Master Thesis

PURCHASE DRIVERS FOR COSMETIC VIRTUAL GOODS IN VIDEO GAMES

A mixed methods study on purchase motivation differences between single player and multiplayer video games

Student: Giuseppe Allegra
Student number: 133059
Supervisor: Seidi Suurmets
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1. ABSTRACT

With the advent of online gaming, multiplayer games and social interactions in gaming have been way more diffuse than ever before. A new source of income for video game companies has also revolutionized the gaming industry, as in microtransactions, the purchase of additional content or resources in the actual game after purchasing the game itself (Tomić, 2017). Specifically, cosmetic virtual goods are steadily becoming the most significant revenue stream for most games. This thesis wants to investigate both the industry's and consumers' perception of such cosmetic microtransactions, the drivers of purchase, and how these drivers (and purchase behaviors) might differ between single-player and multiplayer games. This research will investigate these themes with a survey on a sample made of Italian gamers for what concerns consumers and an interview with a long-time industry worker for what concerns the latter. This study has found significant differences in purchase motivations perception between single-player and multiplayer users and that expense on cosmetic virtual goods was significantly higher in multiplayer users. According to the author, this is because the need for affiliation and, more in general, social needs are a stronger compeller towards purchase behaviors than mere recreational needs.

2. INTRODUCTION

In the last forty years, entertainment and media industries have undergone drastic changes in all stages, from production to consumption. Since the technological advancements in the world are quicker than ever, firms have to constantly re-invent themselves and investigate new phenomenons on almost a daily basis. One of the blatant examples of this constant evolution is the video gaming industry.

Gaming is the largest industry in entertainment by far. Gaming (across mobile, console, and PC) accounted in 2019 for more than triple the revenues of Box Office and more than seven times the ones of Music (Richter, 2020). These figures will be even more significant considering that the 2020-2021 COVID pandemic, which has taken a severe blow on the previously mentioned industries, seemed not to have affected the gaming one. Or else, it made it grow. In an article on their website, AnalyticsInsight highlighted how despite the significant fall of the global economy in the last two years, the gaming industry is still growing due to people looking for the distractions and social interactions they lacked in the previous year in gaming (AnalyticsInsight, 2020).

The global video gaming industry is estimated to be worth roughly $159 billion in 2020. This number represents a massive growth from the industry's total value since 2012 (which was $70.6 billion) and the value prediction from the 2016 forecasts, which estimated for 2020 a worth of $90 billion. (WePc, 2020). Besides a growing trend, this also shows that the sector's growth is more prominent year by year. Even though the vast majority of revenues comes from Asia and the South Pacific (49.2% of the total), Western Europe has shown the most considerable growth rate in 2018-2019 between all the regions worldwide (WePc, 2020). According to research firm DFC Intelligence, more than 3.1 billion people play games – around 40% of the world population (DFC, 2020).

Despite this growing relevance in the global economy, scholars and academia are working at a languid pace towards research on the video gaming sector. According to Malaby, this happens because of “the dismissiveness with which the study of games is still sometimes treated within the academy and which contrasts markedly with the increased interest from policymakers and the public at large” (Malaby, 2007; p. 97).

This overseeing is the main reason the researcher chose this topic as the subject of this thesis: to spark further interest and discussion in consumer research in the video gaming sector. But to get to the actual scope of the study, the author still has to introduce some key concepts.

As mentioned in the first paragraph, entertainment industries have faced repeated and different challenges throughout the years, which forced them to restructure constantly to be sustainable. The video gaming industry was no exception: when the gaming was just born, every project was conducted on rudimentary equipment, had a meager budget, usually arcade consoles in pubs or arcade shops (Tan, 2019). The rising demand and the progress in technology compelled developers and producers to change the system around the industry's economy.

One of the main changes mentioned above was the advent of gaming-specific consoles whose only functionality was play (Tomić, 2017), which various firms released (the most famous of which are Sega, Nintendo, Sony, and Microsoft). Another one, and the most relevant for the last ten years and this research, is the mainstream diffusion of the Internet in our daily lives, which has impacted how people purchase, consume and experience these games, alone and with other people.

The main result of these changes was a radical switch in the business model for companies who operated in the video gaming industry. At first, the primary strategy was to sell the game in its entirety to the customer, creating a gaming system that the author might define as "pay-to-play" (Tomić, 2017). But then, the changes in preferences from consumers and their rising demands put developers and publishers in front of the challenge to keep the business sustainable. These are the reasons why companies came up with the concept of DLC – "downloadable content" -, which the author defines as any add-on content distributed through virtual stores to existing games.

In the following chapter, the author will delve into the DLC commodification of gaming, which might be considered the real-life challenge that brought the topic to light and the scope of this research. The author will also present the research question and the subquestions.

3. PROBLEM FORMULATION

3.1 The microtransaction concept

The gaming industry enacted the DLC strategy to enrich the experience of a single game and lengthen its life cycle. This different way of releasing content allowed companies to avoid the high costs of producing sequels or the financial risk of undergoing the developments of sequels (Tyni, 2011). It also led to a different pricing strategy for games: "free-to-play" (or "freemium") games came into existence that the consumer can play by paying either a meager price or even zero.

These games were sustainable with the help of microtransactions: optional low-price payments, which enabled players to access DLCs (Tan, 2019) that expanded their games more and more.

Microtransactions can be shaped differently throughout games: they can be necessary even to play the game, quite usual in mobile games (i.e. "lives" in Candy Crush Saga, of which you have a set quantity when you start the game but consume every time you start a level and the lack of which prevents consumers from playing), they can be "consumables" (as in one-time goods that provide a set advantage or feature for a limited time), they can be "cosmetics" (as in every content that changes the graphical elements of the game or the player's character and environment they are in, i.e. "champion skins" in League of Legends), they can be "loot boxes" (randomized sets of rewards), or they can even be the so-called "pay-to-win" ones (as in bonuses that players would not have without paying and establish substantial competitive advantages for them).

The author has to remind the reader that such described items are virtual: they only exist in code. Therefore, all regarding their existence and inherent features (such as scarcity and exclusiveness) are entirely up to developers and publishers. Furthermore, some of them (i.e., cosmetics) do not provide the player with what consumer theory calls "use-value" or "the ability of a good to fulfill a need" (Martin, 2008; p.2). And yet, microtransactions are the highest source of revenue for the video gaming industry.

Free-to-play games, which earn their money primarily through microtransactions, accounted for a significant percentage of 80% of dollars spent on digital games in 2019 (WePc, 2020). According to the Entertainment Software Association, almost 50% of gamers have made at least one

microtransaction in the past year. (ESA, 2020). The free-to-play game leading the highest worldwide revenues charts (with a sum of $2.1 billion) in 2017 was League of Legends, a MOBA (multiplayer online battle arena) which microtransactions consist almost their entirety in cosmetic content (Reuters, 2020).

So, having established that these cosmetic contents, accessible through microtransactions, have no use-value to the player, the puzzle to be solved has to be the motivations behind such purchases, considering that they account for so much of the video game industry revenues.
Cosmetic content is not a prerogative of free-to-play games: they also exist in so-called "AAA" games, single-player titles with usually a very high budget and production team (hence the title) (Tan, 2019). However, they are far more widespread in free-to-play multiplayer games – such as the mentioned above games: League of Legends, Fortnite, and the latest gaming sensation Genshin Impact, which experts consider among the most successful games of the last decade.

More in general, multiplayer games have dominated charts in terms of player count. According to Clement, 9 out of 10 of the games with the most players on Steam (a platform used to purchase, access, and play games on PC) are multiplayer (Clement, 2021). The prominence of the multiplayer genre results from the above-noted changes in the industry: the diffusion of the internet and the possibility of connecting people worldwide have led companies to develop more and more multiplayer game modes or even creating entirely new genres.

Games have then acquired a vital social component, which one should not forget when looking at consumer theory. The author knows that social features also drive consumers' shopping motivations, besides mere personal ones (Tauber, 1972). The author also knows from Ajzen's Theory of Planned Behavior that a person will attempt to perform a behavior "[…] if he believes that referents with whom he is motivated to comply think he should try to perform the behavior" (Ajzen, 1985; p. 36).

But, if the central hypothesis of this research is that one should look at shopping motivations for microtransactions in multiplayer games through a social lens, what is to be said about single-player games, in which social interaction is most lacking?

3.2 Research question

This research wants, then, to investigate shopping motivations of microtransactions and how they might differ between single-player and multiplayer games. This investigation will be pursued with a survey to investigate the consumers' perception of their motivations and an interview with a long-time industry worker to check the industry's perceptions and try to match the two. The researcher will further explain the methodology and methods in Chapter 7.

The study will then try to answer the following research question:

How do purchase motivations and habits for cosmetic microtransactions differ between single and multiplayer games?

To answer this question, the author will first use a consumer survey to track their perception of shopping motivation and habits regarding cosmetic microtransactions. Then, the author will interview a long-time industry worker to explore the data obtained and will try to answer the following sub-questions:

1. *How much do consumers perceive social and personal motives to be influential on their purchases?*
2. *How do industry workers' opinions on the subject matter match the consumers' perception of it?*

Furthermore, regarding the first sub-question, the author will try to prove the following hypotheses.

H1. Multiplayer games consumers value more "social" characteristics when purchasing cosmetic virtual goods compared to single-player games consumers.

H2. Single-player games consumers value more "hedonic" characteristics when purchasing cosmetic virtual goods compared to multiplayer games consumers.

H3. Consumers spend more money on cosmetic virtual goods if they have friends playing the same video game and prefer multiplayer games.

4. THESIS STRUCTURE

The thesis' structure will be organized in such wise. Chapter 5 will present the literature review behind this research to familiarize the reader with concepts and notions regarding the gaming industry. In Chapter 6, the author will draw on this research's theoretical framework. In particular, the author will delve on the one hand on consumer theory regarding traditional and online stores' shopping motivations, and on the other hand on behavioral consumer theory and how this applies to the research. The methodology will be in Chapter 7, illustrating the philosophy of science and research design chosen for the development of this thesis and the methods used in this research. Chapter 8 will present the findings and the analysis of the data collected throughout a consumer survey: Chapter 9, instead, will make use of an interview with a long-time industry worker to explain the said data and shed light on possible mistakes in the consumer survey. In Chapter 10, the author will discuss the findings he believes to be relevant to our research questions and hypotheses. Chapter 11 will contain suggestions for future researchers who want to investigate the phenomenon, and Chapter 12 will conclude the thesis, trying to answer the research question.

5. LITERATURE REVIEW

5.1 Brief history of the gaming industry

As hinted in the introduction, the gaming industry has a short history due to its being born very recently. As short as it may be, the abrupt developments in society and information technology allowed gaming to evolve somehow at a faster pace compared to other entertainment industries. This adaptability is also why gaming grew to be the largest industry in entertainment, considering it comprehends around 3.1 billion people.

Canonically, the first video game is considered to be *PONG*, released by ATARI Inc in 1972: a table tennis game (in some countries "ping pong," hence the name) on a black screen. While *PONG* was not the actual first arcade video game (it being *Computer Space*, released in 1971), it became iconically successful due to being way more straightforward than its predecessor. It only asked the player to "Avoid missing ball for high score" (Barton, 2021). *PONG* normalized the idea of playing virtual games on a screen so much that after selling around twenty-thousand arcade cabinets, ATARI managed to sell more than a hundred thousand units for a play-at-home version of it (Hotham, 2020).

In the following years, many other arcade games followed the success of *PONG*. The most notable examples are Taito's 1978 *Space* Invaders, Namco's 1980 *Pac-Man*, Nintendo's 1981 *Donkey Kong* (which featured the first appearance of iconic Italian-American plumber Super Mario). This diffusion of video games led to creating specific consoles that were supposed to move the setting of playing from arcade bars/shops to consumers' houses.

Competition, in-home consoles sector, escalated pretty quickly: fans and experts worldwide argued over which console was technically better, a phenomenon that is still to this day called "console war". Games lineup became pretty quickly a topic of discussion as well, which forced companies to differentiate their offer in terms of game experiences. Game genres came to life in a period of fewer than 15 years from *PONG*, which one could have defined as an elementary sports game. The very first console war happened between Nintendo (home of the Game&Watch and the NES, Nintendo Entertainment System, and whose main titles were *Super Mario Bros*. and *The Legend of Zelda*)

and Sega (home of the SG-1000 and the Master System and the iconic saga of *Sonic the Hedgehog*) (Romero, 2019).

Who actually "won" such console war, and the ones that came after is of little relevance. The key takeaway is that the gaming industry has become highly competitive, which has led consumers to become more and more specific in their gaming preferences.

The second revolution consisted of the mainstream diffusion of internet connection and the implementation of online features in gaming. For what concerns consoles, the public had to wait for the year 2000 for an "internet-ready" console, the Sega Dreamcast (Chikhani, 2015). PC gaming, instead, saw online features some years before – the most prominent example of which are the so-called MMOs, Massively Multiplayer Online games, that allowed a significant number of players to be experiencing the same game at the same time.

The first one of these games was *Ultima Online* (1997) and *EverQuest* (1999), which already included the trade of real money for virtual goods in their gaming experience (Lehdonvirta, 2010). The phenomenon the author is investigating in this thesis is then more than 24 years old already.

5.2 The business model switch in gaming: from games to "games-as-a-service"

According to Lehdonvirta, at the end of the 1990s, virtual goods were already a revenue model for game companies. This presence was the result of a switch in most gaming companies' business models. While at first games were a one-purchase of a complete experience, also due to the low budgets and low capacity (in technical capability and also in available software space) of hardware, since the advent of MMOs, they have turned to be more and more similar to "services" than "one-off performances".

These two different kinds of products require different types of support as well. As already mentioned, this change allowed companies to avoid high financial risks such as embarking on brand new intellectual properties or sequels to their games. However, lengthening a product's life cycle also extends fixed costs, especially the developers' salaries who have to continue working on a game. For players to enjoy a game even years after its release, developers have to roll out continued

updates and new content. This lengthened product life cycle just moves the cost structure to more fixed costs.

Here is where microtransactions come in. In a "game-as-a-service" model, usually, the access to the game content is either available for no money at all (in so-called "free-to-play" games) or blocked by just a small subscription fee (which is usually around $10 or $15 per month). Comparing this to a premium-priced videogame, which as of 2021 sells at approximately $60-70, it takes a company six months to equal the sales of a "standard" game. Companies then came up with the idea of releasing on a more frequent basis tiny chunks of content under a significantly lower price tag.

There is, although, a reason why more and more companies choose to follow the free-to-play business model. First of all, these kinds of services have a potential way bigger audience than other games (Lehdonvirta, 2010). Second, using virtual goods as a revenue model proved to be way more profitable than selling standard premium price games in the last years.

5.3 Different types of microtransactions

A microtransaction is every small payment under the threshold of $15 (even though there are higher-priced ones) with which the player accesses content he would not have had access to without paying. This includes every type of additional content, which the author will try to classify in the following paragraphs. These microtransactions usually are accessed through proprietary online stores (Tyni, 2011) either in the game itself or in the console-specific ones. There is a prevalent type of microtransactions to which people are exposed daily, and that transcends the gaming world: it is the case of smartphones apps' in-app purchases.

The first difference to distinguish is between virtual currency and items. Virtual currency is a currency that exists only in a specific game setting. In a free-to-play game, it is usually separated from the game main's currency, to which the player can have access without spending real money. With such virtual currency, the player can obtain virtual items. This is the case of League of Legends' Blue Essence (free currency) and Riot Points (price-restricted currency), seen in Figure 1.

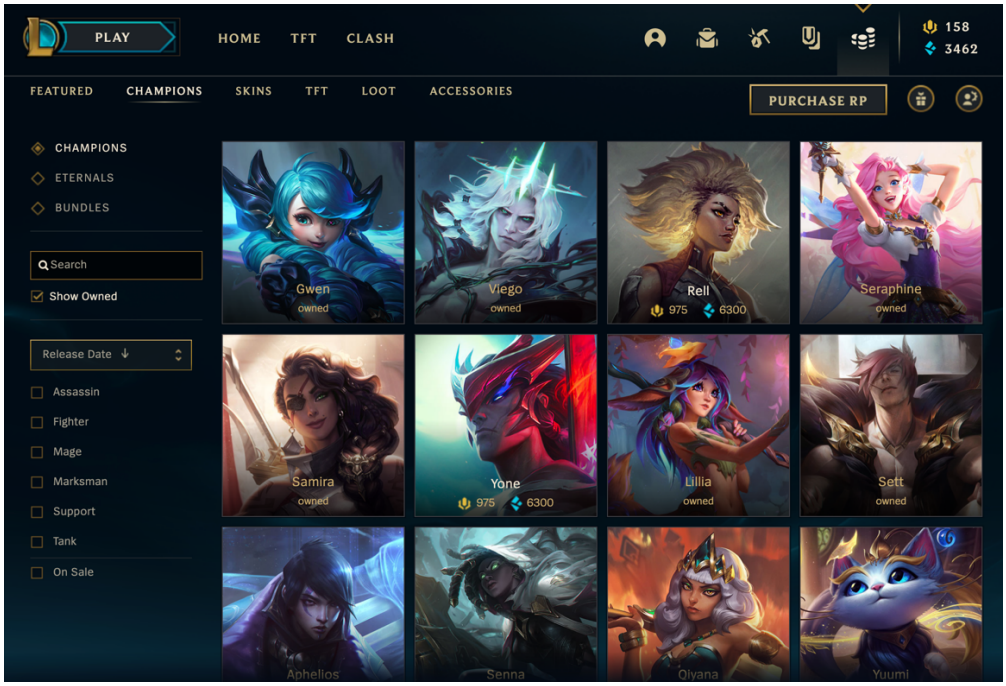


Figure 1 - Example of League of Legends' proprietary store. The screenshot was taken on the 30th of April 2021

At the top right of the figure, one can see the two in-game currencies: Riot Points (at the top) and Blue Essence (at the bottom). A player can earn blue essence by simply playing the game and leveling up his account, with which he can buy characters to add to his roster of playable "champions". To earn Riot Points, instead, he has to spend real money. That is another way for purchasing "champions", but also the only way he can access specific items - such as cosmetic items that show off in-game or graphic enhancements/replacements for their characters (Thorn, 2019).

The second distinction the author has to make is inside the item's category. At large, the author can distinguish between "performance-enhancing" and "cosmetic" items. There is a third category of microtransactions, which is defined as "loot box": however, this kind of microtransaction has raised concerns over the possible link to gambling they might lead to, so more and more games are slowly eliminating them from their content (Zendle, 2020).

The first offer specific advantages to the player over other players who don't spend real money on games. These advantages can vary: from elementary things such as "time-savers" (which allow consumers to execute specific actions faster than other players) to the point of actually better

equipment (for example, weapons or armor, which can be gameplay-defining in player-versus-player (PVP) environments).

These microtransactions are often defined as “pay-to-win” mechanics. Over the years, the gaming community has strongly demonized this kind of strategy, both from a consumer and an industry point of view (Fennimore, 2020). This demonization has led the industry to shift in their microtransactions-accessible content and switch to cosmetic items, which are generally more accepted by communities.

Cosmetic items, instead, change only the graphical aspect of a game. They don’t give players advantages that might be perceived as “unfair” towards other players, but rather are a possibility for them to customize their characters and gaming experiences. An example of this is Champion Skins in League of Legends: they serve as alternate appearances for characters and are usually released in groups of 4 or 5 and following specific themes. (League of Legends Wiki, 2021). You can see an example of this in Figure 2, where you can see different “thematic” skin lines (Space Groove; Battle Academia; Dragon-related) followed by the champion's name for which they serve as alternate appearances.

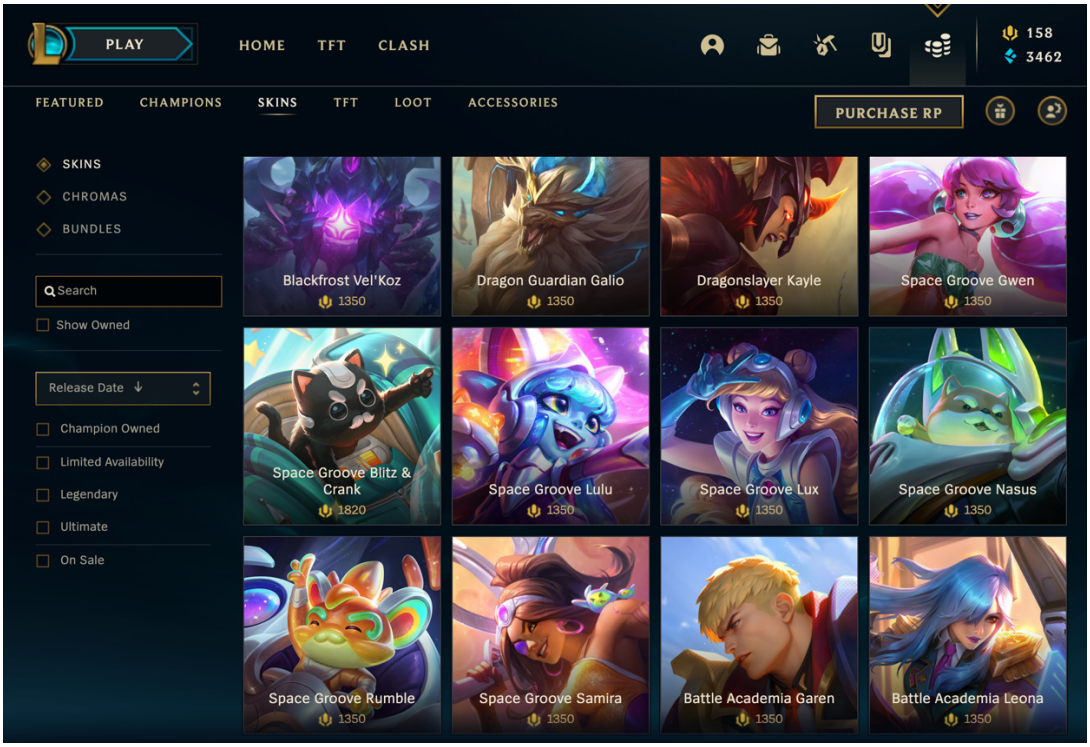


Figure 2 - An example of the cosmetics section of the League of Legends store. The screenshot was taken on the 30th of April, 2021.

These items can hold different meanings to players: as most of these games are multiplayer or social by nature, there is also a social underlying in the purchase and the show off of a specific item.

5.4 Microtransactions in single-player games

However, microtransactions exist as well in single-player games. Tan (2019) tackles the issue in his article, called "Are microtransactions in AAA video games necessary?".

Video games are defined "as AAA" titles when they are high-budget projects from big software houses: an example of this is the saga of *Assassin's Creed* by the software house Ubisoft, which latest installments comprise *Assassin's Creed Origins, Odyssey,* and *Valhalla.* While some of them may have online or multiplayer game modes, most AAA titles are usually single-player experiences.

The first appearance of microtransactions in AAA games happened around 2006 (Williams, 2017). They exist to these days, and the author will use as an example the titles previously mentioned, as in the last three installments of the *Assassin's Creed* saga – one of which (*Odyssey*) is described as well in Tan's article (2019).

The most significant example of microtransactions in *Assassin's Creed Origins*, *Odyssey,* and *Valhalla* is the Season Pass: a $30 pass that allows the player to further expand their game experience by adding new settings and new quests to the main story. This phenomenon is what the author would call "DLC" - downloadable content. While other virtual goods may be considered downloadable content per se, such wording has now taken the meaning of "substantial gameplay addition to a game" in the gaming community.

By having a closer look, though, one would see that the three games mentioned also have both the types of microtransactions that the author distinguished in the previous subsection: "performance-enhancing" and "cosmetics". The first ones are timesavers, which provide the player with experience boosts that allow them to progress quicker in the story. (Tan, 2019). An article by

Altano and Amini (IGN, 2018) stated that these are ways to soften the game's difficulty, allowing less experienced players to still enjoy the game by paying a little bit more.

However, the game also provides "skins" for the player's character, weapons, and means of transportation (horses, ships, etc.). These have no other effect on the game than a graphical alteration of the content, which is usually precisely themed. In Assassin's Creed Origple, set in ancient Egypt, a player can customize its characters with clothing typical of different populations of the same era (Greek, Arabs, Phoenicians, etc.). They can also acquire the clothing of past protagonists of the *Assassin's Creed* saga, acting as if they were that other character in another game.

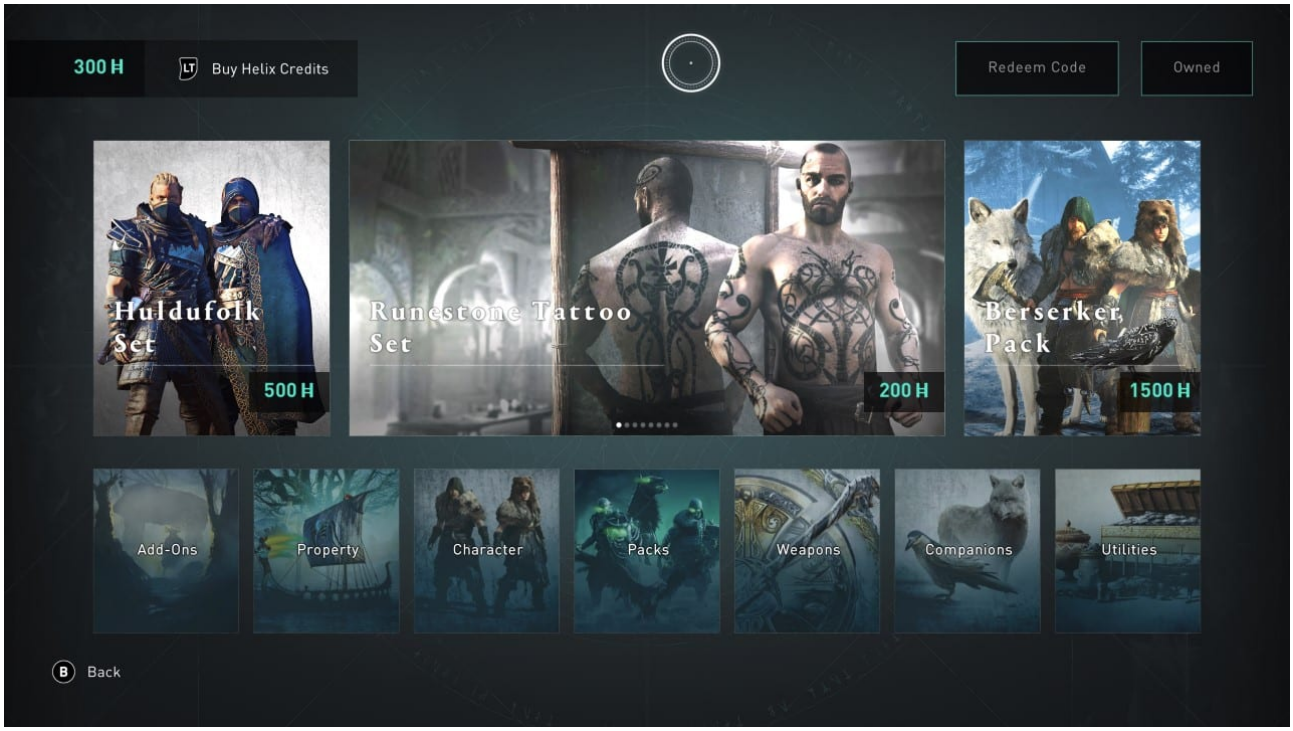


Figure 3 - An example of the cosmetics section of the Assassin's Creed Valhalla store. The screenshot was taken on the 30th of April, 2021.

While performance-enhancing microtransactions satisfy a player's specific need (the one of not having to bear a game that might result to be too harsh), there is no apparent need for cosmetics in such a game. At least for what the author established, in the last subsection, were drivers for purchase – as in the possibility of "flaunting" and the "social" characteristic. In a single-player kind of experience, nevertheless, these kinds of factors might fail to exist. There might be, then, different drivers of purchase besides "social" ones.

To investigate why consumers engage in purchasing microtransactions, the author will describe what virtual goods are in detail, what they are helpful for, and what they could mean for consumers.

5.5 Virtual goods: a literature review of definitions

Virtual good is a term that refers to any item that exists in code in the virtual realm. These items share similar features to real-world properties. However, since these properties are defined by code itself, they can be manipulated and exploited by developers for their better interests.

A first scholarly definition of virtual goods has been given by Fairfield (2005). In his article, he states that a theory of virtual property is fundamental for a better understanding and usage of virtual resources and to reduce searching costs and information costs that might prevent high-value resources from diffusing. He then states that virtual property has three main characteristics that share with physical property: rivalrousness, persistence, and interconnectivity.

The first one is the possibility of the owner to prevent other people from using the object they own. As virtual items only exist in programming code, the author has to investigate if such a thing exists in code as well. According to Fairfield, it does – if one person controls a determined rivalrous code, nobody else does.

Second of all, there's persistence. In the physical realm, an object is persistent – meaning that, if it's not a "one-time" consumable object, it continues existing. This applies as well to most items in code – virtual items could, by definition, not fade after each use.

Lastly, there's interconnectivity. In the physical realm, objects in the world are interconnected: two people in the same space might experience the same things. Similarly, virtual goods are interconnected: even though one person might hold control of it, many others may experience it simultaneously.

These traits mimic real-world properties, thinning the perceived difference between reality and virtual. But, as previously mentioned, developers have control to the full degree of these characteristics since they are determined by code.

Persistence, in particular, seems to be a crucial mechanic regarding virtual goods. As they only exist in code and not in the physical realm, there is no technical reason why virtual items should degrade with usage. However, scarcity is one of the main drivers of the rise in demand (Brock, 1968) for any good. That is why items in virtual worlds usually degrade with time (and sometimes wholly fade away), with developers justifying this with background fiction in MMOs such as World of Warcraft and such (Lehdonvirta, 2010).

Lehdonvirta's article is pretty extensive on virtual goods and how game mechanics can intrinsically create demand.

As the author already said, virtual goods used as a revenue model are already a 20-years-old phenomenon and arena "increasingly popular revenue model", especially for multiplayer games. Nojima (2007) showed that around 32% of game titles in Japan already used virtual goods and microtransactions as their principal revenue source. The author has to define what classifies virtual goods and what distinguishes them from physical ones to proceed with the research. Lehdonvirta (2010) describes them as objects (characters, items, currencies, tokens) that exist in online games and experiences.

Huang (2011) states that virtual goods "have no intrinsic value and are intangible". They do not satisfy individuals' physical needs, such as material goods, but rather a person's social needs –likes status, uniqueness, and self-expression might be. This theory is somewhat confirmed by Martin (2008), which tackles the issue on a consumption theory approach. Starting from the basic idea of use-value that backtracks to Karl Marx, he theorizes that this ability of goods to fulfill a consumer's need (which is the definition of use-value) has now been overthrown by other values intrinsic to goods, such as exchange-value (Jhally, 1987) and sign- or symbolic-value (Baudrillard, 2000).

Even though they lack any use-value characteristic by definition, virtual goods still sell at a very high rate. The author can then assume that the values they are imbued of are the two just mentioned – exchange-value and symbolic-value.

The success of microtransactions and virtual goods, in general, has then led to the problematization of the dichotomy of use-value and exchange-value (Martin, 2008). In particular, academia has investigated if, in some cases, exchange-value can even supplant use-value: and this is precisely the case of the cosmetic virtual goods since there is no physical need for the player to have them (as opposed to "functional" microtransactions in some instances, as discussed in the previous sub-section).

From these definitions, the author can already underline that cosmetic virtual goods have intrinsic hedonic and social functions, as shown in virtual worlds or environments such as Second Life, iMVU, or Habbo Hotel (Martin, 2008). This happens in the same way in analog gaming experiences, such as the MMOs discussed in this Chapter. These two attributes are crucial for shopping motivations.

5.6 Research gap

The author now has made the reader familiarize with concepts that will be repeated extensively throughout this research: in particular, the ones of microtransactions, virtual goods, and the possible motivations that consumers might have in purchasing such items. The author has only hinted at consumer theory, which he will expand on in the next Chapter.

By starting with a review on shopping motivations in traditional stores, the author will then analyze what motivations might exist for online ones. Then, by also tackling behavioral consumer theory and theories that look into consumer experience in general, the author will try to establish a definite set of motivations that will help in future Chapters of this research.

The thesis wants to fill a specific research gap: the differences in consumer motivation among microtransactions in single-player and multiplayer games. While purchase behavior research in

microtransactions trade has already started in academia, the issue has not been analyzed from this dichotomic perspective yet.

6. THEORETICAL FRAMEWORK

6.1 A brief review of motivation theory

This chapter will discuss the theoretical framework the author will use proceeding in this research. The author will start with a brief review of motivation theory to delve more specifically into purchase motivations in stores and then apply this to online stores and gaming.

One of the most famous motivation theories is the one proposed by Abraham Maslow, which depicted a needs hierarchy with five primary needs that a human feels, from the most powerful to the least powerful (Koltko-Rivera, 2006; Maslow, 1943; 1954). When one basic need is satisfied, individuals seek to meet the next in the hierarchy – and so on.

Humans' first need is a physiological need, as in a fundamental need for survival and basic necessities in life, such as food and water. Maslow states, “It is quite true that man lives by bread alone – when there is no bread. But what happens to man’s desires when there is plenty of bread and when his belly is chronically filled?” (Koltko-Rivera, 2006; Maslow, 1943; p. 375)

A new need then emerges, a safety need, which compels an individual to seek security in his life – i.e., through order and law. Consequentially, when this is satisfied, the need for belongingness and love emerges – as in the affiliation with any group of other individuals. Then it is the turn of esteem needs, which an individual seeks in recognition and achievements. Lastly, a self-actualization need emerges: a need to fulfill what an individual perceives is its personal potential.

In his following work, Maslow revisited this theory adding one last step to the need hierarchy, called “self-transcendence” (that denotes the need of an individual to look for a cause beyond the mere self). However, the author did not consider this to be relevant for the research (Koltko-Rivera, 2006; Maslow, 1969).

As extensively hinted at in our research, cosmetic virtual goods do not satisfy physiological or safety needs: they are not needed for survival, and they do not provide individuals with security and

safety. It is then logical to assume that the needs they satisfy are higher in the needs hierarchy pyramid.

The two most relevant needs cosmetic virtual goods satisfy are the need for belongingness (the author talked about how gaming has become a community in which people looked more and more during the years to interact and communicate with) and esteem (a purchase could be seen as an achievement for completing something in one's life).

The two needs identified as primary for this research find validation and development in another critical motivation theory: the one by McClelland (1985).

Motivation theorist David McClelland worked extensively on implicit social motives – unconscious cognitive or affective associations that induce individuals to perform behaviors (Zurbriggen et al., 2002). Of the 20-something implicit motives identified by Murray (1938), McClelland classified three of these as crucial: power, affiliation, and achievement.

The power motive implies an individual's need for exercising power and control over something or someone. This could have positive motives (such as wanting to solve problems, care for subordinates or create optimal environments) or negative ones (such as wanting to manipulate other people to achieve something, ignoring subordinates, and so on) (Bataeva, 2018; McClelland, 1985).

The affiliation motive is quite similar to Maslow's need for belongingness one. It describes an individual who wants to establish positive relationships with people, provides or needs assistance and support from others, seeks approval, and fears rejection from other individuals (Bataeva, 2018; McClelland, 1985).

Lastly, the achievement motive is when a person wants to solve or complete a task, improve a process, or is willing to take responsibility for any activity (Bataeva, 2018; McClelland, 1985).

While the last two are pretty analog to the two identified as relevant for this research in Maslow's theory, it is essential not to overlook the power motive in purchasing a virtual good. A purchase could, in fact, be perceived as an affirmation of power on other people (due to having more money

or just having a more exclusive virtual good). In the researcher's opinion, the key of all motivation when it comes to these kinds of purchases is interaction. This concept will be developed in section 6.3 when the author will discuss the Theory of Planned Behavior.

6.2 Purchase drivers in traditional and online stores

The author will now frame what general purchase drivers and motivations in both traditional and online stores are.

To a general degree, consumers' reasons for shopping are explained by motivation theory, according to which cognitive and affective motives seek personal satisfaction or gratification (McGuire, 1974). Shopping research showed that consumers are driven by utilitarian motives (O'Brien, 2010). However, it is a fairly established point in academia that people do not shop only for the very need of the purchased items. There are more underlying to it, particularly hedonic motivations like entertainment, social interactions, and so on (O'Brien, 2010). Scholars have also extensively tried to categorize shoppers, so there are many consumer taxonomies in literature.

One of the essential papers on the matter is the one by Tauber (1972) called "Why do people shop?". The article theorizes there is more to a mere functional need in shopping and that shopping is a function made from many variables – some of which may even be completely unrelated to the act of purchasing.

Tauber makes a distinction between personal motives and social motives. Regarding personal motives, shopping can be a role-playing act. Since many of the activities people undertake are learned behaviors, people might shop because they are expected to for the position or role they assume in society. This can be exemplified with shopping being associated in society with women since they were the people that the system expected to care for the house and meals. Shopping can also be a way for diversion from daily life, an occasion for physical activity or sensory stimulation to fulfill a recreational need for the consumer. Studies have also shown shopping may have a self-gratification effect on people: several subjects have reported feeling less sad after spending money on their interests.

On the other hand, there also are social motives behind it. First of all, since the beginning of time, the marketplace has represented a social hub. It can provide shoppers with social interactions opportunity, and some shopping activities may even start just as a direct result of interactions with friends. Furthermore, shopping can enhance a person's possibility of communicating with peers having analog interests. Since most hobbies rely upon products, services, or experiences, shopping can be an act of familiarizing with such things to be able to befriend other people. The same happens when someone wants to communicate the belonging to a specific peer or reference group. Dholakia (1999) confirms this, stating that shopping is a spectacle in which one is both performer and spectator.

To summarize, Arnold and Reynolds (2003) theorized six types of hedonic shopping: adventure (seeking stimulation and adventure), social (socializing with peer groups, friends, etc.), gratification (alleviating sadness or boredom), idea (keeping up with trends), role (as previously explained) and value (seeking bargains). Monsuwé (2004) added other facets such as pleasure, arousal, and escapism.

Shopping indeed fulfills a person's need, but it does not necessarily coincide with the utilitarian need of a specific good. When a person experiences one of the above-noted needs and recognizes that shopping activities may satisfy that need, they allocate money, time, and effort to pursue the action.

At the same time, there is no unified theory of shopper behavior (Tauber, 1972). This is because shopping, buying, and consuming are very different activities, and there are very different behavioral determinants between them. Furthermore, shopping might not always be well planned: impulse shopping is a phenomenon that has quickly risen in today's world, especially with the vast increase of offer of products and shopping platforms.

Online shopping motivations are incredibly driven by convenience: to be able to shop from one's home is, in fact, usually the most compelling reason behind buying something virtually (Beldona, 2005). Furthermore, according to Swaminathan (1999), people who look for social interaction in shopping are less inclined to buy online since the virtual shopping activity lacks social function.

While this might be true for most goods one can shop online (ex. Clothing, groceries), this does not apply to the purchase of cosmetic microtransactions. And this is because of the interconnectedness feature discussed in the literature review; an item, at least in an environment that comprises other people (such as any MMO), is experienced by other people right after the purchase happened.

Utilitarian motivations are also to be excluded from consumer motivations when one looks at cosmetic microtransactions. While there might be utilitarian needs behind the purchase of "timesavers" or "performance-enhancing" ones, the author has also already stated that cosmetic content lacks "use-value" and is instead purchased for their exchange-value or symbolic-value (Martin, 2008).

By eliminating utilitarian motives from the picture, the author can state that hedonic reasons are, most of the time, the only motivations behind shopping for cosmetic content. It was already explained that hedonic motivations vary from personal to social causes. To further delve into this, the author will make use of the theory of planned behavior.

6.3 Theory of Planned Behavior

The author has already stated that in the environment investigated, shopping can be a social act: whether to communicate social belonging (Martin, 2008) or to flaunt off a specific social value (Lehdonvirta, 2010), there seems to be particular importance to what other people would perceive or think of one's purchase.

This assumption is validated by Ajzen's Theory of Planned Behavior (from now on TPB). TPB is a behavioral theory that extended the precedent Theory of Reasoned Action (from now on TRA), designed to predict volitional behaviors and their relative psychological determinants (Ajzen, 1985). The critical characteristic that TRA failed to capture the potential mismatch between a consumer's intention to pursue an action and the actual performance. TRA perfectly predicted behavior only when the measure of the intention reflects the subject's intention and when the behavior is performed under volitional control.

However, there might be many obstacles to the direct correlation between intention and behavior. That is why TPB theorized that intentions might be predictors of a subject's attempt to perform a behavior, but the performance might not happen at the end of the day. Ajzen then goes on to state that intentions are often better predictors of attempted rather than actual behavior.

One of the most prominent obstacles to one's performance of a behavior is one's beliefs towards what performing or not performing a specific action might result in. If a behavior happened in total volitional control, such beliefs would not be taken into consideration.

The most relevant belief to this research that can affect a consumer's performing or not performing a behavior is what he believes important referents would think of such performance (Ajzen, 1985). According to the theory, a consumer will attempt to perform subject behavior if he believes that the people he wants to conform to think he should perform such behavior.

Applying this to our research, the author can proceed to assume that before performing the behavior of purchasing cosmetic microtransactions, a person evaluates what they think their important social referent group (as in fellow gamers, strangers or not) will value more. Consequently, before considering how much important referents affect a consumer's purchase behavior, one should identify their important referents.

For the sake of this research, the author assumed that fellow gamer friends would be the most critical referent group to our survey sample for two main reasons. The first is that in the literature examined, close social peer groups were quoted the most among online shopping motivations. Secondly, the author thinks that self-reports might not be the perfect instrument to capture one's perception of how much strangers are considered important to oneself. However, this study's survey will include a variable that will consider strangers' influence on shopping behavior.

6.5 A taxonomy of motivations for the purchase of cosmetic microtransactions

In the next chapter, the author will explain which was the methodology process behind the research. However, before doing that, one has to establish a taxonomy of motivations for cosmetic microtransactions' purchase based on our literature review and theoretical framework to be considered when collecting and analyzing data for this research.

First of all, utilitarian or more traditional shopping-related variables are to be included for the sake of completion. The first variables will then be "Price" and "Advertisements".

Secondly, with the aid of the Theory of Planned Behavior, the author established that social groups that people might consider important referents influence one's behavior and, consequently, purchase behaviors. As previously mentioned, the survey will work on the critical assumption that the most important referent group for our sample is friends. So, the first variable will be "Social value towards friends". However, the survey will also have a "Social value towards strangers" variable to test the potential of future research on important referents in the gaming community.

Friends as important referents will be an object of research in their spending behaviors (and how this might impact one's behavior) and, at a more fundamental level, in their jointness in playing the game. In the light of a person's need to feel status or authority and of issues with self-determination in specific social groups, the author will also add "Being able to distinguish from others" as one of the variables.

Lastly, the survey will consider personal hedonic reasons to capture if they are significantly more prominent in single-player games. These motivations will include "Aesthetic features", "Roleplay," and "Identification with oneself's avatar/character".

The variables are therefore here presented:

1. Price
2. Advertisements
3. Aesthetic features

4. Roleplay
5. Identification with oneself's avatar/character
6. Being able to distinguish from others
7. Social value towards strangers
8. Social value towards friends

7. METHODOLOGY

In this chapter, the author will delve into this thesis's methodology and research method. First, the author will illustrate the research paradigm and the research approach; then, he will move onto the methods that will be used, presenting the research strategy and design.

7.1 Research paradigm and philosophy

Business research is a systematic process that people undertake to describe, explain, understand, criticize and analyze matters which are relevant to themselves. The author defines this process as "systematic" because it is based on logical links and not solely on beliefs (Ghauri and Grønhaug, 2005). Before actually stating how such things are going to happen (describe, explain, understand, criticize and analyze), the author has first to establish the fundamental belief system that leads this research, as in what is the research paradigm that applies to it (Guba and Lincoln, 1994).

A research paradigm, as previously hinted, is a primary system of beliefs and theoretical frameworks that comprises assumptions on the ontology (as in the nature of reality), epistemology (what constitutes knowledge that is accepted in the field), axiology (the roles that the researcher's values play in the research), methodology and methods in the study (Rehman and Alharthi, 2016). It is a frame in which the most crucial component is the research philosophy that describes "the development of knowledge and the nature of that knowledge" (Saunders, 2009). These frames are "accepted (author's note: by scholars) models or patterns" (Kuhn, 1962; p. 23)" of "deep philosophical positions relating to the nature of social phenomena and social structures" (Feilzer, 2010; p. 7).

Two main research paradigms are common in academia. One is positivism, which the author might summarize as "contextualized causal understanding" of realism (Greene et al., 2001; p. 29). The other is interpretivism, which is characterized by the belief that reality is socially constructed subjective and may change from one person to another.

The research paradigm of this thesis, however, is an alternative position to the two just presented. It is, in fact, pragmatism. This research philosophy states that the most important thing to consider

when asking questions of epistemology, ontology, and axiology is the research question: a position might be more appropriate than the other for answering the different questions (Saunders, 2009).

Tashakkori and Teddlie (1998), for example, theorized that the philosophy adopted in research should be thought of as a continuum rather than opposite, strict position. This position allows the researcher to not engage in discussions on the nature of truth and reality but instead on studying what is attractive to the researcher and what seems appropriate.

However, it would be reductive to define pragmatism just as a methodological "whatever may work" approach (Morgan, 2013). The work of the philosopher John Dewey is of particular importance to this concept. On the matter of the conflict between realism and idealism (which may be considered assimilable to the conflict between positivism and interpretivism), he stated that both positions on the nature of human experience were equally important. "On one hand, our experiences in the world are necessarily constrained by the nature of that world; on the other hand, our understanding of the world is inherently limited to our interpretations of our experiences" (Morgan, 2013; quoting Dewey, 2008).

Pragmatism does not dismiss the arguments on the nature of reality; instead, it recognizes the value of different research approaches. Rather than answering existential questions, pragmatism concentrates on catching the beliefs that are more directly connected to actions. Pragmatists think that research should not accurately represent reality but rather try to be useful (Rorty, 1999). This answers questions of ontology regarding this research.

This concept is reflected in the paradigm's epistemology. Both phenomena the author can observe and subjective meanings are considered acceptable knowledge based on the research question. In this way, the author can integrate different perspectives to interpret the data (Saunders, 2009). The same can be said about axiology: the researcher's values have a prominent role in interpreting the findings, and the researcher adopts both objective and subjective points of view (Saunders, 2009).

Concerning method, even though pragmatism as a research paradigm can be used as a philosophical stance regardless of quantitative or qualitative methods (Morgan, 2013), mixed methods research seems the fittest due to the author's epistemological positions. In fact, "if phenomena have different

layers, how can these layers be measured or observed?" (Feilzer, 2010). The solution is then to bridge this gap by using both quantitative and qualitative methods, trying to analyze different facets of the phenomenon with different methods. The author will discuss the method of this research in section 7.3.

7.2 Research approach

When discussing research approaches, what matters is the procedure of broad assumptions towards data collection methods, analysis, and interpretation. According to scholars, there are three main research approaches: deduction, induction, and abduction (Saunders, 2009).

Deduction is more tied to positivism and scientific research and is consequently the most used approach in natural sciences. A list of five consequential stages has been compiled by Robson (2002) regarding deductive research: deducing a hypothesis from the theory, expressing the hypothesis in operational terms, testing this operational hypothesis, examining the specific outcome of the inquiry, and modifying the theory in light of the findings (Saunders, 2009). The deductive approach, then, needs a precisely structured methodology to test hypotheses and usually uses quantitative data. Induction, instead, is more tied to interpretivism and social sciences. The scholars that theorized it were critical of cause-effect links, especially without setting a context that would explain how humans interpreted their reality. Instead, they would focus on understanding these meanings and these possible alternate realities by first collecting qualitative data and then coming up with interpretations of said data (Saunders, 2009). A third alternative approach has been theorized: abduction. This is the method of collecting data and then draw the best possible conclusion from the data collected (Saunders et al., 2019).

The author has found both deductive, inductive, and abductive approaches to be fit for the research. Based on the literature reviewed and the theoretical framework designed for the thesis, the author came up with four hypotheses that will be tested using quantitative data. Then, the author will use collected qualitative data to explain said data and come up with interpretations of it. Lastly, the author will develop possible conclusions from the research carried out by matching and integrating the two types of data. In the next section, the author will make use of this explanation to answer questions of method.

7.3 Method

The author has stated in the research paradigm section that pragmatism's best fit is mixed-method research. This is compliant with this thesis' research question and objectives, which are to test some hypotheses on a small sample and then explore this data with the help of long-time industry experts. For this reason, the research can be considered a mixed-methods study. This is a relatively emergent research methodology that mixes quantitative and qualitative data in a single inquiry (Johnson, 2004). This is also an attempt to legitimize multiple approaches to answer different research questions instead of forcing a researcher with a single approach and method. Specifically, the research typology chosen was mixed-method, which usually comprise a first step of conducting a quantitative mini-study and consequentially have a qualitative one and then integrating the findings (Johnson, 2004).

7.3.1 Purpose of the research

The research purpose defines what the objectives of the research itself are. Scholars have distinguished between descriptive, explanatory, and exploratory studies: however, a research can have more than one purpose at the same time (Saunders, 2009). Descriptive studies mean "to portray an accurate profile of persons, events or situations" (Robson, 2002; p.59), so the researcher must have an unmistakable idea of the phenomenon. Explanatory studies have instead of the goal of studying " a situation or a problem to explain the relationships between variables" (Saunders, 2009; p. 140). Exploratory studies, instead, want to find out "what is happening; to seek new insights; to ask questions and to assess phenomena in a new light" (Robson, 2002; p. 59).

To uncover the research purpose, the author has to look at the research question itself (Yin, 2018). The author can see that the research question of this thesis is a question of "How". These questions are usually associated with explaining phenomena in specific contexts and conditions (Yin, 2018). However, the author also has presented a detailed description of the subject phenomenon, which served as a ground basis for the explanation study carried out with the method. The author can then describe this study as a "descripto-explanatory" one (Saunders, 2009), where the descriptive part is

not worth in itself. Still, it is a premise to explain how microtransactions purchase motivations differ between single and multiplayer games. Furthermore, this study is not meant to be concluding the research on the investigated matter. Instead, it can be used as ground for future research, the possibility of which the author will cover in the last chapter.

7.3.2 Research strategy and design

As hinted extensively until now, this thesis will make use of two methods: a consumer survey and an interview with a long-time industry worker. The strategy adopted will then be the survey and a case study. Survey as a strategy is used with deductive approach and for descriptive and exploratory research (Saunders, 2009). Hence, the author will use it to answer the "how much" first research sub-question. This will allow us to collect quantitative data, which the author will be able to analyze quantitatively using descriptive and inferential statistics.

The survey will be administered to a specific sample: this is due to the time and resource constraints that would imply administering the survey to a whole community or population. With sampling, the author can try to develop findings that might represent an entire community spending less time and resources (Saunders, 2009).

The second research strategy adopted in this thesis will be the case study. According to Robson (2002), a case study is a research strategy that embarks on investigating a specific phenomenon in its context using multiple sources of evidence. The case study strategy is particularly relevant when wanting to obtain a vast understanding of the research's context and the processes in it (Morris and Wood, 1991). It is also helpful to answer the "how" second research sub-question and the main research question.

The adoption of a case study following a consumer survey will require a triangulation of data. Triangulation is the utilization of different data collection techniques and sources of evidence in just one study to make sure that the data collected are coherent throughout the actors involved. This is particularly relevant for this research since the research question wants to match consumers' and industry's perceptions. The author considered these strategies the best fit for this research.

There are two different case study dimensions, which distinguish four case study strategies. The first dimension is single case vs. multiple cases; the second one is holistic case vs. embedded case. Regarding the first dimension, the thesis will adopt a single case dimension. Yin (2003) argues that multiple case design is preferable to establish whether the other cases substantiate the first case's findings. For this reason, a multiple-case method is preferable to the single-case one.

However, the author chose to undertake the single case design for two main reasons. First of all, time and accessibility constraints: big companies who work in the gaming industry are often not quite approachable. The interview used in this thesis was obtained because of a previous connection, but newly established links would not result in success. Secondly, the author strongly believes that the data collected would vary insignificantly between different companies because they use very similar marketing strategies and sell very similar content. This is why the single case study design was adopted, and the case will involve the local Italian branch of one of the biggest companies in the video game industry.

Regarding the second dimension, Yin distinguishes between holistic and embedded. This is regarding the organizational unit of analysis. The embedded design examines several sub-units within the organization, as in departments or different teams. The case study adopted in this research only considers one specific team of the company, the marketing ones, and does not want to reflect the organization as a whole (as, instead, is the holistic design aimed to). Hence, the method adopted was the embedded single case study.

7.3.3 Time horizon

The author will now define the time horizon of this research. According to Saunders (2009), there are two different time horizons one could adopt in a research project: cross-sectional and longitudinal. Cross-sectional studies are more like instantaneous pictures of a phenomenon, as in a depiction of a particular phenomenon at a particular time. Longitudinal studies, instead, expect to observe people and data over time to exercise control over the investigated variables (Adams and Schvaneveldt, 1991; Saunders, 2009). Due to time constraints, the study will be cross-sectional.

7.4 Data collection

There are two primary sources of evidence in this research project. One is a consumer survey, and one is a semi-structured interview – both of which are considered primary data because they were assembled solely for the purpose of this research.

A survey (often described as questionnaire) is a data collection technique in which every subject is asked a specific set of questions in a particular order (deVaus, 2002). This data collection method works best with standardized questions that can be interpreted in the same way by every subject (Robson, 2002). They are often used for descriptive and explanatory research, hence the adoption for this thesis (Saunders, 2009).

The author adopted a self-administered questionnaire that is entirely completed by the subjects because of time and resource constraints: the specific questionnaire type was an internet-mediated questionnaire because the survey was administered online on the Qualtrics platform. The author will describe the sample in the next section. However, the author can anticipate that it was promoted through his social media platforms (mainly Twitter and Instagram) with the help of his existing network of friends to get to the most considerable possible number of people. Five hundred twenty-one people started the questionnaire: however, only two hundred twenty-nine completed it in its entirety. This was considered a fair amount of respondents since the survey was explicitly targeted at Italian gamers (and was only deemed completed if answering positively at gaming-specific questions specified in the next paragraph) and since the time and resources constraints.

The survey was promoted from the start as a survey only for Italian gamers: first of all, the questionnaire was written in the Italian language, and second of all, the promotion included a gift card for aesthetic microtransactions for a video game of the respondent's choice. In this way, non-gamers would not be motivated to start the survey.

According to Dillman (2007), three types of data can be collected through questionnaires: opinion variables, behavior variables, and attribute variables. All of the categories above were comprised in our survey.

The survey had three sections: a first one that was meant to gather personal (non-sensible) data on the respondents, such as gender identity, age, and provenience. These are an example of attribute variables, which describe characteristics that a respondent possesses. Then, it also had two final questions: “Have you ever purchased microtransactions in video games?” and “Do you prefer single-player games or multi-player games?”. If the answer to the first question were to be no, the respondent would have been brought to the ending section of the survey. If, instead, it was to be yes, the respondent would have been redirected to a different section based on the answer to the second question.

A second section had two iterations: one for people who preferred single-player games and one for people who preferred multi-player games. First of all, the concept of microtransactions and aesthetic microtransactions was introduced. Then, the set of questions was the same and in the same order. This was the core section of the survey, meant to collect the actual valuable data for the research: it comprised both opinion variables, as in questions on how respondents feel about something or perceive something, and behavioral variables, as in questions on what people did in their gaming experiences and so on.

The last section would gather the emails of the respondents and the game they chose as the object of the possible gift card. A privacy disclaimer was included in the section to warn the respondents that the email gathering was only functional for the gift card draw and that any database constituted with the emails would be deleted right after the draw. Furthermore, this process was completely optional, making the respondent choose if they wanted to participate in the draw or not.

The complete list of questions of the survey will be translated in English and attached to this thesis in Appendix A. The analysis process of the data gathered with this survey will be explored in the next section.

The second data collection technique adopted in this thesis will be the one of semi-structured interviews. The semi-structured interview technique was utilized because of the need for qualitative data for the mixed methods approach adopted.

The researcher actually expected to have three interviews, of the duration of 30-45 mins each, in this research. The three interviewees were existing connections of the researcher, and the three of them were part of different actors in the gaming industry and occupied different positions to have a clearer picture of the industry POV on the matter.

However, two of the interviewees asked numerous times to reschedule the interviews, to the extent that there would have been no more time to add them to the research. This rescheduling was, according to the interviewees, due to their workloads and time constraints. Hence, only one 30-min interview was conducted.

The researcher considered this to still be relevant for two main reasons. The first being the very nature of this study, as in mixed methods: the amount of data collected with the survey, which was bigger than expected, compensated for the lack of qualitative data. Furthermore, being this a mixed-method study, the researcher did not feel it necessarily needed more qualitative data to conduct a mini-qualitative research. However, this decision was not taken lightly and was only accepted as valid by the researcher because of the time and resource constraints that the COVID pandemic created. Secondly, the single interview provided way more inputs than the researcher expected.

Interviews are purposeful discussions between two or more people (Kahn and Cannel, 1957; Saunders, 2009). They can be of three types: structured, semi-structured, and unstructured or in-depth. The second and the third ones are a non-standardized typology, as opposed to the first one, which is standardized, based on the second distinction of typologies made by Healey (1991) and Healey and Rawlinson (1993, 1994).

The interview conducted for this thesis was a semi-structured one: this means that the researcher had a list of themes and questions to cover, but based on the flow of the discussion and the inputs of the respondents, the researcher might have omitted some questions and added others. The interview was conducted on the video conference platform Zoom due to the long distance between the researcher and the respondent and the COVID-19 pandemic safety and travel restrictions.

The semi-structured interview was adopted in this research due to the existing connection between the researcher and the respondent, to keep the approach friendly and non-threatening and to allow

the respondent to answer the questions in a comfortable way (Yin, 2018). The whole translated, transcribed interview can be read in Appendix B.

7.5 Data analysis process

In this section, the author will discuss the data analysis process for both methods adopted in this thesis. Regarding the survey, after collecting the data through the platform mentioned above Qualtrics, the researcher obtained a .xlsx file with all of the questions in the first row's different columns and each subsequent row having the data of each different respondent's answer.

The data was cleaned in the following manner: first of all, the researcher deleted every respondent who did not complete the survey in its entirety. Secondly, the researcher excluded from the data 25 respondents for two main reasons: either their completion time was very low (below 1 minute) compared to the average, or their answer pattern was somehow considered suspicious (ex. all the variables were given a "100" value). Hence, the number of remaining respondents was 229.

According to business statistics, there are two primary data typologies (Berman Brown and Saunders, 2008; Dancey and Reidy, 2008): categorical data and numerical data. These are distinguished by the numerical measurement utilized to collect said data. Categorical data refer to values that cannot be measured numerically and are instead classified into categories or described in ranks or orders (Berman Brown and Saunders, 2008). Numerical data, instead, are considered "quantifiable" because they refer to those values that can be counted numerically as quantities (Berman Brown and Saunders, 2008). Both categorical data and numerical data were collected for this research. The first was presented as raw data, and the second was analyzed through business statistics.

After cleaning the .xlsx file, the researcher has utilized the software application STATA to run t-tests and ANOVA tests on the numerical data collected in the main section of the survey. By doing this, the researcher tested significant relationships and differences between the different variables identified in this research. This process is what scholars call significance testing (Berman Brown and Saunders, 2008). This test was conducted in order to test the hypotheses presented at the start of this thesis and other hypotheses the researcher considered interesting during the analysis process.

The tables obtained were put into graphs, and the findings of this analysis, along with tables and charts, will be featured in the next section or Appendix C.

The author will now discuss the interview data analysis. The interview was conducted in the Italian language and recorded through the help of the proprietary instrument of Google Meet. However, a secondary recording was enacted to allow the researcher to have a backup if anything would have gone wrong with the Google Meet recording in the first place. The interview was then transcribed with the help of the web application Trint, and the researcher corrected and cleaned the transcription by listening again to the whole recording.

Being interviews a qualitative data collection technique, the resulting data was non-numeric and not quantifiable. The data was, in fact, the words making up the conversation between the researcher and the interviewee. Because of the non-standardized and very complex nature of qualitative data, the data needed to be summarized and categorized. (Saunders, 2009) This process was undertaken with the help of coding.

7.5.1 Coding and coding book

Coding is the process of labeling excerpts of interviews containing specific aggregates of information to give them a particular meaning which was considered relevant for the research question by the researcher. The coded data is, in this way, way more condensed than the original, raw qualitative data of the interviews.

The first step of the coding process consisted of the researcher using computer-aided qualitative data analysis software NVivo and then naming the codes with a descriptive method to have a more straightforward “coding book” (Miles, Huberman & Saldana, 2014). The following coding book resulted from this activity, with the codes presented in the chronological order they were created in the first place.

NR.	CODE	DEFINITION
1	Interviewee background	This code was used when the interviewee talked about his background in the industry or as a consumer.
2	Video games history	This code was used when the interviewee talked about history of gaming.
3	Differentiating user experience	This code was used when the interviewee talked about how cosmetic virtual goods differentiate user experience.
4	Industry POV	This code was used when the interviewee talked specifically from an industry POV.
5	Cultural references	This code was used when the interviewee talked about cosmetic virtual goods having cultural references.
6	FOMO	This code was used when the interviewee talked about FOMO as a driver for purchase.
7	Exclusivity	This code was used when the interviewee talked about exclusivity as a driver for purchase.
8	Individualization process	This code was used when the interviewee talked about the individualization process in a game experience.
9	Affiliation	This code was used when the interviewee talked about affiliation opportunities through cosmetic virtual goods.
10	Generational matter	This code was used when the interviewee talked about the generational differences in purchasing behaviors.
11	Roleplay	This code was used when the interviewee talked about roleplay as a driver for purchase.
12	Collecting	This code was used when the interviewee talked about the passion for collecting as a driver for purchase.
13	Branded content	This code was used when the interviewee talked about the possibilities of branded content in the gaming market.
14	Microtransactions perception	This code was used when the interviewee talked about the perception of microtransactions in consumers.

After categorizing the data, to have a more clearer picture of the different themes developed in the interview, the codes (or labels) were then grouped in specific thematic groups. The following coding book divided in themes is what resulted from this activity.

NR.	CODE	THEME GROUP
1	Interviewee background	1: INTERVIEWEE KNOWLEDGE
2	Video games history	//
3	Industry POV	//
4	Cultural references	2: GENERAL PURCHASE DRIVERS FOR COSMETIC CONTENT
5	Exclusivity	//
6	Collecting	//
7	Individualization process	3: PURCHASE DRIVERS ONLY FOR SINGLE-PLAYER GAMES
8	Roleplay	//
9	Differentiating user experience	//
10	Affiliation	4: PURCHASE DRIVERS ONLY IN MULTIPLAYER GAMES
11	FOMO	//
12	Generational matter	5: INPUTS FOR FUTURE RESEARCH
13	Branded content	//
14	Microtransactions perception	//

The codes and theme groups will be used to match and integrate the quantitative data in order to answer in the best possible way the research question.

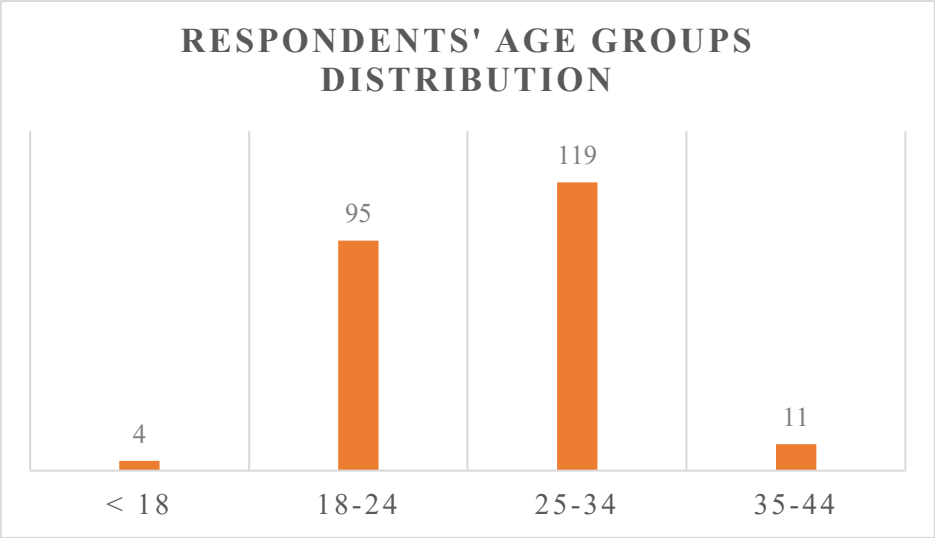
8. QUANTITATIVE DATA ANALYSIS

8.1 Sample description

In this Chapter, the author will analyze the quantitative data collected through the survey. Before doing this, the author will present in this section a description of the sample based on the categorical data collected in the first section of the questionnaire. The sample was not predetermined in any way.

After cleaning the data as specified in the previous chapter, a total of 229 observations remained. Of the 229 people, 178 (77.7%) identified as cisgender men and 33 (14.4%) identified as cisgender women, 9 (3.9%) of them identified as non-binary and 7 (3.1%) of them preferred not to specify their own gender identity. The last 2 (0.1%) people missing selected the "Other" option, and both of them identified as genderfluid. The choice of the numerous gender identity options was adopted by the author to keep the survey as inclusive as possible.

Regarding age groups, 4 (1.7%) of the 229 people were under 18 years old. The age group 18-24 saw 95 (41.5%) people inside it. The age group 25-34 was the most frequent, having 119 (52%) people inside it. Only 11 (4.8%) people reported being in the 35-44 age group. No person over 45 was recorded in the questionnaire. The following graph will present a visualization of respondent's age group distribution on a bar chart.



All of the 229 respondents answered “Yes” to the question “Have you ever purchased something through microtransactions?”: this happened because, in the cleaning mentioned above process, the a eliminated every subject that did not engage in any microtransactions purchase because it was not relevant for the research since they did not compile the main section of the survey.

Hence, this was the distinction between single-player gamers and multiplayer gamers. Out of the 229 subjects, 141 (61.6%) of them reported to prefer and play more usually single-player games; 88 (38.4%), instead, preferred multiplayer ones.

Regarding their game of choice for the gift card reward, there were many different games in the data collected. However, the author has to state that the most frequent was League of Legends, with an incidence of 20% on all the subjects that wanted to participate in the extraction.

8.2 Main hypotheses testing

In the following section, the author will analyze the data collected to test the main hypotheses identified in Chapter 3. The author will proceed in the order identified in the problem formulation, starting with H1.

8.2.1 Hypothesis 1

H1. Multiplayer games consumers value more “social” characteristics when purchasing cosmetic virtual goods compared to single-player games consumers..

This hypothesis was formulated in light of the literature review conducted for this research and its theoretical framework. The author had identified “social” motives as primary motives for virtual goods purchase in Chapter 5 and, more in detail, in Chapter 6. Due to the social characteristic being more prominent in multiplayer games, the author hypothesized that social characteristics would be valued more by multiplayer games consumers, as opposed to single-player games ones.

The author collected the data through Q9 in Section 2 (Single-player games) and Section 2 (Multiplayer games) of the survey, which you can see in Appendix A. The question asked the respondent to use sliders to describe how much they perceive specific features to be relevant on their purchase decisions.

The author conducted the two-samples t-test to compare the respondents' perceived importance of the variables coded as "social" (as in: "Differentiation from others", "Social value towards strangers" and "Social value towards friends") between users that prefer Multiplayer games and user that prefer Single-player games. The author will now report the results for each of the three variables.

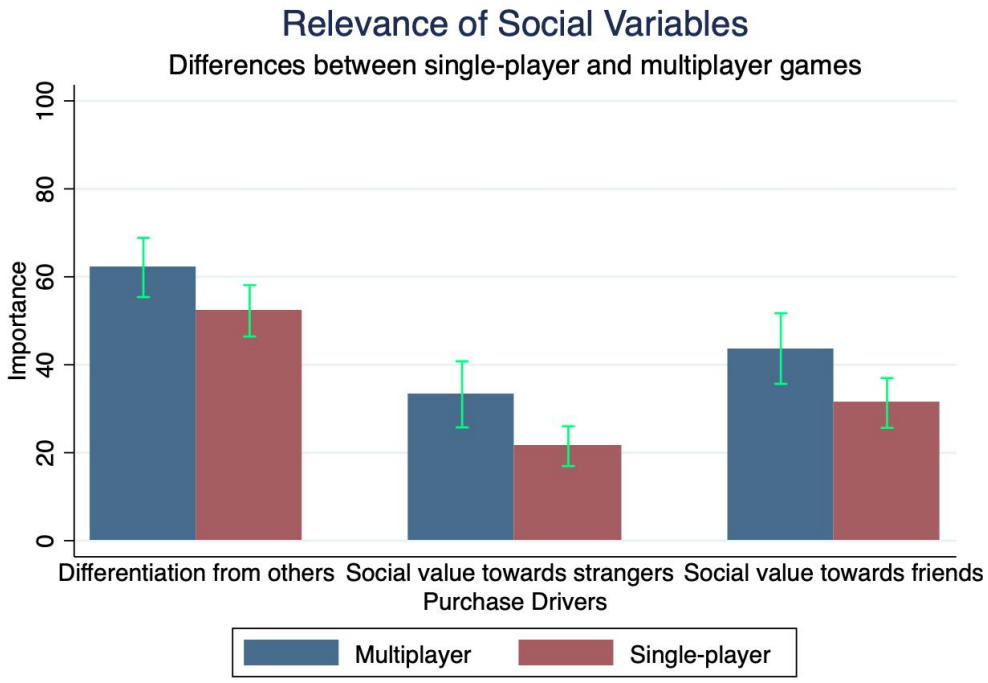
In the case of "Differentiation from others", the difference was significant in the scores between users that prefer Multiplayer games (henceforth, MP players) ($M=62.13$, $SD=31.77$) and users that prefer Single-player games (henceforth, SP players) ($M=52.26$, $SD=35.09$); $t(227)=2.14$, $p = 0.033$.

This was also the case of "Social value towards strangers": the difference was significant as well in the scores between MP players ($M=33.27$, $SD=35.49$) and SP players ($M=21.48$, $SD=27.21$); $t(227)=2.83$, $p = 0.005$.

Lastly, the same happened for "Social value towards friends": the difference was significant in the scores between MP players ($M=43.68$, $SD=37.87$) and SP players ($M=31.31$, $SD=33.98$); $t(227)=2.56$, $p = 0.01$.

These results show that the preference on the game typology has an effect on the perceived importance given to these variables; indeed, for an MP player, this perceived importance is higher than for a SP player. The hypothesis of the equality between the two means is rejected, and this result supports the hypothesis presented by the author.

The following graph will present a visualization of the two means of each variable per game type preference, with the respective confidence intervals. A table with all the numerical results of the analysis can be seen in Appendix C.



8.2.2 Hypothesis 2

H2. Single-player games consumers value more "hedonic" characteristics when purchasing microtransactions compared to multiplayer games consumers.

This hypothesis was formulated in light of the literature review conducted for this research and its theoretical framework. Having established in Chapter 5 and 6 that social features are less prominent in single-player games (and, if they exist, they require extra levels of interaction than the mere playing process), the author has identified three potential purchase motivations, coded as "Personal" for this research.

The first purchase motivation for cosmetic virtual goods identified was the intrinsic aesthetic feature of the good, coded "Aesthetic features".

The second purchase motivation was identified to be "Roleplay": a specific cosmetic could make the player to feel "more adequate" in a specific setting (ex. A Viking Outfit in Assassins Creed Valhalla, set in a Viking tribe context).

The third purchase motivation was identified to be “Identification with own avatar or character”, considering that the only interaction that a single-player gamer has its mostly with his virtual representation of the self.

The author collected the data through Q9 in Section 2 (Single-player games) and Section 2 (Multiplayer games) of the survey, which you can see in Appendix A. The question asked the respondent to use sliders to describe how much they perceive specific features to be relevant on their purchase decisions.

As for the previous hypothesis, the author analyzed the data with a two-samples t-test, to compare the respondents’ perceived importance of the variables coded as “personal” (as in: “Aesthetic features”, “Roleplay” and “Identification with own avatar or character”) between users that prefer Multiplayer games and user that prefer Single-player games.

In the case of the first variable (“Aesthetic features”), the author reports a significant difference in scores among MP players (M=86.75, SD=20.52) and SP players (M=74.96, SD=26.40); $t(227)= 3.57$, $p = 0.0004$.

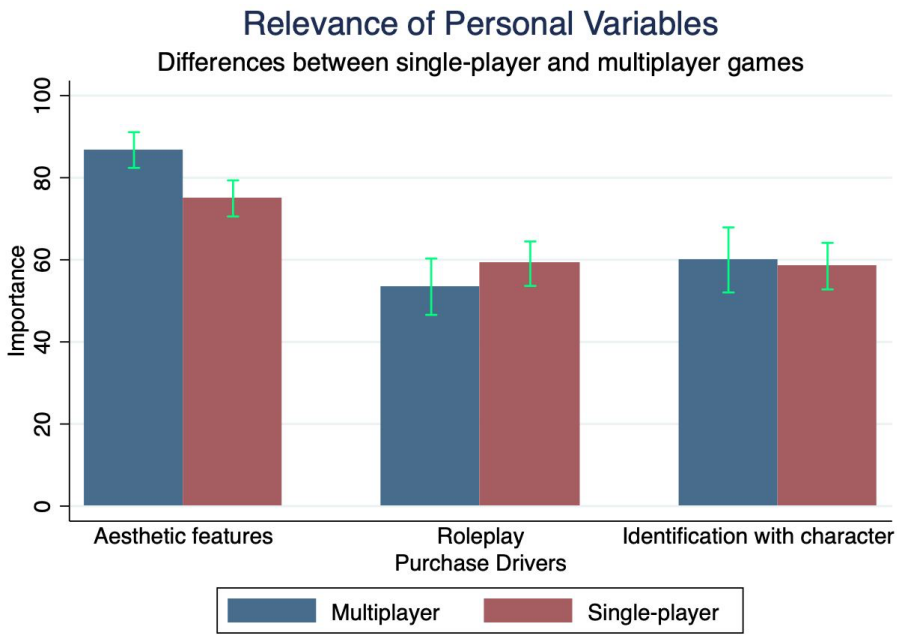
There was not a significant difference, however, in the other two cases. For what concerns the second variable (“Roleplay”), scores were not significantly different between MP players (M=53.45, SD=32.39) and SP players (M=59.06, SD=32.53); $t(227) = -1.27$, $p = 0.205$.

The same happened for the third variable, “Identification with own avatar or character”. Scores were not significantly different between MP players (M=59.98, SD=37.41) and SP players (M=58.46, SD=34.06); $t(227) = 0.32$, $p = 0.753$.

The data suggests a complete rejection of the author’s hypothesis. Not only for two of the variables (specifically “Aesthetic features” and “Identification with character”) the perceived importance is higher for MP players than for SP players, going against the hypothesis, but also two of the variables’ differences (specifically “Roleplay” and “Identification with character”) are not statistically significant.

The interesting finding the author can grasp from this analysis is that perceived importance of "Aesthetic features" is higher in MP players compared to SP players, and that the difference is statistically significant. This will be further discussed in Chapter 10.

The following graph will present a visualization of the two means of each variables per game type preference, with the respective confidence intervals. The tables with the actual numerical results of this analysis can be seen in Appendix C.



8.2.3 Hypothesis 3

H3. Consumers spend more money on cosmetic virtual goods if they have friends playing the same video game and they prefer multiplayer videogames.

This hypothesis was formulated in light of the literature review conducted for this research and its theoretical framework. The assumption was based on the already established social motivation as driver for purchase, and enforced by the Theory of Planned Behavior (Chapter 6.3). The author, in fact, hypothesized that the presence of a relevant referents group could be identified as a predictor for a bigger expense in cosmetic virtual goods.

The author collected the data through Q8 and Q11 from Section 2 (Single-player games) and Section 2 (Multiplayer games) of the survey, which you can see in Appendix A. The first question asked if the respondent had any friend playing the same game they've been playing in the last four months. The second question, instead, asked how much money does the respondent spend on average on cosmetic virtual goods monthly.

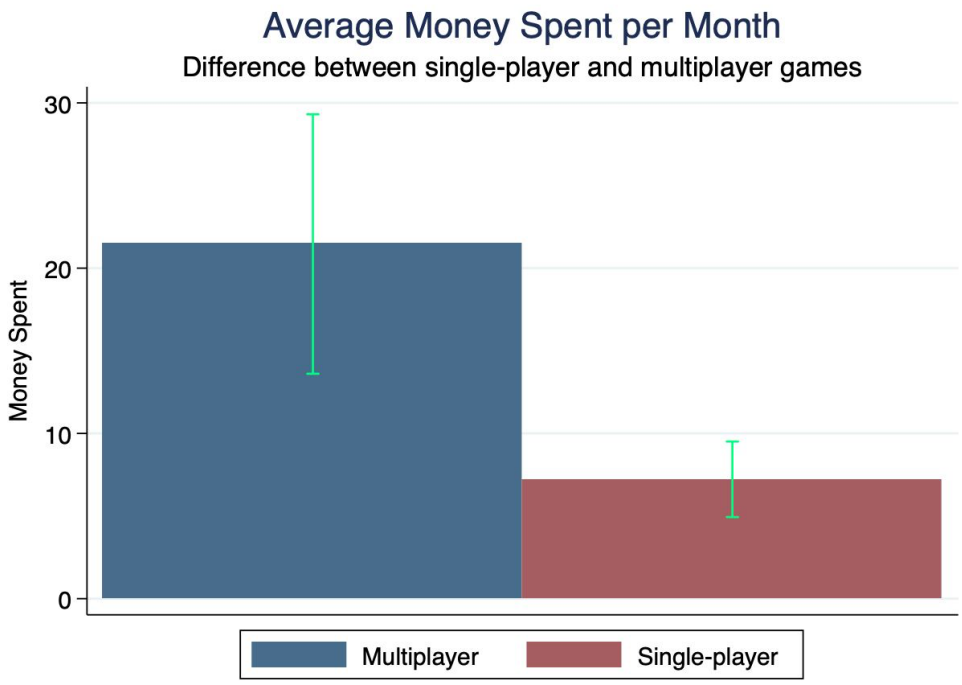
A two-way ANOVA was conducted to compare the effect of having friends and game type preference on the money spent for cosmetic virtual goods. There were two factors: (1) preference for MP / SP games; (2) Having friends playing the same game (Yes/No). The dependent variable was the average monthly expense on cosmetic virtual goods.

The main effect of having friends playing the same game was not significant ($F [1, 217] = 0.46$, $p = 0.4981$). The main effect of game typology, instead, was not significant (on alpha level 0.05) but could be considered on trend level ($F [1, 217] = 2.94$, $p = 0.0881$). Because of this result, it would be interesting to examine this with a bigger sample and check if it reaches significance.

The author did not encounter a significant interaction between having friends and game type preference ($F [1, 217] = 1.97$, $p= 0.1614$). The results of this analysis suggest that there is not a significant interaction between the two independent variables (having friends and game type preference) on the expense for cosmetic goods. However, the game typology main effect is worth further investigations.
The author ran then a two samples t-test to compare the average monthly expense between users that prefer Multiplayer games and user that prefer Single-player games.

There was a significant difference in money spent among MP players ($M=21.46$, $SD=36.83$) and SP players ($M=7.22$, $SD=13.37$); $t(219)= 4.08$, $p = 0.0001$. These results show that the preference on the game typology has an effect on average money spent in cosmetic virtual items; indeed, for an MP player, the money spent is almost triple compared to SP players.

A visualization of these results is presented in the following graph, with the respective confidence intervals. The tables with the actual numerical results of this analysis can be seen in Appendix C.



In the next section, the author will present another exploratory analysis that the author considered to be interesting in addition to the three main hypotheses the author presented until now.

8.3 Additional exploratory analyses

In the next section, the author will present other findings that the author considered to be interesting in addition to the three main hypotheses the author presented until now. It is important to note that these hypotheses came up during the data analysis process. Hence, while they might be related to this study and indicative of this sample, it was not considered in the research process. For this reason, this can be considered useful rather than for this study in itself, as an exploratory analysis for future research.

8.3.1 Effect of friends on respondent's perception of importance of variables

An additional degree of analysis that might be considered of relevance to this thesis is the effect of having friends in the respondent's perception of the value they gave to the features the author identified as "social" (Differentiation from others, Social value towards friends and social value towards strangers).

The author collected the data through Q8 and Q9 from Section 2 (Single-player games) and Section 2 (Multiplayer games) of the survey, which you can see in Appendix A. Both of the questions were explained in previous sections.

As for previous hypotheses, the data was analyzed with a t-test, to compare the respondents' perceived importance of the variables coded as "social" between users that reported to have friends playing the same game and users that reported to not have them. For the sake of synthesis, the author created a synthetic indicator named "Relevance of Social variables" as the average, for each participant, of the values expressed towards perceived importance of said motives.

There was a significant difference in the scores for respondents who have reported to have friends playing the same game (henceforth, WF Players) (M=41.60, SD=27.57) compared to respondents who have reported to not have friends playing the same game (henceforth NF Players) (M=31.63, SD=23,67); $t(227) = -2.345$, $p = 0.019$.

These results might suggest that having friends may have an effect on perceived importance of said "social" variables. In fact, this perceived importance is higher in player who have reported to have friends playing the same game compared to players who have not reported so. However, the survey design might have not captured correctly variables that would be useful for this analysis, so further research is needed to prove this hypothesis.

To have a clearer picture, the author will also look at the effect of having friends on the value that respondents perceived to be relevant for "Personal" variables. The data collected was the same as the previous analysis, and was analyzed with a t-test, to compare the respondents' perceived importance of the variables coded as "personal" between WF players and NF players. For the sake of synthesis, the author created a synthetic indicator named "Relevance of Personal variables" as

the average, for each participant, of the values expressed towards perceived importance of said motives.

There was a significant difference in this case as well. In fact, these were the scores for WF Players (M=66.79, SD=22.004), and these were the scores for NF Players (M=59.40, SD=22.05); t(227) =-2.11; p = 0.036.

This table results that respondents gave higher values to “personal” variables as well if they had friends playing the same game as them, as opposed to respondents who did not have them. What the author can gather from these two t-tests is that friends appear to be important actors in purchase motivations. Perception of respondents changed when friends were in play.

9. QUALITATIVE DATA ANALYSIS

The author will now make use of the qualitative data to validate the findings of the quantitative analysis, to explain more in detail the plausible reason behind these findings, to find out what was not captured correctly by the consumer survey and to establish what could be explored further in the future. The author will do so by analyzing the data collected in the interview following, one by one, the theme groups that are considered relevant for this research.

9.1 General purchase drivers for cosmetic content

During the interview, four main purchase drivers emerged as principal purchase drivers for cosmetic content in both single-player and multiplayer games. These purchase drivers, identified in Chapter 7 under the coding book, are cultural references, exclusivity, and collecting.

Of the three variables, only exclusivity was somehow already present in this research. In fact, while exclusivity was looked into in the literature review conducted for this research, it was probably mistranslated in the process of the survey design. The variable "social value towards strangers", in fact, which may refer among other things to perceived exclusivity, was not explained accurately enough for the respondents to answer in a more precise way.

The interviewee identified exclusivity to be an important purchase driver, especially the perceived one. According to him, a consumer has a strong impulse towards having something before others:

« *Ok, I'm one of the first to use this skin! Iit's also that premium moment. […] But of course we are talking about a target that maybe now is more accustomed to chronicle everything they do, show it in stories and so on. So you become premium by being one of the first to have the skin. And then you obviously flaunt it off to others in game.* » (Appendix B)

This feeling of perceived exclusivity is tightly tied to individualization process in a consumer experience of a video game, which the author will cover in the next section.

Cultural references and collecting, instead, were not captured by the survey at all. Regarding the former, as it was for some other variables described in this chapter, the researcher did not want to put too many variables in the survey. Regarding the latter, instead, it simply did not emerge from the literature review conducted for this research.

However, collecting makes a very good point in the researcher's point of view. The interviewee referred to it in this excerpt:

« *If before people bought Panini stickers, now they buy FUT, for example. If you used to collect Pokemon cards, now you play Hearthstone, do you understand?* » (Appendix B)

While the examples the interviewee makes are rather from a gameplay point of view (Hearthstone is a collectible card game, while FUT is the system behind the latest FIFA game installments' football market), this can be also applied to cosmetic content. The author can take the example presented in Chapter 4 of League of Legends: in the game, every "champion" (or character) has multiple different "skins" (or graphical alterations). A player may be compelled to complete his sets of skins regarding specific champions, to which he might feel more affiliated with and so on. According to the researcher, this strengthens the relationship with the character – value that was captured in the survey and was perceived to be one of the most important variables for consumers of both types of games.

Regarding cultural references, instead, the author refers to any cosmetic content that might have a reference or a link to other IPs or media. Examples of this might be costumes of older Assassin's Creed games protagonists in newer Assassin's Creed games, but this can be applied to real world too in the interviewee's POV.

« But if you think about it, it means that for example a user during the European Championships 2021 will have more interest perhaps in using the Ronaldinho skin, rather than the normal, "classic" game one. […] if you think about the fact that in Fortnite ... if you think, even in Fortnite for example, Avengers comes out, they do the Thanos - Infinity War event and everyone has the skin of Deadpool, or Iron Man. […] I wouldn't say it's the most central thing but it's a very, very strong tool. » (Appendix B)

9.2 Specific purchase drivers for single-player games cosmetic content

During the interview, three main purchase drivers emerged as specific purchase drivers for cosmetic content in single-player games. These purchase drivers, identified in Chapter 7 under the coding book, are Roleplay, Differentiation of user experience and Individualization process.

The first one was captured in the survey and was classified by respondents as one of the most important purchase drivers (across all genres). However, it makes sense, according to the researcher, to analyze it also in a single-player dimension.

In fact, while roleplay might have relevance in a social context, the author can also consider it to be relevant analyzing from a "identification within a context/setting" lens. This is particularly clear from this interview excerpt.

« *I always take the examples from Valhalla which is a single player game - but it tries, to do weekly events and additional side missions where maybe you say: It makes no sense that I go there dressed as a Carolingian, I should rather buy the Viking armor set.* » (Appendix B)

This represents a very interesting input because it allows us to see roleplay disconnected from a social context and seen as a personal interaction with the game. It will definitely be interesting for future research, which the author will discuss in Chapter 11.

The differentiation of user experience emerged as the main purchase driver for single-player games. This was not taken into consideration by the researcher and therefore not captured by the survey. In the future, research should focus more in detail on the customer journey when embarking on a single-player game adventure. This process is faced by the interviewee also from an industry point of view, which sees vanity items as interest points to keep interest high to ensure sales of "substantial content", as in DLCs.

« *If a single player game right now is no longer a closed enclosure but becomes a launching pad where with the single player that allows you to play from 60 to 80 hours of play, add-ons are added, which are DLCs that are then managed through season pass basically. From this point of view, the proposed vanity item simply becomes a communication pulse point: how do I increase user retention in a single player game where I don't have control over player events? […] to answer your question I would say that the urgency of having microtransactions in the single player is paradoxically the simplest of the answers. To have the most varied experience possible, familiar but varied*. » (Appendix B)

The last purchase drivers identified in the interview is tightly connected with the differentiation of user experience, and is what the researcher coded as Individualization process. The interviewee noted a specific customer journey when playing a single-player game: the first phase is Interest, as in the moment in which one knows about the game and starts gathering information and purchasing the game. Then the Interest becomes Learning, as in familiarizing with game mechanics, setting, characters and narrative. When Learning is done, the Familiarization is at its highest point and thus, players seek Individualization. A study that follows this customer journey idea based on these findings might be interesting, especially if the future researcher takes a look at where in the process does the purchase intention start to manifest.

This motivation driver might also be of interest when looking at multiplayer games, so the author will briefly assess it in the next section as well.

« *In every gaming user experience there is a first moment of interest; then, the interest becomes learning what you are doing. After it settles down, and this thing becomes familiar, then the gaming experience becomes familiar and individualism begins. […] So you spend on creating your own identity.* » (Appendix B)

9.3 Specific purchase drivers for multiplayer cosmetic content

During the interview, two specific purchase drivers were identified by the researcher regarding multiplayer games: Affiliation and FOMO. However, the researcher will explore the individualization process as well, since it was captured by the customer survey.

The individualization process was described by the interviewee in a multiplayer setting as well, labeling it as differentiation from others. This was the same label the researcher used in his consumer survey, and that was perceived by respondents to be the most relevant among the variables that were labeled as “social”, both in multiplayer and in single-player games.

In fact, individualization can also be seen as self-determination, especially in a social context in which graphical features of one’s character/avatar express specific values or interests. This

perception can also be linked to perceived exclusivity, as the principle at the root is basically the same: proving to have something different from others.

Affiliation was also looked into in this research. The author has established in chapters 4 and 5 that friends play a prominent role in consumers' perceptions, and the survey data analysis also showed this. The interviewee highlighted a possible opportunity of affiliation, as in showing the same graphical and aesthetical features to communicate belongingness.

« *I have friends who started playing League of Legends simply because friends were playing League of Legends and they started spending just because there was that. stuff… like collectible stickers albums, do you know what I mean? Oh did you see that the new skin is out, I want to buy it, no I buy it no but we do the coordinated team that I buy this and that we make them all in the same style… so surely there is a synergy between what happens in the community within a group of friends and what actually happens to the individual.* » (Appendix B)

The last purchase motivation identified was FOMO, as in the Fear of Missing Out. According to the interviewee, this perception compels consumers to engage in purchase to not feel left out from a specific context, whether this be a community one or a friends group.

The three of these motivation drivers are all rooted in social interaction, so the author can safely assume from the analysis of these data that the social feature is crucial in multiplayer games – and might also work on a subconscious level, so it would not be possible to capture it only with self-reports. Regarding the validity of the survey and future research, the author invite the reader to continue through Chapter 10.5.

9.4 Interesting findings for future research

Although none of the following issue was looked into in this research, the researcher found two of them to be particularly relevant for consumer behavior research.

The first one was actually planned to be included in this study at the initial stages of the research process but was scrapped in order to better delimitate the topic. That is Branded Content, as in the incorporation of branded products in gaming experiences. To have an example of this, the author will present the collaboration between Riot Games, the company developing and publishing League of Legends, and luxury fashion brand Louis Vuitton. (Louis Vuitton, 2019)

The collaboration had two outputs: one was a capsule collection of "League-inspired" clothes designed by the Louis Vuitton brand. The other was the release of an exclusive "prestige" champion skin (obtainable only with a large sum of money or intense grinding for resources in the game) for the character Qiyana. Said skin was a variation of another, less pricey skin, named "True Damage" Qiyana. In the following image, which serve as a preview of the skin model in-game, the reader can see the Louis Vuitton branding all over the outfit, in the character's earrings, and in her signature weapon.

Figure 3 – A splash art for True Damage Qiyana Prestige Edition by Louis Vuitton

However, the interviewee came up with another example from recent gaming experiences, as in the collaboration between Konami's Death Stranding and the energy drink brand Monster.
« *If you think simply of Death Stranding and Monster… they partnered with Monster but it was not a product placement partner but they created an in-game dynamic where they justified the presence of Monster and showed the Monster logo big as well. So you, Norman Reedus, you have to go to your base to recover stamina and in order to recover it you have to drink the energy drink. Camera, energy drink, Monster logo splashed all over your face. That's in my opinion is the future of branding* » (Appendix B)

In particular, the interviewee found incredibly relevant the connection between the branded content (the Monster energy drink) and an in-game mechanic, stating that « *it would stick more to consumer habits* ». Following this assumption, it could be interesting in the future to research the possible consequences of such actions, or the conversion rates of said efforts.

The second interesting input is the fact that consumer purchase behaviors regarding cosmetic content might be a purely generational matter. Specifically, the shift of going from "premium price, full-fledged experiences" to "free-to-play experiences with constant additions" would impact a lot on older consumers, which according to the interviewee reject it, and not on newer consumers that simply would not know alternatives to this sale model.

« *Fifteen years ago, you bought a game, 60 euros, that was the experience. […] So .. in my opinion the new generations, especially digital natives, therefore those who have access to mobile devices and in any case have that language, are able to chew that language right away, are much more inclined to make microtransactions simply because it is the substitute.* »

It would be interesting for future research to investigate whether purchase behaviors differ significantly between older and younger generations.

10. DISCUSSION

In this chapter, the author will discuss the quantitative and qualitative findings presented in the last two chapters. The results will also be addressed through the theoretical framework that the author established in Chapter 6.

10.1 Key findings

Before starting data collection, the author proposed a taxonomy of purchase motivations of cosmetic content in single-player and multiplayer games. This taxonomy was afterward used in the survey design and can be found in Chapter 6.5. The qualitative data collected with the interview revised and integrated such taxonomy, which will be presented in this section.

When looking at single-player games, the qualitative data analysis suggests that usual purchase motivations can be: “Setting Roleplay”, “Differentiation of User Experience” and “Individualization process”. Especially in a single-player game, the experience tends to become quickly monotonous: hence, cosmetic virtual goods could be perceived as ways to revive one’s interest in the games.

When looking at multiplayer games, the qualitative data analysis suggests that usual purchase motivations can be: “FOMO” and “Affiliation”. More in general, it seems that interactions between users become pivotal and affect purchase motivations.

These findings partially validated the results of the qualitative analysis. Multiplayer games users reported higher perceived importance towards variables coded as “social” in the taxonomy mentioned above to single-player games users. This did not happen for single-player games users in relation to variables coded as “personal”: this is probably due to the author’s mistake in designing the survey and failure in capturing correct purchase motivations for single-player games. Future research should take into consideration this revised taxonomy and these mistakes: the author will discuss it further in chapter 11.

The industry’s perceptions somewhat matched the results from the consumer survey, especially regarding multiplayer game users. They were also useful for giving an explanation to consumer behavior induced by industry selling techniques: specifically, the author has learned that in most single-player games cosmetic content is considered a “pulse point” to spark interest in the consumer to lengthen the life cycle and the product and make consumer transit towards substantial content add-ons, as in DLCs.

10.2 Exploratory findings

The author has also reported other exploratory findings that were not taken into consideration prior to the data analysis. Specifically, regarding the effects of having friends on the perceived importance survey respondents' gave to different variables, the possibility of higher expense in cosmetic content in younger generations and the opportunities of branded content in this market.

According to this sample, the analysis suggested that having friends playing the same game as the respondents made perceived importance towards all variables higher compared to respondents that reported to not have them. While this may not be completely out of the scope of this analysis, not taking this possible effect into consideration when designing the survey might have resulted in leaving out some key questions that might shed more light into this. Hence, it would probably be better to further explore it in a future research.

The qualitative data analysis suggested that younger generations might spend more in cosmetic content than older ones. The reason for this would be, according to the interviewee, consumer habits: older consumers would be more accustomed to an older model of buying content, as in paying a premium price and obtaining content in its entirety, rather than paying small sums and obtaining little chunks and content continuously. A study on consumer habits between subjects of different ages might clarify and verify such assumption.

Lastly, branded content is already pretty established in the gaming world: the author gave two examples in Chapter 9.3. This is of particular relevance to gaming consumer research because the level of engagement and immersion in a videogame is relatively higher than other media sources: a study on flow theory and branded content could look into the effect of the immersiveness on consumer behaviors towards brands they experienced in gaming worlds.

10.3 Results interpretation

In line with the first hypothesis presented in this research, this study suggests that game typology preference has an effect on perceived importance towards purchase motivations: specifically, the results showed multiplayer games users to be more leaning to give higher values to "social"

purchase motivations compared to single-player games users. However, contrary to the second hypothesis formulated in the research process, single-player games users did not show a trend of giving higher values to "personal" purchase motivations compared to single-player games users.

While, as the author already mentioned, this may be because of mistakes in the research process, these results are in line with Ajzen's Theory of Planned Behavior. Indeed, the author has established in this research that multiplayer games add a social interaction layer to game experience, hence constant comparing and competitiveness mechanisms are instilled in consumers. As Ajzen stated, important referents groups play a key role in affecting human behavior: the following assumption would be that, when a person plays multiplayer games, enters a subconscious dimension in which expectations of others (may they be friends or strangers) are taken into consideration, and this affect consumer behavior.

The results of the author's exploratory analysis in Chapter 8.3.1 is in line with this assumption. When the variable of having or not friends playing the same game as the respondents was taken into consideration in the analysis, perceived values to all variables increased in a statistically significant way. With all the cautiousness of the case, one could assume that in this case the important referents group is identifiable in friends, and that this has a significant effect on consumer behaviors.

When looking at Hypothesis 3, the reader can see that the hypothesis is rejected as it was formulated; however, it can be rewritten in "*Consumers spend more money on cosmetic virtual goods if they prefer playing multiplayer video games*", as the difference in expense between who prefers multiplayer video games and who prefer single-player video games was found to be significant. This could be explained, in light of the literature review and the qualitative analysis, simply with stating that since most multiplayer games are free-to-play games, they run more options of cosmetic microtransactions. However, in light of the results shown by Hypothesis 1, the author strongly believes that sociability and social contexts are a stronger "propulsor" for people to engage in cosmetic microtransactions rather than the mere bigger, more varied offer.

This study's results are also in line with the other two human motivations theories presented in Chapter 6. The need for belongingness identified in Maslow's theory of needs and the need for affiliation can be used as an explanation for these findings.

Both authors have in fact stated that seeking affiliation, groups and feeling belongingness are strong propulsors for human motivation. This is no different in gaming community: whether this perceived affiliation might come from friends or just fellow gamers whom consumers interacts with in their gaming experience, humans have an underlying longing for it. It is safe to assume that gaming worlds and experiences with a social layer to it, albeit virtual, reproduce this motivation compellers in what humans perceive in "reality" as well.

While all of this may be true when looking at multiplayer games, it is difficult to assume the same about single-player games. As the author already stated, social interactions require extra levels of activity and are not seamlessly integrated in single-players games experiences. Since the quantitative findings rejected the author's hypothesis, a further look into theory will be needed.

The author has already stated in Chapter 10.1 what were the revised purchase motivation for single-player games cosmetic content, as in "Setting Roleplay", "Differentiation of user experience" and "Individualization process". Looking at these findings from the motivation theory framework the author established, the only theory that appears to be relevant in the author's point of view is Maslow's Need for Self-Actualization. The key assumption would be that, in single-player games experiences, people look for self-determination in the virtual context through their avatar and characters.

If one looks, instead at the consumer theory the author presented in Chapter 6.2, two specific classifications come in help. The first is Tauber's (1972): the purchase motivations that the author identified in the aforementioned section could be linked to purchase motivations cited by Tauber such as "Diversion from daily life" and "Sensory stimulation". In other words, single-player games cosmetic content would satisfy a mere recreational need in the consumer.

The second is Arnold and Reynolds' (2003), in particular regarding "adventure shoppers" and "gratification shoppers". Purchase might be perceived from consumers as an act of alleviation from boredom and a research for stimuli, which in the virtual world would come from graphical alterations in the user experience.

10.4 Implications for marketing

The results of this study build on the taxonomies that have been created for shopping motivations applying them on gaming contexts. This research suggests that, regarding multiplayer games, social characteristics are pivotal and one of the human need that games "trigger" is the need for affiliation. This might be considered relevant for marketing branches of gaming firms, as their activities and efforts might be put into creating cohesive narratives and releasing content in "groups", allowing consumers to buy different cosmetic content but in analog fashion to the ones that other gamers might buy. This approach has already been undertaken by Riot Games in the last two years and has encountered wide appreciation in their player base. Furthermore, considering MP players spend significantly more than SP players (according to this sample), it would make sense to invest more in MP games cosmetic content rather than in SP games ones.

10.5 Limitations, validity and reliability

One of the biggest limitation of this study was the impact that COVID-19 pandemic had on daily life, work, research activities and also personal motivation. Along with time and resources constraints, the pandemic has significantly affected this research. An effect of this is visible in the difference between the number of planned interviews and the fact that the author was able to carry out only one.

It is also important to note that both the sample taken into consideration in this study and the interviewee were Italian: this raises some issue about overall generalizability, albeit the sample might be indicative of the Italian gamer population.

One limitation of this study might be the time horizon of the data collection, specifically the survey one. An individual survey, in fact, is almost like a "snapshot" of a current situation and does not track a trend in real time or over time. However, this was due to the time horizon of the research itself, so it was already taken into consideration when undertaking this research.

Secondly, the author has to remind that all of the answers were self-reports: therefore, they are subject to respondent bias. The author wants to point out that this might be particularly true, for example, in questions such as “expense on cosmetic virtual content”: since microtransactions are still somehow perceived as bad in the gaming community, respondents might have downsized their numbers in order to “look better”.

This attitudinal fallacy, as in the inconsistency between what a person says and does, could also be considered a limitation when looking at the interview, specifically when the questions asked a personal answer from the interviewee rather than an industry POV.

Regarding reliability, the author believes the survey might be subject to participant error. Respondents might have interpreted wrongly some questions and therefore have given the wrong answers. However, this seems to be difficult to apply to the whole questionnaire, because most of the findings of this study have been found to be in line with previously existing theory. Regarding validity, instead, the threat might be not having conducted a focus group with some of the sample respondents to further develop on their answers. However, this seems to be difficult for the same reason as for reliability.

11. FUTURE RESEARCH

In this section, the author will briefly delve into what future research could look into based on this study. As it was already established, this study is not meant to be concluding; however, several inputs emerged to be interesting to be looked into.

Effect of having friends on consumer perception

The results from this study's sample suggested that having friends playing the same game affects consumers' perception of purchase motivations. This was regardless of the game typology preference stated in the survey. Since this was an exploratory analysis, hence the survey was not designed to capture a lot of data regarding this hypothesis, it could be worthy to take a deeper look into this.

Effect of having friends on expense

The results from this study's sample suggested that having friends playing the same game did not affect significantly consumers' expense. However, the survey might have failed in capturing relevant data regarding this hypothesis, such as expense possibilities and so on. Hence, it could be interesting to investigate this especially in a multiplayer setting, having established that the social aspect is pivotal in them.

Generational matter

Qualitative data results have suggested that expense on cosmetic virtual goods might be a generational matter: specifically, that younger generations would be more inclined to buy them rather than older ones. It would be interesting to study this effect across gamers of different ages.

Purchase intention manifestation

According to Ajzen's Theory of Planned Behavior, what comes before behavior is intention. Qualitative data results have suggested that there is a specific consumer journey when looking at gaming, which can be summarized in Interest, Learning and Familiarization. It would be interesting to investigate when purchase intention for virtual cosmetic goods manifests and when behavior is actually performed in this process.

Branded content

Branded content is already happening in the gaming world, with big firms partnering with gaming ones with many different collaboration outputs. According to the researcher, it would be interesting to look at conversion rates when comparing "traditional" online ads and this kind of advertising activity, also in light of the flow theory concept introduced in this Chapter.

Multimedia stimuli sources effect on consumer expense and purchase motivations

It is becoming more common for gaming firms to break boundaries across many mediums. An example of this is, again, Riot Games (League of Legends' publisher), which has started to release music for fictional music bands made up from characters from their own games. This is the case of Pentakill, a metal band, True Damage, a trap/hip hop band, and K/DA, a pop girlband. Along with the music of these bands (which is, in real life, written and performed by real musicians and singers who lend their voices to the characters for the occasion), an immense quantity of merchandise has been released by Riot Games, both in-game and off-game. K/DA's first single (POP/STARS), as of May 2021, has 438 Million views on YouTube and 203 Million streams on Spotify. Since these numbers are astonishingly high, it would be interesting to investigate the effect of these kind of marketing activations on consumer expense and purchase motivations for related virtual cosmetic goods.

Figure 6 – The social media announcement for K/DA's first EP, "All-Out", released on digital platforms on 06/11/2020.

12. CONCLUSION

The research question of this paper asked how purchase motivations for cosmetic virtual goods differed between single-player games and multiplayer games. The literature review and theoretical framework has identified the key difference to be the social structures that are inherently present in every multiplayer game, and that was validated by the quantitative and the qualitative data analysis.

Purchase motivations for cosmetic virtual goods differ between single-player games and multiplayer games in the way that there are different underlyings to both game typologies. Multiplayer game users have reported to care more about "social" features when purchasing content rather than single-player game users.

Multiplayer game users in this sample have also reported to spend significantly more than single-player game users. This means that purchase behaviors between game typology preferences differ as well, and that the multiplayer market is probably a bigger one compared to the single-player one.

In the social context, different meanings are imbued in the cosmetic content that consumers purchase. If purchases might happen for recreational needs in a single-player games, they satisfy needs for affiliation and alleviate FOMO in multiplayer games, denoting that, while there might be analogies on some motivations (such as aesthetic features, which was relevant for both groups analyzed in this study), there is a precise distinction between purchase motivations for different game typologies. Whether these purchase motivations are actually shaped by game preference (and thus become definitive purchase motivation for the subject in question) or just shift when subjects enter into contact with different game typologies is out of the scope of this research.

According to the interview carried out for this study, the industry's perception definitely matches consumers' perception. Moreover, it seems like the industry has a clear understanding of consumers' perceptions and therefore is seamlessly acting to maximize their profit without particular efforts or misconceptions.

Lastly, the author strongly believes that there is still a strong dismissiveness on gaming marketing and consumer research, as it was pointed out by Malaby in 2007. This attitude by the academia,

which is detectable to this day, 14 years later, has not prevented firms from growing and from helping gaming in becoming the biggest entertainment industry. However, a bigger effort on research in this sector might help industries capture potential opportunities to grow even more.

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APPENDIX A

Survey structure and questions

Section 1

Q1: How old are you?

< 18

18-24

25-34

35-44

Q2: What is your gender identity?

Female

Male

Non-binary

I prefer not to specify

Other (text field)

Q3: Where are you from?

(Text field)

Q4: Which of these games do you prefer?

Single-player games

Multiplayer games

Q5: Have you ever purchased something through microtransactions?

Yes

No

Based on the answer to Q4 and Q5 there are three ramifications

If answer to Q5 is No, respondent would be redirected to Section 3

If answer to Q5 is Yes, respondent would be redirected to a different Section 2 based on Q4 answer

➔ **If answer to Q4 is Single-player games, respondent would be redirected to Section 2 (Single-player games)**

➔ **If answer to Q5 is Multiplayer games, respondent would be redirected to Section 2 (Multiplayer games)**

Section 2 – Single-player games

Brief text explaining what microtransactions are and what do we mean for cosmetic content

Q6: What is the last single-player game on which you spent more time in the last four months?

(Text field)

Q7: How much time do you play said game weekly?

One hour

Between one and three hours

More than three hours

Q8: Does any of your friends play the same game?

Yes

No

Q9: By using the following sliders, indicate how much the following variables influence your purchase decisions on cosmetic virtual goods in single-player games.

Left extreme: Not at all

Right extreme: Completely

(The sliders did not show the values, so the respondents only had a graphical visualization on a line of their answer)

Variables:

Price

Advertisements

Aesthetic features

Roleplay

Identification with own avatar/character

Differentiation from others

Social value towards strangers

Social value towards friends

Q10: When do you usually buy microtransactions? (they were able to choose more than one)

At the start of a game session

During a game session

At the end of a game session

Q11: How much money do you spend in cosmetic virtual goods monthly?

(Text field)

Q12: Do your friends that play the aforementioned game spend money in cosmetic virtual goods?

Yes

Not

I wouldn't know

I don't have friends that play the aforementioned

➔ After completing this section, respondent would be redirected to Section 3

Section 2 – Multiplayer games

Brief text explaining what microtransactions are and what do we mean for cosmetic content

Q6: What is the last multiplayer game on which you spent more time in the last four months?
(Text field)

Q7: How much time do you play said game weekly?
One hour
Between one and three hours
More than three hours

Q8: Does any of your friends play the same game?
Yes
No

Q9: By using the following sliders, indicate how much the following variables influence your purchase decisions on cosmetic virtual goods in single-player games.
Left extreme: Not at all
Right extreme: Completely
(The sliders did not show the values, so the respondents only had a graphical visualization on a line of their answer)

Variables:
Price
Advertisements
Aesthetic features
Roleplay
Identification with own avatar/character
Differentiation from others
Social value towards strangers
Social value towards friends

Q10: When do you usually buy microtransactions? (they were able to choose more than one)
At the start of a game session

During a game session

At the end of a game session

Q11: How much money do you spend in cosmetic virtual goods monthly?

(Text field)

Q12: Do your friends that play the aforementioned game spend money in cosmetic virtual goods?

Yes

Not

I wouldn't know

I don't have friends that play the aforementioned

➔ **After completing this section, respondent would be redirected to Section 3**

Section 3 – End of survey

Thank you for participating!

If you want to participate to the extraction for two 25€ gift cards for microtransactions leave here your email

(Text field)

Write here the game for which you would want the gift card for

(Text field)

This email gathering is only functional to the aforementioned extraction. By writing here your email, you give your consent to insert your email in a database which will only exist until the prize extraction, and that will be deleted at the end of the survey.

Appendix B

Translated interview transcript

INTERVIEW 2/5/2021

Interviewer [00:00:10] Hello Mattia. As I told you, the interview will now be recorded. For the following questions I ask you to give me your very personal opinion, because I am interested in the opinion of a person who has the point of view of a consumer and of a person who has worked in the industry.

Interviewee [00:00:44] Yes, although I have worked in a publisher company in the past I am not in one anymore now, but actually the company where I work now allows me to see some things that all the video game publishers do so that certainly can be interesting as a conversation.

Interviewer [00:01:06] There's a little bit of delay, I don't notice I'm talking to you because I'm starting to talk but you were probably already talking. The interview as you asked me will be completely anonymous, but I will give some indications about your position and the company in which you work.

Interviewee [00:01:28] That's fine! Whenever you want.

Interviewer [00:01:35] I'll explain the thesis project in 5 seconds. So the thesis project is: I have examined more or less, in the vast literature that I did not expect to find, the reasons for buying that there may be in online stores especially in video games and although there have been many studies on a classification of purchase reasons no one has ever made a differentiation between what leads to buying microtransactions in a single-player game and what leads to buying microtransactions in a multiplayer game.

Interviewee [00:02:47] When you talk about single player games which games do you mean?

Interviewer [00:02:55] For example, games as Assassin's Creed Odyssey. So why do you think people buy aesthetic microtransactions in single player games?

Interviewee [00:03:05] So, I'd make a distinction from this question already. I mean, when we talk about single player with internal microtransactions, whether they are aesthetic or qualitative, or I'm sorry quantitative, we are talking about a game as a service. In the last five years there has been a fairly important shift for all publishers who are basically trying to create more revenue, more lines of revenue on a single product; with multiplayer it easiliy happens in an endemic way, in the concept of multiplayer. For the single player, instead! You mention Odyssey which in my opinion was a "beta" for this type of activity, but especially in Assassin's Creed Valhalla, this thing is very present. Why would anyone enter – I mean, pay to receive vanity items in a single player game? I tell you this from experience: since these are open world games where you go to grind several hours, several hours, there comes a point where actually, apart from the fact that there may be vanity items that have "extra" attributes, a player will get used to what they aredoing a lot, visually, aesthetically, and they are more inclined to convert the vanity item when they see something that is in their interest, one thing above all. If a single player game right now is no longer a closed enclosure but becomes a launching pad where with the single player that allows you to play from 60 to 80 hours of play, add-ons are added, which are DLCs that are then managed through season pass basically. From this point of view, the proposed vanity item simply becomes a communication pulse point: how do I increase user retention in a single player game where I don't have control over player events?

Interviewer [00:06:05] Where you are not in control of their gaming experience.

Interviewee [00:06:13] I create these poles of interest in such a way that I have peaks of interest interspersed with DLCs - therefore with "substantial" contents. Now an example above all is that after ... in the post launch of Valhalla, they also started to come up with, for example, gothic armor sets which were very inspired by Sauron of the Lord of the Rings. So basically you refer to a - you use a cultural reference. To then create precisely that diversification within the game. I'm giving you the example of Valhalla because that's what I've played most recently. Unlike in multiplayer games, where you can refer to FOMO, so in which you basically want to do something because you feel left out, in a single player game it is slightly different. There are obviously timed things, for example, that we might feel as “exclusive”. Someone obviously wants to grab it because he says if I don't do it now I won't have this item anymore; but let's say that the logic is different… so to answer

your question I would say that the urgency of having microtransactions in the single player is paradoxically the simplest of the answers. To have the most varied experience possible, familiar but varied.

Interviewer [00:08:16] This answer makes perfect sense… and therefore, instead, you were saying that in multiplayer games social interaction comes into play and therefore FOMO, etc. ...

Interviewee [00:08:25] The idea is that, correct. Why, what are you doing? A multiplayer game, generally… if we talk about multiplayer gaemes, free to play comes to mind. Free to play is a product that is developed, that has costs, that is however made public while the development is still ongoing and the business model, all the revenue, is made through vanity items. However, the problem here is manifold, because when you are in the role of the developer who has to continually create items in the catalog to have the offer that is always new, always engaging and all the rest, obviously you do it to instigate FOMO in players and you have to stay very very very careful however with all the news that you bring because - if you bring qualitative news, like with new clothes, new costumes, new skins, is one thing, if you bring quantitative things like new weapons there will be a fairly important nerfing period. So this latter activity is less profitable because it is more demanding. But how it works there for the former: same thing as in the single-player, but in my opinion is even more rooted because… so. In every gaming user experience there is a first moment of interest; then, the interest becomes learning what you are doing. After it settles down, and this thing becomes familiar, then the gaming experience becomes familiar and individualism begins. So if you play a multiplayer game and you know that you are using a skin that everyone uses you will have more interest in individualizing yourself. Differentiating from others. So you spend on creating your own identity. If we take Fortnite as an example, because in the end it is the prime example, Fortnite does it in a very intelligent way because the greatest strength of Fortnite in my opinion, besides the game itself, I mean the gameplay, is that they are able to ride the global marketing trends in the sense that they manage to intercept the trend when it is still a rising trend. So it is not yet viral and they manage to include it as a proposal in Fortnite, in fact in Fortnite there is an update every two weeks, new skins that, however, if you notice, always ride someone else's pulse point. These are obviously trade agreements in my point of view. But if you think about it, it means that for example a user during the European Championships 2021 will have more interest perhaps in using the Ronaldinho skin, rather than the normal, “classic” game one. That's why this

then also creates that moment of affiliation intended as one that rides the wave, which says ok, I'm one of the first to use this skin, it's also that premium moment.

Interviewer [00:11:11] A feeling of exclusivity.

Interviewee [00:11:19] Yes, right. If you also simply think about the dances, the ballets they do, that are paid, they are… nothing, it does not affect the playing experience. But it is actually very smart the way they do it because they take up the viral ballet of the football player etcetera and create just a vein of FOMO where people are basically ... feeling the need to express this kind of reference, you know? But also for personal returns. But of course we are talking about a target that maybe now is more accustomed to chronicle everything they do, show it in stories and so on. So you become premium by being one of the first to have the skin. And then you obviously flaunt it off to others in game.

Interviewer [00:12:11] Also, in my opinion, from a sales point of view in my opinion something that is very strong in Fortnite and is totally different for example in League of Legends is that in League of Legends there is that great store of contents… ok, every two weeks they add content, but the store is always the same; in Fortnite there is the randomness of the fact that I don't remember how often the store changes, so the player could also say “I don't know when I will find this skin on sale again”.

Interviewee [00:12:40] I believe it is that too. It depends, in my opinion there are the hardcore players who do not miss anything rather than maybe people like the partners with Epic Games who have some benefits... Then, however, it depends on the type of gamer - for the general public I definitely think this is just the typical experience.

Interviewer [00:13:13] You have already answered the following quesiton, so I move to this question that I want to ask you because it is something that I analyzed in my survey. Do you believe that having friends who play the same game as you can be a valid element to predict a greater expense in aesthetic microtransactions than people who do not have friends who play the same game?

Interviewee [00:13:43] In my opinion yes in my opinion yes because ... So, I'll give you an example always on League of Legends. I have never played League of Legends because I don't like the type of game but I have friends who started playing League of Legends simply because friends were playing League of Legends and they started spending just because there was that. stuff… like collectible stickers albums, do you know what I mean? Oh did you see that the new skin is out, I want to buy it, no I buy it no but we do the coordinated team that I buy this and that we make them all in the same style… so surely there is a synergy between what happens in the community within a group of friends and what actually happens to the individual. But this happens above all in multiplayer games, I don't think about single player because in itself there is much less will of comparison? In the sense that it's your stuff anyways, you don't have to do anything else ..

Interviewer [00:14:48] No, but also in my opinion the possibility of comparison is very limited. In the end what could it be, the Ps4 Share function, but it is very very fragmented ...

Interviewee [00:15:04] But yes, that's right, that's right, it's a little bit like that, it's a little bit like that. Then I tell you again, it's a bit more of a personal preference and advantage - which is working a lot, anyway, eh, because the idea of creating moments - I always take the examples from Valhalla which is a single player game - but it tries, to do weekly events and additional side missions where maybe you say: It makes no sense that I go there dressed as a Carolingian, I should rather buy the Viking armor set.

Interviewer [00:15:45] And here the roleplay factor comes into play.

Interviewee [00:15:49] That's right, that's right. Then it depends from game to game ... I repeat, I'm giving the example of the last game I played with this type of microtransactions, which is Assassin's Creed Valhalla. Then surely there will be others that work the same way ...

Interviewer [00:16:12] To report the results of the questionnaire, basically the results have shown that in general multiplayer players buy, I mean, they spend much more per month than the single player. But above all, in general, and this regardless of the categories, players who have friends who play the same game spend on average more than twice as much. These were really really high

numbers. Now a question to you player, do you buy microtransactions? If so, what kind and what kind of games and why.

Interviewee [00:16:38] So, I don't buy microtransactions… I'm a bit atypical as a consumer, in the sense that .. So I don't like it in itself ... I'm a little older and a little more mature, you know. It happened to me though, the only conversion I made - the only microtransaction that happened to me was after playing and finished Final Fantasy 15 when I discovered there was the Royal Edition with some extra stuff. And I bought the Royal Edition because I was so much… I was so into the game that I wanted more. This however is not a microtransaction as much as it is an add-on with extra content so ...

Interviewer [00:17:55] No exactly, because Final Fantasy 15's Royal Edition is almost a DLC, right?

Interviewee [00:17:59] Yes, the Royal Edition is a DLC that adds the stuff, corrects the others… adds you three hours, four hours of gameplay… one of the worst purchases I've made in my life, I said to myself "I won't do microtransactions anymore". But that's the idea, they are not for me, I am not the type who converts because… it does not have the value it can have for other consumers. I've never been fascinated to say even by Pokemon collectible cards. So I don't have that collecting thingy, that passion.

Interviewer [00:18:54] I would like to add a very brief question then, do you think it could be a generational matter? So that younger people are more inclined to purchase microtransactions.

Interviewee [00:19:23] Definitely, definitely ... Because the idea is that ... If we talk from generation to generation ... let's pretend that we are 15 years behind, in 2006. Fifteen years ago, you bought a game, 60 euros, that was the experience. After five years, in 2011, you buy a game that is three quarters of a game, but the real ending is the last quarter present only in the DLC ... So .. in my opinion the new generations, especially digital natives, therefore those who have access to mobile devices and in any case have that language, are able to chew that language right away, are much more inclined to make microtransactions simply because it is the substitute. If before people bought Panini stickers, now they buy FUT, for example. If you used to collect Pokemon cards, now

you play Hearthstone, do you understand? I no longer buy Magic decks but I play Magic Arena, and for example there you can buy decks with microtransactions - but it's a multiplayer - and you do it because ... you have to ... it's like buying cards, so let's say it's a microtransaction that lies within the very concept of the game.

Interviewer [00:21:09] Among other things, I tried Magic Arena but my computer is too weak so it runs very slow. I am particularly fond of Legends of Runeterra, the League of Legends mobile card game, which is very very very nice and has only aesthetic microtransactions, only. You can buy cards with real money but you can easily get them just by playing. Now I ask you: Do you think a player is more inclined to buy an aesthetic microtransaction if it refers to another game or another IP of any media but also a reference to pop culture in general?

Interviewee [00:22:12] So in my opinion yes, and in part I have already answered definitely yes. You give me the example of using the costumes of the old games on Assassin's Creed; totally agree. In the sense that if you think about the fact that in Fortnite ... if you think, even in Fortnite for example, Avengers comes out, they do the Thanos - Infinity War event and everyone has the skin of Deadpool, or Iron Man. Surely one thing that ... I wouldn't say it's the most central thing but it's a very, very strong tool.

Interviewer [00:22:53] That is, it can be a motivation. And do you think Branded Content has a place in this market? The most striking example is Louis Vuitton x League of Legends but they have certainly done so in Fortnite 10 million times.

Interviewee [00:23:15] I am quite convinced that, from here on, marketing 3.0 will take place in digital worlds, to also simply tell you the fact that… if I do a Travis Scott concert on Fortnite ... that is, it is very pioneering as a reasoning… so if I do a reasoning too of, for example Animal Crossing which is used to do other things like the island for the election campaign of Joe Biden ... it seems very plausible that from now on there will be a greater attention than this type of media, especially for the branded content. If you think simply of Death Stranding and Monster… they partnered with Monster but it was not a product placement partner but they created an in-game dynamic where they justified the presence of Monster and showed the Monster logo big as well. So you, Norman Reedus, you have to go to your base to recover stamina and in order to recover it you have to drink

the energy drink. Camera, energy drink, Monster logo splashed all over your face. That's in my opinion is the future of branding because… Because it's exactly like making Coke in "Home Alone". The placement, however, is a more Stranger Things placement. I don't know if you remember, in the last season of Stranger Things there is a Coca-Cola placement and I know that there are them talking about the Coca-Cola of the Coca-Cola placement so they break the fourth wall and the fifth actually… according to me is this because it is because it is one of the ... The idea is that by now marketing and commercialization has entered completely into the anthropological social tropes, ok? So one of the last poles that needs to be settled is gaming. I hope it is never so heavily experienced, but it seems plausible to me to think that the next Cyberpunk, the next GTA, will have billboards for brands in four years.

Interviewer [00:26:03] In my opinion for two reasons: the first is that nobody outside the industry considers it anyway, but gaming is the largest entertainment industry of the entertainment industries. I know this because I searched for the data for the thesis. Literally, the global video game industry is twice the size of global cinema and music combined. The second reason is that the video game requires a different type of engagement perhaps from a film or any other medium, in my opinion it requires a higher level of engagement and therefore any advertisement is more… observed there.

Interviewee [00:26:43] I agree. If you do 40 seconds in a one-hour video of drinking Red Bull or Monster, that's it. It happens to me that you have had a drink. If I have in my own experience, of my user experience something that is linked to a dynamic... In my mind I remember very well the Monster and I also remember the fact that if I go out I see a Monster I think of Norman Reedus and Death Stranding. So they are things completely - when you put a placement of this kind in an action then you vehicle the action to accomplish something. It is normal, it sticks more to human behavior. Yes, surely this thing is very interesting then I tell you, it is not that I think there is a conversion rate of 1, in the sense of 100% conversion, but I am sure that doing a placement in a video game converts more than a billboard imagined the street.

Interviewer [00:28:12] And this is more or less one of the conclusions I will arrive at in the thesis. Because what I write is the thesis is that the literature that I have found much more than I expected but in any case compared to the importance that gaming has in the world much less than it should

be. Why? Because there is still this idea that gaming is not relevant to investigate understood, to be researched in my opinion.

Interviewee [00:29:06] In my opinion there is also an idea of microtransactions that are not very much explained and pass, mainly due to Electronic Arts, always pass only as gambling so it is certainly slightly less interesting from that point of view because one says… ok, then I do the exact same reasoning about poker, because I don't put on ... But the truth is that…. It depends. Because microtransactions, or converting into a product to receive a vanity item is one thing, which however is mediated by the publisher, if the publisher only puts the title then skin is one thing. If like EA in Battlefront 2, you put the weapons, everything else, some in-game weapons to be accessible only by paying otherwise you have to do six months of play to unlock it in-game ... That's a little bit that a little shady.

Interviewer [00:30:30] Very well, thank you very much for this interview Mattia. You provided me with a lot of useful inputs.

Interviewee [00:30:31] Perfect, I'd say we're there. Look, then that's perfect, I'll send you the recording as soon as it is generated by the program.

Appendix C

Table 1. Two sample *t*-test with equal variances, social variables split by game preference

	Multiplayer games users		**Single player games users**		
	M	**SD**	**M**	**SD**	***t*-test**
Differentiation from others	62.125	31.769	52.262	35.093	2.144*
Social value towards strangers	33.272	35.491	21.482	27.205	2.831**
Social value towards friends	43.681	37.866	31.312	33.975	2.564*

*$p<.05$.
**$p<.01$.

Note. M = Mean. SD = Standard Deviation. All the three "social" variables range from 1 (No influence) to 100 (Complete influence).

Table 2. Two sample *t*-test with equal variances, personal variables split by game preference

	Multiplayer games users		**Single player games users**		
	M	**SD**	**M**	**SD**	***t*-test**
Aesthetic features	86.75	82.402	74.957	70.561	3.570***
Roleplay	53.454	46.592	59.057	53.640	ns
Identification with character	59.977	52.050	58.461	52.789	ns

***$p<0.001$
ns = non significant.

Note. M = Mean. SD = Standard Deviation. All the three "personal" variables range from 1 (No influence) to 100 (Complete influence).

Table 3. Two sample *t*-test with equal variances, money expense split by game preference

	Multiplayer games users		**Single player games users**		
	M	**SD**	**M**	**SD**	***t*-test**
Average monthly money expense	21.460	13.610	7.223	4.939	4.082***

****p<0.001*

Note. M = Mean. SD = Standard Deviation. Money expense was a free text field for respondents and could potentially contain any numerical value.