role-playing Game) Path of Exile. These tabs provide players more room to stash their found items. Premium stash tabs are also more editable than normal ones as their names and color can be changed when player wants to do so.

Hedonic and social attributes may be hard to distinguish from each other. As an example, user may choose his in-game virtual clothes by what pleases them and therefore provide hedonistic value for user (Vili Lehdonvirta, 2009). The virtual clothes can also be perceived as fashionable from other players perspective and therefore provide social value (Vili Lehdonvirta, 2009). Background fiction refers to background fiction of the virtual asset that may provide hedonistic pleasure for the user and make the purchase more compelling (Vili Lehdonvirta, 2009). As an example, in MMORPG Final Fantasy XIV player may purchase the mount called Sleipnir from digital shop. Mounts are virtual items that enable faster transportation from place to place. This mount belongs to

challenging foe within game called Odin and the status of the foe is used in enticing players to make the purchase.

*“This item allows you to summon forth Sleipnir, the legendary mount of the elder primal Odin. All eyes will be drawn to his void black coat and sleekly muscled flanks as you thunder across the plains on a steed fit for a god!” (Square Enix, 2019)*

Provenance on other hand refers to “item’s age, previous owners, notable situations it has been involved in and how it was originally created or acquired” (Vili Lehdonvirta, 2019, p.108). This is one category that may not be found from microtransactions. Microtransactions are directly sold from company to consumer so the sold item cannot be one that has previous owners’ nor it cannot be measured as being old. The item that is sold can become old and then traded to another user, but it is not anymore microtransaction between company and consumer.

Customizability could be referred as social attribute or individualistic emotional attribute depending on context (Vili Lehdonvirta, 2019). As an example, in game Anthem users may purchase new parts and materials for their Javelin (exosuit that acts as players in-game character) through playing or through microtransactions. This customization allows player to come up with design that pleases them. The example by Lehdonvirta of customizability as social attribute does not fit as it is in microtransactions. Provided example is one in which group of players in game World of Warcraft can design guild tabard that acts as symbol of membership of the guild (Vili Lehdonvirta, 2019, p. 108). Items such as guild tabard which purpose is to represent group of players are not usually sold as microtransactions. Microtransactions focus on providing virtual assets for individual players. Although if a group of players decide that certain outlook represents them as a group, and it can be obtained through microtransactions it would fit the criteria.

One example of virtual assets that represent cultural references are seasonal contents such as Halloween masks (Vili Lehdonvirta, 2019). In games such as Overwatch and League of Legends seasonal content includes new cosmetic virtual items that can be obtained through microtransactions. Example of such from the game Overwatch can be seen in Figure 5. Branding on the other hand would mean bringing known commercial brand to in-game virtual world.

Lehdonvirta (2019) states that rarity is the most socially oriented attribute of virtual goods. Reasoning is that its “value is strongly associated with its ability to distinguish a (small) group of owners from non-owners” (Vili Lehdonvirta, 2019, p.110). Rarity within microtransactions can be manufactured by offering something for only limited amount of time, introducing randomness in getting the rare items or requiring some feats from player in addition to purchase. Example of microtransactions that introduce limited time rarity are microtransactions that are offered only during certain events such as cosmetic item in Figure 5. Other way of introducing time window in getting the item is offering only certain items for purchase and changing the available items after set amount



of time. This can be seen for example within in-game shops of Fortnite and Apex Legends where only couple different items are being sold and there is a timer when the available items will change. The last option which requires players input along with purchase can be seen for example in seasonal Battle Passes of Fortnite. Battle Pass gives player an opportunity to earn different kind of rewards within set dates. Completing the battle pass requires typically from 75 to 150 hours of play according to Epic Games (Epic Games, 2019).

### 3.3 Motivation to play

Users can have different motivations to play which can affect their expectations. Within work environment the system is mainly used for specified outcome related to work whereas in games userbase may have wide variety of reasons to use it. Nick Yee (2006) conducted a research in which he investigated the different motivations of players and it will be introduced in this subchapter. The found components were categorized to three different main components and assessed how gender, age and usage affects these motivations.

TABLE 1. SUBCOMPONENTS REVEALED BY THE FACTOR ANALYSIS GROUPED BY THE MAIN COMPONENT THEY FALL UNDER

<i>Achievement</i>	<i>Social</i>	<i>Immersion</i>
<b>Advancement</b> Progress, Power, Accumulation, Status	<b>Socializing</b> Casual Chat, Helping Others, Making Friends	<b>Discovery</b> Exploration, Lore, Finding Hidden Things
<b>Mechanics</b> Numbers, Optimization, Templating, Analysis	<b>Relationship</b> Personal, Self-Disclosure, Find and Give Support	<b>Role-Playing</b> Story Line, Character History, Roles, Fantasy
<b>Competition</b> Challenging Others, Provocation, Domination	<b>Teamwork</b> Collaboration, Groups, Group Achievements	<b>Customization</b> Appearances, Accessories, Style, Color Schemes
		<b>Escapism</b> Relax, Escape from Real Life, Avoid Real-Life Problems

Table 2. User motivations to play (Nick Yee, 2006)

The found main components were achievement, social and immersion related motivations (Table 2). The research was conducted for MMORPG (Massively-Multiplayer Online Role-playing Games) which may mean that it does not generalize to other genres of games. Yet as it was stated in the paper “MMORPGs may appeal to many players because they are able to cater to many different kinds of play styles” (Nick Yee, 2006, p.772) which can help in providing wide spectrum of different kind of motivations for research.



Components below achievement include advancement, mechanics and competition. Advancement was defined as “The desire to gain power, progress rapidly, and accumulate in-game symbols of wealth and status”. Mechanics on the other hand is about “having an interest in analyzing the underlying rules and system in order to optimize character performance” and competition is “the desire to challenge and compete with others” (Nick Yee, 2006, p.773).

Social motivation consists of socializing, relationship and teamwork sub-components. Socializing was defined as “Having an interest in helping and chatting with other players”. Relationship consist of “desire to form long-term meaningful relationships with others” and final component teamwork is “deriving satisfaction from being part of a group effort” (Nick Yee, 2006, p.773).

Last main component Immersion has subcomponents discovery, role-playing, customization and escapism. Discovery includes “finding and knowing things that most other players do not know about” while roleplaying is about “creating a persona with a background story and interacting with other players to create an improvised story”, customization is defined as “having an interest in customizing the appearance of their character” and last component escapism is about “using the online environment to avoid thinking about real life problems” (Nick Yee, 2006 p.774).

### **3.4 Resistance through product review**

No articles were found that researched the user resistance to change related to microtransactions. Yet it can be witnessed in articles (Webster, 2018 and Edmonds, 2017), forums posts (Reddit, 2018) and product reviews (Figure 6) related to products that include them. As no literature that explains the resistance in this context could be found this chapter will incorporate earlier models of resistance to users’ motivation to play and theorize what could be the reason. This will be done in order to better understand the phenomena that will be further investigated through empirical research. This will also provide an example of what may be classified as user resistance within this context.



Figure 6. Steam reviews of Street Fighter V (Screen capture taken from Steam application 25.11.2018)

Street Fighter V is a fighting game that provides content updates every year in form of costumes, fight stages and characters. These content updates can be mostly earned by playing the game with some exceptions regarding to some cosmetics. Figure 6 consist of two reviews that were considered as most helpful ones in the past 30 by users of the Steam platform. Both of them include comments that can be linked to active user resistance and warn users to not invest into the game because of how content is unlocked. It is worth noting that first review states “You used to be able to grind somewhat to unlock things within game fighting money” (Figure 6) that could be interpreted that user is required to do more inputs than before to reach the same outcome.

Many games such as Overwatch, League of Legends and Street Fighter V use in-game currency that can be earned by playing. This currency or real money can be used to buy microtransactions. Some microtransactions can be locked behind only real money purchases. The user refers to change that made earning the said in-game currency harder. In this situation the initial condition was how in-game currency was earned, object was the patch that introduced the change and trigger was the actual consequences of the implementation. This leads to situation where user exhibits active resistance behaviors and warns other users of buying the game. Player might be driven by motivation to advance within the game and after the change the self-efficacy for change plummeted and they felt that they can no longer obtain their goal which resulted in resistance.

## 4 USER REACTION

Even though user resistance theories explain how or why users oppose upcoming change it does not explain how or why users feel the way they do in these situations. In order to further understand what happens in these situations, fairness theory and psychological contract theory will be examined within this chapter. These theories will be later on used while analyzing the answers from the interviews.

### 4.1 Fairness theory

Fairness theory was described in research by Robert Folger and Russell Cropanzano (1998) as being a framework that “focuses on accountability for events with negative impact on material or psychological well-being”. Fairness theory separates two determinants which are events negative impact and accountability for the event (Folger & Cropanzano, 1998). Accountability refers to whether the other party is held accountable for the negative event. Negative impact refers to event that is perceived as negative.

When taking this to the context of microtransactions it would mean how negatively the impact is perceived by users and if they held company accountable for it. It could be stated that some users already perceive microtransactions as “necessary evil” within industry as those are relatively common in new games. This would mean that the company behind the game is not necessarily held accountable for the inclusion of microtransactions as inclusion could be regarded as standard within the industry. It may be possible that resistance occurs when new kinds of microtransaction models are introduced to market and especially if those are perceived as greedy by majority.

## 4.2 Psychological contract breach

Psychological contract can be defined as “Psychological contract refers to an individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party” (Rousseau, 1989, p.123). It may be possible that the users of pc games can be considered to have psychological contract to the developers. This kind of situation could be linked to user review in Figure 6 where user may have expected that all of the content could be unlocked by playing the game and psychological contract breach occurred when system was changed so that in-game currency was more time consuming to acquire. In this sense psychological contract breach can act as trigger for user resistance. In the theory by (Lapointe & Rivard, 2005) it was mentioned that one possible trigger is the reactions of the system advocates. In this example they changed the value of time commitment to get the virtual items and it was perceived negatively.

## 5 USER RESISTANCE AND GAME

As Hirscheim and Newman (1988) stated user resistance is a complex phenomenon that defies simple explanation and analysis. It can also be witnessed in this literature review as different models and frameworks try to capture different viewpoints of the phenomena (Lapointe & Rivard, 2005; Boevey & Hede, 2001 and Kim & Kankanhalli, 2009). The goal of understanding and presenting these frameworks is to gain better understanding of the resistance as well as participants that will be interviewed. Presented theories give insights to different aspects of the resistance. Status Quo Bias Theory presents constructs that influence whether individual will resist implemented system or not (Kim & Kankanhalli, 2009). These constructs pinpoint what are the potential reasons behind microtransaction resistance in individual level (Kim & Kankanhalli, 2009) yet the framework has its flaws in this context. The framework probably requires adjustments in order to fit into consumer context. At least within UTAUT to UTAUT2 framework change three new constructs were presented in order to fit the acceptance model into consumer context (Venkatesh, Thong & Xu, 2012). These constructs were hedonistic motivation, price value and habit (Venkatesh, Thong & Xu, 2012). These along with the constructs from Status Quo Bias Theory are the constructs that may provide insights on how user resistance behaves within individual level and as such the questions in interviews will focus on identifying whether they are relevant while giving participant an opportunity to provide answers that may not be related to these constructs.

Longitudinal framework focuses on explaining resistance on group level (Lapointe & Rivard, 2005). Even though thesis focuses on resistance on individual level longitudinal framework provides insights on how the resistance changes (Lapointe & Rivard, 2005). This is crucial for this research as the participants might have resisted microtransactions some time ago and therefore it is important to understand what factors might affect resistance at the time of the interview. I think it is likely that the resistance might have changed in some degree to the ones promoting microtransactions from the actual microtransactions. As an example, this can mean that the participants resist the ones that advocate microtransactions as opposed to microtransactions itself. If the answers related

to resistance are quite similar from one person to another within same community it may be related to the unification of resistance behaviors which is also referred within this framework (Lapointe & Rivard, 2005).

As it was stated in UTAUT2 framework hedonistic motivations, price and habit play a part whether user accepts the system or not (Venkatesh, Thong & Xu, 2012). Users want to be entertained when using the system and because of this the research tries to see if the motivation to use the system affects how users resist the system while also taking price and habit constructs into consideration through different interview questions.

As it was stated there may be unification of resistance behaviors related to framework presented by Lapointe and Rivard (2005). It may be that the resistance behaviors are so unified within certain gaming communities that attitudes towards microtransactions do not have drastic differences between users. Because of this the interview invite will be posted on a place that has varied and large userbase. The userbase within a forum can have influenced one another through forum posts yet as the userbase is as large as it is and users have varied preferences when it comes to gaming preferences it is likely that the attitudes towards microtransactions are not totally unified. One possibility is to conduct second set of interviews where the participants are invited from elsewhere yet that would pose a challenge to researcher as he has only limited amount of time.

To identify resistance the interviewer needs to be able to identify what is classified as resistance behaviors. In this case the framework by Bovey and Hede (2001) can be useful as it classifies resistance through four different categories and provides examples of those behaviors. In interview question "How have you resisted microtransactions?" the participant is given example from all categories. The answer is not limited to these as they are only examples of each of these categories and participant may have resisted microtransactions in a manner that is not presented by the examples. Therefore, participant is given opportunity to answer in his own words and examples are only there to be asked after the participant has answered or if participant does not understand the question. Psychological contract breach and fairness theories provide framework for understanding how participants may feel related to microtransactions. They may perceive them to be unfair or feel that they have broken psychological contract in one way or another and this may be evident in which manner participants speak of microtransactions. The focus of research remains on understanding resistance and as such these frameworks are not investigated further as it would expand the scope of the research too wide. The focus will remain on user resistance while also taking these frameworks into consideration.

## 6 RESEARCH METHOD

Chosen research method for this research is semi-structured interview. Before the actual interview literature review will be conducted in order to identify relevant theories for the research and those will be used as basis for the interviews. The main goal is to find the most relevant theories that explain the user resistance and identify the constructs within the proposed frameworks. The main research method will be the semi-structured interviews yet as the literature review is also a part of the thesis, it will be explained to some extent within this chapter.

The articles used in literature review are required to be about user resistance and they must propose framework for understanding the user resistance as phenomena. Main source for finding the articles are Google Scholar and JykDok search engines. There can be problems related to literature review on this topic as it has not been thoroughly researched within IS literature and therefore it may be difficult to find research articles that are directly about players and how they react to microtransactions. Thus, the literature review needs to form a synthesis of several different theories that in combination could explain the situation. The main theories will be user resistance theories but in addition the literature review will include complementary theories that explain the context such as game and microtransaction related theories. Research also includes fairness and psychological contract breach theories which can help in analyzing the answers gained from interviews.

Literature review will be followed by semi-constructed interview. Interviews further examine the theoretical background in practical context. Interview will be conducted through discord (chat application). The reasoning for semi-constructed interview is to be able to identify and if necessary deviate from the interview script as the subject has not been widely researched. The open questions in the interview are crucial as it is probable that researcher has not fully understood the phenomena and all the aspects related to it. Providing the participant an opportunity to answer outside of before mentioned options can provide insights that were not found from existing theories. Semi-



structured interview provides the opportunity for the researcher to delve deeper with follow-up questions when necessary.

The language of the interviews will be decided separately for all interviews. In each interview it will be the one that the both participant and interviewee are most fluent. In practice this means that half of the interviews will be conducted in English and half of the interviews will be conducted in Finnish. When latter ones are quoted the quote will be translated to English.

Interviews can be explained as drama with stage, props, actors, an audience, a script and a performance (Myers & Newman, 2007). The latter part of this chapter will focus on explaining how the interview will be conducted and how the pitfalls of qualitative interview will be addressed. These factors will be mostly explained through article "The qualitative interview in IS research: Examining the craft" by Michael Myers and Michael Newman (2007). The article was chosen as it explains qualitative interviews within IS research and it can be considered as relevant as it had been referred 1640 times. Next, the seven guidelines by Myers and Newman (2007) will be explained while providing information on how they are addressed within research. The guidelines by Myers and Newman (2007) can be found listed below.

1. Situating the researcher as actor
2. Minimize social dissonance
3. Represent various "voices"
4. Everyone is interpreter
5. Use Mirroring in questions and answers
6. Flexibility
7. Confidentiality of disclosures

Situating the researcher as actor is about explaining the aspects related to the relationship between the researcher and the participants. Explanation of this relationship will in turn help readers in assessing the validity of the findings. (Myers & Newman, 2007)

Researcher is familiar with gaming and microtransactions within them. Researcher plays games during spare time and has followed the evolution of microtransactions within the industry.

Researcher has exhibited resistance behaviors towards microtransactions mainly by talking negatively of loot boxes within closed group of people. On the other side he also agrees on most of the implementations of microtransactions with the exception of microtransactions that enhance players performance. This is a factor that needs to be taken into account when conducting interviews as researchers' views need to be separated from the interview. Questions need to be carefully thought of as the tone of questions should not reflect interviewer's opinions of microtransactions.

Examples given by the interviewer are used rarely because if the example is new to participant the opinion would be created under time pressure. This leads to pitfall called artificiality of the interview (Myers & Newman, 2007).

Therefore, examples are only used for clearing the ambiguity of language. Ambiguity of language within interviews relates to problem in which the participant does not fully understand the question (Myers & Newman, 2007). As such the participants are required to understand microtransaction yet they are not required to understand phenomena called user resistance. To make sure the participant understands what classifies as resistance behavior and that the research captures that data the examples of such behavior are given if necessary. Even then the examples are given after the participants have been given freedom to answer in their own words so that the examples do not influence the possibility to answer something that is not included within them.

Minimizing social dissonance is about minimizing “anything that may lead to the interviewee to feel uncomfortable” (Myers & Newman, 2007, pp 16). Article advises that interviewer has to play a part by dressing up or down when needed. One example of too great social dissonance is “someone who is very young with little business experience might find it difficult to gain the respect and trust of a CEO of a large corporation”. In order to minimize social dissonance, the researcher will explain in the invitation to interviews that motivation to do this research comes from his personal interest and that he plays games as well. Reason why researcher explains that the motivation comes from himself is that he wants to distance himself from the companies that sell microtransactions and make sure nobody thinks that such corporation is behind this research. This is also one of the reasons why Discord was chosen as a tool for the interviews. Discord is chat application that is relatively common within gamers and it provides option of establishing a server for users’ own use. The interviews will be held within server named “Master Thesis: Microtransactions” that is established just for this interview. The servers have image that represents them and as the server acts as one of the props for this drama it should be dressed appropriately. Researcher chose the image of loot box for the channel as it is widely recognized and relatively controversial.

Representing various “voices” is about making sure that the answers are not just from one group of people within organization (Myers & Newman, 2007). In this research the potential participants are the users of games that have microtransactions within them. This makes it hard to give voice to every group within the definition. In order to capture as varied voices as possible the interview invite will be given through forum that does not focus on singular game. The participants will be acquired through Reddit forum and by word of mouth.

Everyone is interpreter guideline is explained as “to sensitize the researchers to the interpretive world of the subjects, the researchers themselves, and the audience they write for” (Myers & Newman, 2007, p.22). To answer this guideline the researcher has included different frameworks that explain different aspects of user resistance in addition of theories related to fairness and psychological contract breach. These theories help researcher in understanding why participants may feel as they do. Researcher has two supervisors that help him in writing coherent piece for the scientific community that can be classified as audience from earlier example. As it was previously mentioned microtrans-

action have not been properly researched within IS research and as such the microtransaction are explained within research in order to make it easier for reading to scientific community.

Use mirroring in questions and answers part of guideline refers to using of different questioning techniques to avoid imposing interviewer's views on participant (Myers & Newman, 2007). One of such technique is mirroring in which the interviewer uses words and phrases that the participant uses in following questions (Myers & Newman, 2007). Using of such techniques requires expertise on conducting interviews and the interviewer at hand has not done many interviews yet it may be hard to utilize to its potential. The interviewer will try to use the technique in potential follow-up questions. Myers and Newman (2007, p.17) also state that "it is usually good practice to use open rather than closed questions" and as such the researcher has tried to form the questions in the script to be as open as they can be.

Flexibility refers to readiness to explore interesting lines of research and searching for surprises (surprises) during interview (Myers & Newman, 2007). The script has room for talking about microtransaction related experiences within games that the participant has played. Most of the room is within follow-up questions to the ones that are defined in the script. Within flexibility guideline Myers and Newman (2007) remind that interviewer should react accordingly to participants differing attitudes such as bored, shy or deceiving. This can be hard within this research as it is conducted within chat application without video feed. Some of these can be heard from the participants voice but misinterpretation is possible and as such this can pose challenges for interviews.

Confidentiality of the disclosures is of how the data gotten from interviews will be handled (Myers & Newman, 2007). The invitation to the interview will explain how the data will be handled and who can listen to it. The data will be collected anonymously, and it will be stored on interviewer's personal computer. The anonymity of the interview will be assured as if participant shares confidential information the data will be anonymized before reporting. Participating does not require giving out the participants real name. More on the subject in the chapter eight called "Data Management". Next chapter will introduce the interview script that will be used within interview. The possible follow-up questions are not presented as they highly depend on the discussion with participant.

## 6.1 Interviews

Following chapter introduces the principles that are applied in conducting the interview. The interview includes questions that try to identify previously mentioned constructs related to user resistance. The questions are kept as open as possible so that they can provoke discussion related to the topic while being as neutral as possible so that the interviewer would not affect the participants answers.

The script includes main questions that will be asked during the interview and it can be found as appendix 1. The structured questions can be followed up by questions that are not presented here as doing so can provide more useful information on the subject. Interview will start by more general question of why the participant plays games. The goal is to continue from there to discussion of what games the participant plays and if those have microtransactions within them. Latter part of the interview will focus on specific questions related to microtransactions.

## 6.2 Demographic

The interview participants were from four different countries and their ages ranged from 19 to 32. All of the participants were male. The employment status was asked but after analyzing the answers it does not provide anything important for the research, so it is omitted. The participant ages and countries:

27, Canada first interview  
32, USA second interview  
27, France third interview  
19, USA fourth interview  
29, Finland fifth interview  
23, Finland sixth interview  
25, Finland seventh interview  
25, Finland eight interview

## 6.3 Data management

The conducted interviews and the analysis that follows them involves handling data that may possibly involve sensitive data related to participants. Because of it this chapter will explain how that data will be handled in different stages of the research. The interviews include questions related to participants background information. This includes participants occupation, gender, age and nationality. The reason for such questions is to identify how varied data the interviews manage to capture. Negative aspect is that there are a lot of phishing attempts and it is crucial to inform the participant on how his data will be handled and erase potential uncomfortable feelings during interview.

The research will use method in which answers will not be reported precisely. As an example, if participant has a job title that few people have within the company it would make it too easy to identify who the participant actually is. Therefore, the researcher will just ask if the participant is unemployed, student, employed or student and employed. The same kind of anonymization method is used for participant ages. Even if the participant answers precise age

the reported ages will be categorized within age categories that include more than one participant.

The researcher has no right to interview people of underage. Therefore, the invite to interviews will include information in which it is declared that the participants are required to be adults. If the researcher finds out that the participant is of underage the data related to participant will be erased as soon as possible.

The interview data will be stored in individual mp4 files within the researchers' personal computer. If required the data will be stored also to researchers Google Drive. The interview data will be modified if required to preserve the interview data as anonymous. The guideline related to preserving the data and anonymization was obtained from Tietoarkisto (Tietoarkisto, n.d.). The first two questions require negative answer and the last one should not be probable.

1. Making observation from the crowd: Is it possible to identify person from the material after anonymization?
2. Connectivity: Can the information from the material be connected to another material or outside source which makes the participants identifiable?
3. Deduction: Can the information related to participant be deducted to be of certain person? Is it possible to deduct the original values of modified or erased information.

## 7 RESULTS

This chapter will explain the results from interviews. Not every question or answer will be mentioned as the focus is on reporting the most important results. The questions were positioned to acquire information of resistance constructs introduced in integrative framework by Kim & Kankanhalli (2009) therefore the structure of the results chapter is divided into different resistance constructs and how they were mentioned within interviews. Other reviewed theories were reviewed in order to grasp a better understanding of the users' perspective such as motivation to play. The questions related to these theories and their main findings are also mentioned.

### 7.1 Reasons to play

Each of the participants were asked what games they play and why they play them. Answers were varied within the participants. This is as expected as the sample size was not confined to a specific game or even game genre. In the chapter each of the participants' motivations are explained in their own paragraphs and the final paragraph will summarize the results.

The first participant explained his motivation to play a game called Mass Effect with the following reasoning.

*"The voice acting is top notch, the story is amazing, the combat got better with each release and just like the world. The actual lore and stuff is so awesome. I read the books and stuff like that so."*

This answer emphasizes the immersion of the Mass Effect trilogy. Mass Effect is single player role-playing game in science fiction setting. The participant also played game called Apex Legends. He played it as he appreciated its gameplay and because of social aspects. This was evident on the comments such as the following.

*“Their take on battle royale genre really appealed to me”*

When he compared Apex Legends to other multiplayer games he wished them to have same “pinging” feature as what Apex has. Pinging is a feature through which player can communicate to another with pointing an object and clicking the appropriate keybind. The contextual message is then delivered to the teammates through visual and audio cue. The participant also mentioned playing with two friends of his so some degree of social motivation is also in place.

Second interview participant mostly played games as he liked to be completionist. He referred to completing games to 100% or to sometimes to 80% or 90% and then moving on to other games.

*“I wanna complete umm, get a hundred percent on games about, some time it’s just umm, I’ll get 80, 90 percent and then teeter off”*

The completion percent can refer to in-game completion percentage or achievement percentage, but it was not clarified within the interview. It’s important to point out that playing the story from start to finish does not necessarily give player 100% completion. The games quite often have optional side content that is included in the completion percentage. The participant is referring to such games where he is doing optional side content in addition of the story completion. The participant also plays with other players and/or friends from time to time. As an example, he mentioned playing a game called Division in a clan. The clan is a feature in which players can form a community within the game and gain access to clan specific features. As the players work together this can help the said participant to cooperate and earn rewards faster as well as provide social aspect to gaming.

Third interview participant mentioned that he prefers single-player games as he does not have much time to play time consuming games.

*“Soo that’s why I play those because I can play fifeteen minutes and stop whenever I want without problems.”*

Participant refers to multiplayer games being time consuming and he mentions playing Counter-Strike and DOTA. Both of these are competitive multiplayer games which don’t have ending. Nier: Automata was mentioned as an example of single player game and he mentions liking its presentation and dynamic action in gameplay. It was also mentioned that Nier: Automata was something that he hadn’t experienced before.

Fourth interview participant liked the intensity related to battle royale genre. One of the reasons was the limited respawns that are associated with the said genre of fps games.

*“It’s more nerve wrecking. It’s kinda like if you played Call of Duty just kinda respawn. But if you play Battle Royale you got one life to make it.”*

In battle royale games all of the players are dropped on one single map that starts shrinking. Participant numbers and the gameplay vary from game to game. In Apex Legends the game includes generally 20 three man squads that are competing for the win. At the end only one squad is declared as the winner. The participant mentions playing these games with friends.

Fifth interview participant had aspects of completionist combined with interest in customizing available gameplay options. When asked why he plays games he mentions the following.

*“Strategy elements and then if the game has some form of fun collecting”*

Later on he mentions Path of Exile where he liked trying out different builds that affect how the character is played. He also played some games because his friends played them.

Sixth interview participant mentioned that he likes to play casually and does not try to play competitively.

*“Currently I only play online multiplayer games that are more casual and not as serious.”*

Later on he mentioned playing competitively World of Tanks. Currently he preferred playing games with his friends in more casual manner. He mentioned that the games won't keep his interest if he is playing alone.

Seventh interview participant liked games that involved strategic knowledge. He talked about World of Warships as an example of such. He also played Apex Legends and Counter Strike: Global Offensive. In regards of Apex Legends and Counter Strike: Global Offensive the participant mentioned that he is not the best shooter, but he compensates on positional awareness. In a way he played games in which he competed against others and analyze the ongoing situation.

Eight interview participant mentions that he plays most of the games with the exception of fighting and strategy games. When speaking more of his motivations he mentions enjoying when the game challenges him on gameplay and emotional level.

Overall as seen in these results the motivations to play were varied but some common motivations were in several interviews. The social aspect and playing with friends were in several interviews. Other motivations were immersion through story, challenges or even player agency over how the player can play the game as mentioned in fifth interview with the addition of achievement related motivations such as thrill of playing against other players and seeking to complete a game at least to 80 to 100 before switching games. The results will be further investigated in the chapter 10.2 where these further linked to theory behind the motivation to play.



## 7.2 Resistance Behaviors

The chapter will provide the results of what kind of resistance behaviors were mentioned within interviews. The results will be reported one interview at the time and the final paragraph will summarize the results briefly. These findings will be further tied to existing Status Quo Bias Theory in the discussion chapter. If participant mentions concept or game feature that has not been explained yet, a brief explanation will be given.

During the first interview the participant mentioned detaching if the game involved microtransactions that are other than cosmetic. It was also evident that the participant followed the media related to microtransactions as evident in the following statement.

*"I have seen so many posts and Youtube videos of people doing the math theoretically of how long it would take to unlock these guns. With Black Ops III you could technically earn the currency through playing."*

The participant answered this when talking of situation where developer raised the playtime required to earn certain guns within the game. Even as microtransactions could be earned by playing the actual implementation and progress rate matters as evident in his following statement.

*"there have been studies done both with paying money upfront to unlock lootboxes and just playing and it's just absurd amount of time even with paying. That obviously really rubs me the wrong way."*

Second interview exhibit resistance that were to some extent similar compared to first interview. He played Madden which is a sports game but because of the microtransactions he played only the single-player portion of the game that was unaffected by them. He also skipped two games because of microtransactions. First being World of Tanks and second was Battlefield II. He played the first Battlefield but decided to ignore the second one because of microtransaction situation even if it went on sale. In these cases, the participant detached himself of games where he perceived microtransactions as negative or in the case of Madden ignored one portion of the game as it was affected by microtransactions.

Third interview followed the similar pattern when it came to resistance. He mentioned holding off from buying newest Assassins Creed and Battlefield II because of microtransactions. He also mentioned a case where he chose between two games solely based on how the microtransactions were implemented. In this case the games were League of Legends and Defense of the Ancients 2. Both of these games belong to MOBA (Mobile Online Battle-Arena) game genre and participant mentioned the following.

*“the reason why I decided to play Dota 2 instead of League of Legends few years ago was especially because in League of Legends either you have to spend hundreds of hours into gameplay in order to unlock new heroes or you can buy them directly. Whereas in Dota 2 micro-transactions are limited to only cosmetic items”*

This means that the option where microtransactions did not affect gameplay was seen as more favorable. He also mentions that when talking to friends he points out microtransactions as bad point if the game has them. If single-player games include microtransactions he purposefully plays as if the microtransactions would not exist.

Fourth interview provided interesting insight on how resistance had changed to the advocates of the system. When asked if microtransactions affect his purchase decision he responded that first thing he checks is if the game is made by EA (Electronic Arts). Reason behind it was that he perceives that EA likes to put in microtransactions and Star Wars: Battlefront II was given as an example. He also mentions that he reviewed game negatively because of microtransactions and he even borrowed his friends' phone to leave another negative review of the game. It was also mentioned that he was upset when the developer changed the work needed to earn virtual items.

The fifth participant was working within gaming industry as developer. He thinks of whether microtransactions are good or bad through how they affect the game. If microtransactions as an example improve your character to the point that the player cannot manage without them, they were perceived as bad. When asked if he had reviewed game negatively because of microtransactions he mentioned only of complaining of too expensive microtransactions. Electronic Arts was mentioned as bad example of microtransaction implementation.

Sixth interview had points that were not brought up in the earlier interviews. The participant mentioned not buying microtransactions for a game called Paladins as the unlockable characters were not better than the ones unlocked. They were just different. He mentions that he feels that he would not benefit enough from unlocking them. He had played World of Tanks competitively before and paid for premium time within that game. It was explained that it was crucial to buy the premium time that made the playing more efficient and premium tanks were better than normal ones. Another reason for not buying the microtransactions was that he felt the game was a copy of Overwatch.

*“in a way it is cheaper Overwatch copy which is why I don't want to spend money and anyway the other characters are not better but just different so I don't benefit from buying them”*

He also explained that if the microtransaction saves his time he tends to buy them even though he still does not think of them as pleasant.

Seventh interview had some common points with the sixth one. He had played World of Warships that is a game from the makers of World of Tanks

and has some similar microtransactions in it such as premium time. The participant had bought premium time and premium ships in World of Warships but he also mentions that it felt bad to use 40 euros for one ship. He bought premium time to make the playing feel more pleasant. Premium time is bought in days or months and it makes playing more efficient as player earns more rewards from playing. He was clear that the separately sold ships in the game were just different and not better than the ones that could be earned. They were better in some regard to earnable versions, but they also had new weaknesses to even it out. This was crucial point as he perceived that it was not the case in World of Tanks where premium tanks were just better. It was a reason why he stopped playing World of Tanks and switched over to World of Warships. He also plays Apex Legends and in that game he was disappointed that some of the skins were not possible to earn by playing. It was mentioned that when he reached maximum level with his account, he stopped earning lootboxes and has not gotten new skins after that level.

Eight interview had interesting point as he was not sure if he had bought microtransactions. Later on, he told that he had bought Riot Points within League of Legends and these are virtual currency that is used within the game and part of the League of Legends monetization model. Player can buy this currency with real money and after buying it he can spend it within the in-game store.

*"I don't really have logical reason for the mild disgust that I have towards microtransactions."*

The participant mentioned that he is not accustomed to microtransactions as he is used to buying games in larger portions. He also mentions that it feels worse if a larger company has microtransactions in its product as opposed to smaller companies. When talking of resistance towards microtransactions he also mentions the following.

*"I can say that it is rather feeling based thing"*

Later on participant mentions being worried about predatory aspects of microtransactions as he is worried about the possible gambling addiction related to lootboxes and how some users could be more susceptible for it.

Overall the resistance behaviors were varied between the participants. For others such as last participant it was more or less just dislike against the monetization model and its possible ramifications but for others it was a reason for entirely skipping products that had implemented microtransactions. Other mentioned behaviors were reviewing the game negatively privately or through public review platform, switching to another similar product with more favorable implementation. In one case the participant even reviewed the game negatively twice. Second time was done with friend's phone.

Reasons behind the resistance were discussed to some extent. The last interview was interesting as he directly mentioned that his dislike against microtransactions is feeling based. This can be behind some of the reasons in other

interviews also but the only one who mentioned it directly was the last one. It revolved around the fact that he was used to buying games in larger packages and he was afraid of how microtransactions can affect those that get addicted to them. More common reasons behind the resistance were how long it took to earn the same items through playing, if microtransactions gave competitive edge in games where players played against each other or if player felt that he is required to buy microtransactions.

### 7.3 Colleague opinion

This chapter will focus on where the players found their information and if any answers were similar to how colleague opinion influences resistance in working conditions. The chapter will include only the summary of what was found and not every interview will be mentioned.

The question in the interviews where participants were asked where they got information regarding the microtransactions was answered with different forums or other media platforms where individuals post their opinions. This can be seen as example in the following answer.

*“During the last years it has mostly been through community dependant on reddit or youtube. Before I used to read gaming newspapers but I don't do it since several years now”*

None of the answers mentioned currently checking the games website or corporations that review games such as IGN or Gamespot for information related to microtransactions. This points towards similar behavior as in working conditions where opinions of colleague are held in higher regard compared to the ones advocating the new system.

### 7.4 Motivations to buy virtual assets

Even if many of the participants had some forms of resistance behaviors towards microtransactions many of them had bought microtransactions. The actual value behind microtransaction purchase did not come up many times. In sixth interview the participant mentioned holding off from buying microtransaction because he did not receive enough benefit from buying them as the unlocked heroes would be equal compared to ones he already had. In this case the motivation can be classified to be related to functional attributes of microtransactions such as performance. In interview seven the participant mentioned that he did not like the look of available skins in available battle pass.

Many of the interviews brought up buying microtransactions because they wanted to support the developers behind the game. As an example, in inter-

view two the participant mentioned purchasing microtransactions usually after work when he does not make the smartest purchase decisions.

*“when I do buy microtransactions it’s usually when after work and I have a few beers and then, umm, I guess I don’t make the smartest purchasing decisions and it’s more emotional based”*

In the quote from second interview it is evident that the driving reasons for buying the microtransactions relate more on the emotional buying. The interviewer did not specifically state or mention what kind of microtransactions bought but the focus was on emotional satisfaction and later on he mentioned that he wanted to support smaller developers.

*“I honestly don’t care about the skins in the game, but I am still thinking about doing it just to support it. It’s 10 bucks and I have gotten 80 hour out of it so far.”*

The quote from first interview underlines the feeling of wanting to give something back to developers even if the player did not care about the microtransactions themselves.

*“and every once in a while just to, umm, for, umm, to support like especially smaller devs that are free to play, umm, games to, umm, you know, the games to stay viable and to keep, umm, keep supporting them to making new content”*

The second interview mentioned that the goal for supporting is to enable the game to stay viable and supporting developers in making new content. The purchase reasoning related to supporting developers came up in interviews one, two, three, four and five. Some of them mentioned thanking the developers while for e.g. in second interview it was mentioned that he wanted to support so that the game can remain viable and developers can make new content.

## 7.5 Triggers and object of resistance

Triggers were events where users’ resistance towards something is influenced and through that influence the resistance can change. Example of trigger can be when person advocating the system speaks of it and tries to sell it to users. It can also be situation where user has negative experience when using the system. The theories behind these were explained in chapter 2.4 as it was crucial to understand how resistance can shift for example to different object. First the user can resist the system but when he hears something unpleasant from its advocates the resistance can start to shift to the ones advocating it.

*“Yes I do. One of the biggest things I check for is if EA makes it.”*

When asked about microtransactions in the game the participant answers that one of the biggest things is if Electronic Arts has made the game. None of the other companies were mentioned negatively during the interviews in such manner. When asked how participant decides if microtransactions are bad or not following statements were made.

*“just trying to evaluate whether it’s fair or not, umm, free to play game of course your gonna put some microtransactions because they need those to, umm, bare costs and umm make a profit so umm not too concerned about those”*

As noticed in the quote some participants understood that in order to keep the game profitable microtransactions could be necessary. In these cases microtransactions were understood.

*“So obviously like I said as long as it’s cosmetic only. That’s the first thing”*

Microtransactions were better received if they were only cosmetics. The feature opposite cosmetic microtransactions was getting more powerful items or features through microtransactions. In general these “pay to win” implementations were not well received within interviews.

*“The next thing that I looked at it whether or not it is intrusive. So I... If it’s constantly beating you over the head”*

If user feels that the microtransactions are forced as opposed to optional was seen as bad. There were also statements regarding the initial price of the system.

*“just trying to evaluate whether it’s fair or not, umm, free to play game of course your gonna put some microtransactions because they need those to, umm, bare costs and umm make a profit so umm not too concerned about those”*

If the price was lower the user was more accepting towards microtransactions. The object of resistance was either the company, the game or microtransactions inside the game. When the resistance shifts to company the future products of the company can be perceived negatively because of the past experiences.

## 8 DISCUSSION

This chapter discusses the results and compares them to reviewed theories. The goal is to understand what the results mean in the context of theories and if the theories are applicable to consumer context. Important findings are related to how the concepts within Integrative framework by Kim & Kankanhalli (2009) can be applied to resistance against microtransactions within PC games. The research question “Why user resistance behaviors occur against microtransactions in PC games?” seeks out the reasons why the resistance occurs in this context.

### 8.1 Reasons to play affecting the equity implementation model

The chapter 7.1 went in detail of what each participant liked to play and why. The reasons were varied which underlines that each user can have varied motivations to use these systems..

The games provide a platform that can be used for social needs. This was evident in interviews where the participant preferred playing with their friends. On the other end of the spectrum are players who prefer playing alone. This is usually evident in games that cannot be played with more than one player.

One of the interviews mentioned preferring playing single-player games as they are more convenient. In this situation the convenience of being able to start and end gaming depending solely on the player itself is seen as motivator.

Within integrative framework by Kim & Kankanhalli (2009) motivations to use the system are not directly mentioned as the focus is on how efficient the new system is. This is emphasized as equity implementation model is used as part of the integrative framework (Kim & Kankanhalli, 2009). In order to fit the theory to consumer context the net equity needs to be understood in different context. In organizational context this refers to amount of work done related to amount of inputs. In consumer context this should refer to amount of hedonistic value received related to amount of inputs. In some cases this can mean the

same as in organizational context but for others the provided change might be purely cosmetic. In next paragraphs these two different cases are presented and explained.

The microtransactions related to obtaining boost for a certain timeframe provides player a more efficient playing experience. The boost provides player more rewards for same amount of inputs as before. When microtransaction made the playing too efficient in multiplayer game it was perceived as bad. This kind of microtransaction fits the current theory of equity implementation model. Crucial difference being that it was not well received and users preferred if microtransactions did not affect power status between players. When the bought microtransaction only affected the visuals of the game the current model did not have concepts to capture the value of the change.

Cosmetic microtransactions can change e.g. how the played character looks, moves and sounds. As the player plays the game the shown visuals could be perceived as more pleasant than before with the same amount of inputs as before. The actual value and how users felt when playing with the new looks was not researched within this research. The change does not make the user more efficient but it could be argued that it provides more entertainment. These microtransactions were perceived as good way to implement microtransactions.

## 8.2 Identified resistance behaviors

Resistance behaviors can be categorized to four different categories that were introduced in chapter 2.3. All of these were present in the interviews to some extent. The discussion chapter summarizes the different resistance behaviors and reasons behind the resistance.

Resistance behavior results were presented in chapter 9.3. The different ways of how participants exhibit resistance behaviors were ignoring the system, stopping the use of system, disliking the system, reviewing the system negatively on public platform or during discussion with friends or just observing the system as opposed to using it.

The situation where user did not want to anymore use the system happened in several different occasions. As an example, in interview four the participant mentioned the aforementioned situation related to game called Star Wars: Battlefront II.

*"I preordered that game and when I heard about all the stuff that was happening to it. I got my money back. I did not.. I haven't played yet. I did not want to deal with that"*

In other cases, such as in the one mentioned in seventh interview the participant stopped playing the game as items obtainable through microtransactions could be used to gain advantage over other players. In this case the user switched over to World of Warships from World of Tanks as the former was



perceived to implement the same kind of microtransactions better. Main difference was that he perceived that the users did not gain advantage over other players through microtransactions.

It was evident that resistance towards microtransactions exists and that it comes in variety of different forms. The causes behind it are even more varied but most common reasons in interviews were related to affecting power balance between players or trying to force the players to buy the microtransactions in one way or another.

Although it must be pointed out that in interview six the participant did not want to buy microtransactions as they did not provide him anything that would make him more efficient against other players. Which means that even within this small sample size of eight interviews the reasons for resistance are not uniform and can change from user to another. The player in question had played World of Tanks competitively and used to buy microtransactions in that game in order to be competitive.

Most of the resistance in these interviews could be categorized as covert. Negative reviews, refusing to use the system or never getting the system were resistance behaviors that were mentioned. Several participants also observed news related to microtransactions when doing purchase decisions which refers to passive overt resistance (observe, refrain & wait).

In several cases the participants mentioned that the price of the product affects how they tolerate microtransactions. If the product is free some assume that the microtransactions will be a part of the monetization as developers need to receive money. In the theory this could be linked to organization allocating resources to lower the entry barrier for users by not setting a price tag for the product or setting a low price for product.

### **8.3 Community replacing the roles of colleagues**

Most of the information that the interviews had gained was through forums or individuals who post content to different platforms such as Youtube. This could be argued to represent community around the system much in a same way as the employees form a community in organizational context. Within organizational context this represents "Social norms" that comes from status quo bias theory. The opinions of other colleagues affect the user and therefore affect if and how user resistance occurs.

Other potential places to look for information of the games could be media reviewing the games but interestingly this did not come up in the interviews. This might be because individuals within e.g. Youtube platform and game related forums could be closest to colleague opinions as these individuals are not representing organizations. The role of media outlets compared to the advocates of the system in organizational context was not further investigated within this thesis.

## 8.4 Value from supporting the organization

One of the interesting findings in the interviews was that even if some interviews spoke about the value gained from the purchased item others referred to more emotional based purchase decision. The value in this case refers to functional or hedonistic attributes of the microtransactions (Vili Lehdonvirta, 2009). There were also cases where the obtained value could not be found from the classifications by Vili Lehdonvirta (2009). Five interviews mentioned wish to support the developers or thanking them through microtransaction purchases.

These two ways are different when thinking why users actually buy microtransactions. The values mentioned by (Vili Lehdonvirta, 2009) referred to buying the microtransaction if it helps in competition against other players or if the item is visually pleasing for the user. The value that came up within interviews did not refer to what the user actually receives but rather what he gives to the organization. This reminded of how tipping works within restaurants. If customer is happy with given service, they can choose to pay extra.

## 8.5 Differences in what users resist

In the theory by Lapointe and Rivard (2005) it was mentioned that it is possible that the resistance changes from the system and its features to the ones that are advocating the system as an example the company or the spokesperson related to the company.

One of these cases could be heard in the interviews as Electronic Arts was mentioned in several interviews as bad example when talking about microtransactions. In the actual interviews it was not further inquired when the participant started to think this way about the company. By further investigating the change in object of the resistance it could be possible to pinpoint what triggered the change.

## 8.6 Organizational support in consumer context

Organizational support for change can be for e.g. training and resources that are allocated towards making usage of new IS easier (Kim & Kankanhalli, 2009, p.573). In consumer context the same kind of training is not possible as the possible users of the said system are not working for the company. Some organizations have opted to provide alternative ways to obtain the microtransaction related items. This could be classified as allocating resources to make obtaining the microtransactions related items possible through other means. Users can in

this case provide two different resources to the company. He can either provide the company his time or money in order to obtain the items.

In similar fashion some companies have opted to remove costs elsewhere while introducing microtransactions. In this way the cost to use the system is lowered in order to justify the existing microtransactions. In this way company supports the players in buying the microtransactions as in the end users have finite amount of resources that they can invest.

These two ways for organizational support related to microtransactions were evident within interviews. Several interviews mentioned that they do not expect microtransaction from products that cost full price. This means that the price of the game itself affects how user perceives microtransactions. Microtransactions were more acceptable if the actual game was not priced as the same as standard game in their respective platform. This is also evident in current successful games that have microtransactions as the core of their monetization model. Many of them are released as free to play products. Examples of such games include League of Legends, Path of Exile, Fortnite and World of Tanks.

## **8.7 Contributions to literature and practice**

The chapter will explain how the findings could affect the future research related to resistance or microtransactions along with how it could be applied to practice. The scientific contributions are weighted first and the latter part of the chapter will focus on practical implications within related industries.

The research cannot prove that any of these findings would apply to wider sample of gamers. It provided explanations of some causes behind resistance against microtransactions and what kind of resistance behaviors these users exhibit. The master thesis took user resistance theory related to organizational context and used it within consumer context. The framework was perceived as useful in understanding the resistance even in consumer context yet some of the constructs had to be modified slightly e.g. the output was not related to amount of work but more as amount of hedonistic value. This provides possibility to expand the integrative framework by Kim & Kankanhalli (2009) to a new consumer context. Other changes to framework were related to organizational support for change and colleague opinion. In the interviews the discussion included how the organizations made it possible to earn the same items through play or through buying and it was seen as positive. It was also perceived that if the game is cheaper it is understandable that the money will be acquired through microtransactions. In some interviews it was also seen important that the player could earn the same virtual items through play as by paying. These could be perceived as organizational support so players can choose whether to invest time or money to get the items they want.

In practice the findings can have implications on how the microtransactions could be implemented. Although the practical implications would require further research to the resistance against microtransactions as the sample size

does not enable generalizations to a larger sample. The potential practical implications refer to how organizations could sell their microtransactions to users while avoiding the resistance against them. In order to not be seen as greedy the game should focus on singular monetization model. As an example if microtransactions are chosen as monetization model the game should be priced low or free in order to lower the resistance. Different players prefer different kind of microtransactions. It was mentioned in several interviews that they wanted to support the developers. As such the microtransactions should be treated as a way for the players to give something back to developers. If microtransactions feel too forced it may result in resistance against them. This requires a leap of faith from the publishers as they have to be sure that the product they are offering is good and engages enough players for longer period of time in order to be profitable.

## 9 CONCLUSIONS

The research question was why microtransactions within PC games were facing resistance. In order to fully understand it the integrative framework by Kim & Kankanhalli (2009) was chosen as main theory. It was further expanded with theories related to how resistance can change and what kind of resistance behaviors there can be. These helped in understanding and identifying the resistance behaviors within interviews. The possible object of the resistance and the reasons for playing were also explored through complementary theories.

The implications of the research show that the integrative framework (Kim & Kankanhalli, 2009) mostly fit to consumer context. It provides necessary concepts that are required in understanding resistance within consumer context. Yet some of the concepts do not exist in the same form as within organizational context as the users do not exist within a singular company and the reasons for using the system are varied.

The absence of actual organization changes the concept of colleagues. Many interviews stated that they find the information related to microtransactions from community forums or through Youtube videos that are from individuals. None of the interviews mentioned larger media outlets such as IGN or Gamespot. It was interesting to see that none of them mentioned the publishers or developers' website as the source for information. As such it seems that the role of colleagues is similar friends of the user or the users that can be found from the different digital platforms such as Reddit or Youtube.

Organization needs to support the system usage through new means such as taking into account the finite resources that users have. In organizational context the price to implement the system is paid by company. In consumer context it is paid by the user. Therefore, when microtransactions are implemented some companies have erased or lowered costs elsewhere such as making the game free to play or releasing new content for the game free of charge. In some games the same items sold by microtransactions can also be obtained by playing making it a player chose either to invest time or money to earn them. It is worth noting that in interviews some users bought microtransactions just to

support the developers. This in turn is reversed organizational support where actually the users wish to support the organization.

The reasons to use the system were varied and as such the outcome that the system provides is different for different users. Some look for social interaction while others wish to experience story that affects their emotions. The gratification can also come from competing with other players and emerging victorious against all odds or completing optional content. In this sense the equity implementation model and its way for measuring efficiency does not fully translate to consumer context. All of the mentioned reasons could be classified as hedonistic value. Therefore, if the net equity is switched to net hedonistic value, the theory could fit the consumer context. As an example, if user buys a new skin and plays the same character as before. The user is doing the same amount of inputs as before, but he could receive more hedonistic value as the updated visual animations and effects could be perceived as more pleasant.

The answer to the research question “Why user resistance behaviors occur against microtransactions in PC games?” can change depending on the user and how microtransactions are implemented. The reasons that were mentioned in the interviews refer to lacking organizational support, selling microtransactions that affect power balance between users in multiplayer games or not receiving enough benefit when buying microtransactions.

## 9.1 Limitations and future research opportunities

The sample size of the research is small which is justifiable for qualitative research. As the sample size is small the findings of cannot be generalized to larger sample. In the end goal was to get a better understanding of user resistance phenomena in consumer context through investigating the resistance against microtransactions. The research provided insights on how the existing theory by Kim & Kankanhalli (2009) could be changed in order to use it in this context.

One of the interesting findings was the possible commonalities between tipping and motivations to buy microtransactions. Future research could include theories related to why customers tip and compare it to why users buy microtransactions. In this thesis it was only noted that if users were happy with the provided service they wanted to support the developers. Theories related to tipping were not examined.

Other possible research possibilities would be related to the change in integrative framework (Kim & Kankanhalli 2009). Future research could use modified integrative framework that changes net equity to net hedonistic value.

The change related to perceived colleagues should also be scrutinized. The information related to microtransactions was often received through non-organizational channels, yet the research did not further inquire the reasons behind it. It resembled how in organizational context the opinions of colleagues are held in higher regard compared to others. In this situation opinions of individuals were taken into account and reviews by media company were ignored.

Lastly the only case where it was evident that the resistance had shifted towards the advocates of the system was related to Electronic Arts. This could be investigated and especially the reason why it has happened as it could provide further insights on possible shortcomings that acted as triggers and shifted the resistance towards the advocates.

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## **APPENDIX 1: Interview questions**

How old are you?

Which country do you live in?

What is your gender?

- male
- female
- other

Occupational status?

- student
- employed
- unemployed
- student and employed

### **Motivation to play:**

1. What kind of games do you play currently?
2. Why do you play those games?
3. Do those games have microtransactions in them?

### **Microtransactions:**

4. What do you think about microtransactions in those games?
5. How do you evaluate if microtransactions are bad or not? (features, where to get information)
6. What do you think of buying microtransactions?
7. How microtransactions affect your purchase decision?

8. Have you reviewed game negatively because of microtransactions?
9. What do you think of items that can be gotten only by microtransactions?
  - How important it is for company to provide option to get the same items also by playing?
10. What benefits do you see in microtransactions?
11. Do you think that microtransactions have affected the games that you play?