University of Bergen

Department of linguistic, literary, and aesthetic studies

DIKULT350

Master's Thesis in Digital Culture

Spring 2023

Predatory/exploitative Monetization in Modern Video Games

A critical analysis of FIFA 23 and Diablo: Immortal

Håkon Dale Askeland

Sammendrag

Denne masteroppgaven undersøker de pågående problemene knyttet til utnyttende metoder som brukes til å tjene penger av spillere i moderne dataspill. Videre i oppgaven så undersøkes og sammenlignes to spill, og hvordan de bruker utnyttende metoder til å oppfordre spillere til å kjøpe mikrotransaksjoner. Mikrotransaksjoner er små og vanligvis valgfrie tjenester som spillere kan kjøpe inne i spillet. Når vi diskuterer utnyttende metoder, så snakker vi blant annet om taktikker som blir brukt til å presse og oppfordre spillere til å kjøpe ulike mikrotransaksjoner i spill. Disse metodene er påtrengende for spillere, og er designet for å skjule de langsiktige kostnadene ved å kjøpe disse mikrotransaksjonene. Tidligere akademiske verk har sett på relevante problemer rundt dette, men har undersøkt det mer generelt. Denne oppgaven, derimot, ser på to spesifikke spill, og fokuserer på deres bruk av utnyttende metoder. Dette skjer ved bruk av en "app-walkthrough method". Her undersøker og analyserer oppgaven hvordan *FIFA 23* og *Diablo: Immortal* oppmuntrer spillere til å kjøpe mikrotransaksjoner i spillene. Samtidig så tar oppgaven bruk av en komparativ analyse for å fremheve forskjellene og likhetene i bruken av utnyttende metoder. Det ble funnet at begge spillene er tydelige i bruk av disse utnyttende metodene. Spesielt er deres bruk av taktikker hvor spillere kan føle seg presset til å kjøpe mikrotransaksjoner. Dette stammer fra, blant annet, spillenes konkurransemessige natur. Spillene er også ivrige i bruken av *loot box*-lignende systemer, som gir spillere en svært lav sjanse til å skaffe seg en rekke ulike gjenstander ved kjøp. Hvordan hvert spill bruker disse og andre utnyttende systemer kan være svært annerledes derimot. For eksempel så er spillere direkte involvert i utfallet av å åpne disse i Diablo: Immortal. Oppgaven argumenterer derfor at en spesifikk type av en utnyttende mikrotransaksjon kan variere i stor grad fra spill til spill, selv om det grunnleggende konseptet kan forbli eller er det samme. Det kan også være en stor tilstedeværelse av mikrotransaksjoner uavhengig av inntektsmodellen til et spill.

Acknowledgements

I would like to first and foremost thank my supervisor, Nick Montfort. Major thanks to him for keeping me on track throughout the process of writing the thesis, and making me think critically about my aims, purpose, and goals with the thesis as a whole. Additionally, I am thankful for his invaluable knowledge and feedback which has provided me with meaningful insights and a clear path to the finalized thesis.

Thank you to my family, especially my parents, for supporting me in writing this thesis. Without your support and constant encouragement, none of this would have been possible. Lastly, a thank you to my dog, whose joy and love has provided me with everlasting emotional support, even in his older days.

Table of contents

Abstract

This thesis examines the ongoing problems related to the monetization of modern video games, as they have become increasingly monetized through several means. Furthermore, the thesis examines and compares how two specific video games utilize predatory/exploitative monetization schemes to incentivize purchase and use of microtransactions, small additional purchases found in modern games. Predatory/exploitative means of monetization can involve, e.g., pressuring tactics that entices players towards purchase of a variety of microtransactions. These schemes are intrusive towards players, and are designed to hide the long-term cost of purchasing these. While previous academic work has looked into issues regarding predatory monetization of games, theirs have generally examined these on a wider scale, and not necessarily on a case-by-case basis. In contrast, this thesis closely examines two recently released video games, and focuses on their specific monetization methods using the "app-walkthrough method". Specifically, this thesis analyzes how "FIFA 23" and "Diablo: Immortal" guides and incentivizes players towards in-game purchases. In addition, a comparative analysis is conducted to highlight the key differences and similarities in their use of predatory methods of monetization. Furthermore, the thesis finds that the games are evident in their use of predatory/exploitative monetization schemes. Notably, is the games' use of pressuring tactics which stem from the games' competitive nature, among other things. These games are also avid in their use of loot box-like mechanics, in-game containers that give players a measly chance to acquire a variety of in-game items through purchasing and opening these. Ultimately, their methods of utilizing these schemes differ, e.g., as players are directly involved in the outcome of loot boxes in Diablo: Immortal. Therefore, the thesis argues that a specific type of exploitative microtransaction can differ largely from game to game, even though the basic concept might remain. Moreover, there is a large presence of microtransactions regardless of the monetization model of a game.

1. Introduction

Video games are unique from other entertainment mediums. The variety of genres, sense of community, and gameplay games can offer a player, is an experience unlike any other medium. They can tell a compelling story, and at the same time, give players a way to interact with it. This interactivity between a specific game and its player can create unique stories that differ from other players. Most importantly, video games are inherently fun. Since my childhood, I have been playing video games, first being introduced to them by my two older brothers. In the time that has passed between then and now, the video game industry has grown exponentially. The introduction of the world famous "Pong" game set the precedent of what a game could be. Through its story of success (Lowood 2009), video games have since become the largest entertainment industry in the world at present time. An industry so big that an estimated 197 billion US dollars was generated globally in the year of 2022 (Statista 2023). When someone bought a video game for a premium price tag 15-20 or so years ago, they would receive a full and perhaps finished product. At least, that was the expectation. These would be released by developers and companies before they would move on to their next game or endeavor. In other words, any existing features and problems present in these games would stay as they were, as these games were never updated. These games were at least full products, and they could tell a story to completion.

However, games are a constant evolving medium. In the relatively short time that has passed between then, there have been numerous technological advancements, some considerably more problematic than others. *Some* games have also become increasingly expensive to play to their full potential. In contrast to older games, modern games are often divided into several parts or versions, where the potential story is told over time in the form of addons. These "DLCs" or downloadable content addons started as separate purchases such as a story expansion, which could provide players with a different story to the original (Ivanov, Wittenzellner, and Wardaszko 2021, 390-391). In the end, these can provide more context to an existing world and story already in the game. As games have progressed, however, there has become an increasing focus on multiplayer player games in comparison to singleplayer. Rather than focus on telling a story, these games allow players to play against each other or with each other in cooperation, providing a sense of competitiveness.

With an increasing focus on multiplayer games in present time, how these are being monetized is an ongoing discussion among players and researchers alike. This is truly where the problems of modern gaming begin to unfold. Rather than sell a game for a premium price tag of $60, as has been the standard for a number of years (Johnson, and Brock 2020, 149-150), there is now an abundance of microtransactions in modern games. These "microtransactions" are generally small additional purchases that players can buy in-game (King, and Delfabbro 2018, p. 1967), hence the word micro. Specifically, what these small additions are, vary, but some explored in this thesis include "virtual currencies", "cosmetic skins", and "loot boxes". A microtransactions is therefore "an umbrella term that covers a wide range of purchases within video games." (McCaffrey 2019, 485). While microtransactions may not be inherently problematic, in recent years there has been an increase in predatory and exploitative means of monetization towards players of video games. Daniel L. King and Paul H. Delfabbro define predatory monetization schemes as those that "typically involve in-game purchasing systems that disguise or withhold the true long-term cost of the activity until players are already financially and psychologically committed." (2018, p. 1967). This, largely, occurs through the use of microtransactions, where games can use, e.g., pressure tactics to entice players towards purchase of these (p. 1968). Since there is such a variety of games, in terms of their genres, and gameplay, how these are utilizing certain microtransactions can also differ on a large-scale. In recent months, the hugely popular game *Fortnite* has been under scrutiny. This game, which is largely targeted for children and young teens, was alleged by the United States Federal Trade Commission of using "dark patterns" to trick players into purchase of microtransactions. Since then, "Epic Games", the gamemakers of Fortnite, has been fined $520 million for this and a number of other violations (Federal Trade Commission 2023). Furthermore, whether dark patterns or predatory monetization, these schemes seek to trick or exploit players into purchasing microtransactions. What this ultimately shows is that predatory monetization schemes are utilized in modern gaming, regardless of the players' ages. This is also one of the most popular video games of the last decade, where microtransactions are also prevalent.

A specific type of microtransaction, *loot boxes*, have also been under scrutiny in recent years, from academics and gamers alike. Studies on this phenomenon have linked loot boxes to gambling, as it shares distinct similarities with real-life gambling (Johnson, and Brock 2020; von Meduna et al. 2020). Gambling can be defined as "risking something of value on the outcome of

an event when the probability of winning is less than certain." (Korn, and Shaffer 1999, 292). These *loot boxes* are akin to gambling, as they present random chances of obtaining a variety of in-game items (King, and Delfabbro 2018, p. 1967). As such, there has been an increase in the discourse surrounding these, both academically and on a global basis. More specifically, these loot box microtransactions have the attention of the European Union, where they recently voted to take action against these (Cox 2023). These predatory monetization schemes, e.g., loot boxes, are problematic for several reasons. The long-term effect and cost of these for players are perhaps some central issues that come with these being prevalent in a game. While players who do spend small amounts of money on these at first may seem in control, the amount can quickly turn into hundreds or thousands in order to succeed in obtaining the wanted in-game item (von Meduna et al. 2020; King et al. 2020; Li, Mills, and Nower 2019). The possible dangers and issues that surround video game monetization is apparent. What is not necessarily clear is how these may be utilized in specific games.

1.1 Purpose of the thesis

Due to the timeliness and relevance of these issues in the modern game industry, this thesis examines predatory and exploitative monetization in two specific games. Additionally, previous studies have generally focused on relevant issues on a larger-scale, or rather, in more general terms. In other words, past studies have not exclusively examined these being utilized in specific games. The main goal of this thesis, however, specifically seeks to examine how predatory schemes may be utilized in the games "FIFA23" and "Diablo: Immortal", and if their methods of doing so differ. These are both recently released games, and have since seen immense success. This is in terms of the number of players playing them, as well as the money these games have generated. In looking at games that are hugely successful, we can possibly discover how and if these games take advantage of players using exploitative means of monetization, and to what extent. While loot boxes may be a prominent feature in these games, the thesis does not seek to only examine these, as these are just one of many possible exploitative monetization models. The general concept of a loot box has also already been discussed in great detail in previous research. The focus of the thesis is, consequently, not solely on these. This thesis aims to build on existing research regarding predatory monetization in video games (King, and

Delfabbro 2018; Petrovskaya, and Zendle 2021). However, video games are constantly evolving, and as such, so are their methods of monetization. The importance of this is in regards to the increase in exploitative monetization schemes in modern games. Realizing how exploitative means of monetization are used in individual games is something I find can possibly further the conversation that surrounds these. The reason for this is largely as individual games may take different approaches to utilizing these. Due to the diversity of games, these games may take existing concepts of monetization (such as a loot box), but mold and transform them into something that fits that particular game. A loot box can, therefore, possibly differ vastly on a game-to-game basis, even though the basic concept might still be similar (randomized container of in-game items).

The problems surrounding modern video game monetization is apparent. These potential exploitative schemes that modern games use have, seemingly, exploded in popularity these last few years. A central theme this thesis seeks to discuss is the monetization of video games. This does not necessarily mean modern games only. An interesting phenomenon is to look at how video game monetization has changed as video games have evolved over the course of the medium's history. In realizing this, we can discover the vastness of video game monetization, and discuss how monetization of video games today is under scrutiny. To briefly elaborate, the potentially problematic and exploitative, but highly profitable methods of monetization used in modern gaming today have been *perfected* over a long span of time. Indeed, they are the result of a number of trial-and-error efforts from different game developers and companies dating all the way back to the first video games in history. While this is not the thesis' main goal, it can serve the thesis in providing detailed description of past and present monetization of games. The thesis aims to answer the following questions:

1. How are (specific) modern video games using predatory/exploitative monetization schemes to incentivize spending on microtransactions?
2. Do their methods of doing so differ, if so, how?

The main body of the thesis consists of five main chapters. Moreover, the two first parts of the main body focuses on conducting in-depth walkthroughs of both FIFA23 and Diablo: Immortal.

Here, we are critically analyzing the chosen games in their use of predatory/exploitative monetization schemes. Specifically, when examining these two games, we are analyzing how the games incentivize purchase of microtransactions, and their use of predatory/exploitative monetization schemes. This may only answer one of two research questions. Therefore, a comparative analysis will be conducted, where we analyze and compare the games' use of predatory monetization schemes, leaning more into the similarities they may share, and how they might differ. Any major results gathered from the analysis of both games will need to be discussed in correlation to the thesis' goals. The discussion part of the thesis will be used to determine the games' potential use of predatory monetization schemes, and how these may differ from game to game. Above all else, the chapter will discuss the thesis' significance and implications, and provide new insights into the problems surrounding modern game monetization. The expected results or conclusions of this thesis will detail how modern video game monetization is predatory and exploitative towards players, and that games can take different approaches to utilizing predatory methods to further exploit players. Furthermore, it will detail that there is a large presence of microtransactions in video games regardless of the monetization model.

2. Literature Review

2.1 Video game monetization of the past

This literature review is first and foremost an overview of past and present academic work in the field of study of this thesis. Additionally, it also serves as a timeline on important events and technological advancements during the history of video game monetization. This is as it not only discusses current and recent studies on game monetization, but also that of the past and how monetization of video games has evolved throughout the years. Furthermore, this literature review serves as an in-depth overview of different types and forms of monetization appearing in past and modern video game titles. By first introducing a specific method of monetization of the past and examining its purpose, we can look at how it has evolved throughout the years. This

allows the thesis to discuss in detail how monetization of video games today has since become under scrutiny and disputed.

2.1.1 How monetization models of video games have changed throughout history

How video games are being monetized is an area that has seen constant development over the course of video game history. When we are discussing models of monetization, we are, in reality, discussing a game's business model. To elaborate, Martin Ivanov, Helmut Wittenzellner, and Marcin Wardaszko define business models in their article on "Video Game Monetization Methods Mechanisms in Triple A (AAA) Video Games" as:

> "The business model of a company is the most basic, yet vital component of revenue creation and is the fundamental part of every company's "DNA". The business model is de facto the blueprint of how a specific company is intending to generate value, target its customers, distribute its products, plan and expend its resources, monitor its key performance indicators (KPIs) as well as manage all, if any, supplier connections (2021, 389).

When we are discussing business models, or rather, monetization models within the video game industry, there is no set model that applies to all games (Ivanov, Wittenzellner, and Wardaszko 2021, 390). This is due to the wide variety of models and methods being utilized to monetize video games. Paying a one-time purchase for a video game is just one of many ways companies generate revenue in the largest entertainment industry in the world. Since the dawn of "Pong", in terms of monetization, video games have been the subject of trial and error. Video game companies have desperately tried figuring out how to generate the most amount of revenue from their games. From creating accessories essential to playing a specific game like the light-gun, where players would use a physical toy-gun to play rather than a controller, to handheld devices such as the Gameboy. The innovative ways game developers and innovators within the gaming industry have attempted to advance the technology being used to play video games is interesting. Some notable of these methods are coin-operated machines, one-time purchases, subscriptions, DLC (otherwise known as downloadable content), and free-to-play, where revenue is generated through other means (Ivanov, Wittenzellner, and Wardaszko 2021; Cobb 2017). As we progress

through this chapter, we will dive deeper into each of these methods, and we will start doing so by looking back at the time when video games were not considered mainstream, namely, the creation of Pong.

Pong is the first success story in video games. In Henry Lowood's article, he discusses the early history of video games and how they first came to be (2009). Moreover, it was during the 1960s and 1970s when games first started to emerge out of research facilities and laboratories (Lowood 2009, 5). However, as described by Nick Montfort and Ian Bogost, given the high price for a compatible computer system to play these games at the time, they were also confined in these same universities and laboratories (2009, 7). The first breakthrough came with the release of "Pong", and it is perhaps with the release of Pong where people also realized the potential of video games. Pong is not the first video game in existence, as it shares its inspirations and a close resemblance to games such as "Spacewar" and "Computer Space", which has since gone under the radar in comparison to Pong (Lowood 2009). The concept was simple, two players faced each other, each controlling their own on-screen rectangle paddle using a physical dial. The dial would be used to move the paddle, and in turn, try and shoot the ball past their opponents paddle to win. In contrast to modern games, not a single line of code was utilized in the creation of Pong. It all came down to the brilliance of the mind and creator behind Pong, Al Alcorn. Rather than use lines of codes to create the rules of the game, Alcorn used his knowledge of electrical engineering to build his game from the ground up, basing his design on "simple rectangles that digital TV circuits could easily generate on the fly." (Lowood 2009, 15). It was this simplistic yet brilliant design that eventually led to the success of Pong, as not only was it easy for new players to learn, it was also easy to play, requiring no past knowledge of video games or how to play them. All the players had to do was move their paddle and beat their opponent. However, even though the rules and play of Pong were easy to learn, like any competitive video game, who won would largely come down to the most skillful player of the two. This was due to there being no ways to really work outside of the box to beat the opponent, owing to its simplistic design. As Lowood describes, Pong really is the first video game success story, which again, largely came down to its simplistic and easy to pick up design (2009, 6).

When we look back at the time before video games first started to become an actual mainstream media, there was, initially, no intent to monetize them. These were still in an early

and experimental phase (Smith 2019; referenced in Johnson, and Brock 2020, 147). The first developers of video games were still figuring out the quirks of this fascinating new media, and were largely held back by the technology at the time. They had neither computers as we know them, nor did the internet exist at the time. This is particularly interesting, as it details the vast difference between past and modern game monetization. Moreover, this is not only in terms of how games are now being developed, but the change in goals and direction. Ultimately, this shows that video game monetization has not always been problematic, as in contrast to modern games, games of the past were not heavily monetized. Furthermore, the relevance of Lowood's (2009) article to this thesis generally has to do with video games, but in a closer sense, it details how an industry came to be. It previews how video games first started to evolve from being *simple* science and laboratory experiments, to fully fledged means of profit, capable of generating billions of dollars. Pong showed that the potential was there, and with continuous improvements of past and new technology, we would eventually see an entire new multi-billion-dollar industry take form. Even though Pong is not considered to be the *first* video game in existence, its sheer wide scale success resulted in an entire new industry, namely, the video game industry. The success of Pong, however, was not only due to its simplicity. It also owes a lot of its success to the Arcade machine.

The arcade machine was essential in introducing video games to the larger public. In their article, Mark Johnson and Tom Brock discuss how monetization within the gaming space has changed and evolved through the years. In this discussion, they happen to mention the *arcade machine* which perhaps paved the way to how video games would come to be monetized, as their popularity rose (2020, 147). When discussing monetization in early video game history, the arcade machine is a central and necessary item of discussion. It is a piece of revolutionary technology within video game history, and played an essential part in Pong's success, and among other video games of that time. The arcade machine allowed people to play video games by paying real-world currency in the form of coins. In the early years of the arcade machines, these machines were strategically found at places of gathering, such as bars or taverns (Lowood 2009, 14). At first, they were not the main attraction they later would become. Rather, they were a side activity, something of intrigue that was placed out of the way, perhaps in the corner of the bar for people to enjoy. These arcade machines would quickly become social hubs, and would replace

social activities otherwise present in taverns and bars such as dart boards and other related activities (Montfort, and Bogost 2009, 7). As mentioned, these machines hosted coin slots, and by paying the right amount of coins, the game would give the player a number of lives, or a certain amount of time to play the game present on the machine. Furthermore, when the player had lost all their lives, or the timer had run out, the player would have to pay with coins through the machine's coin slot in order to play again. Researchers Nick Montfort and Ian Bogost have compared these machines and their games to slot machines found in casinos (2009, 6). While they do share similarities, there are also clear differences. To elaborate, their look, the one-time purchase through coin slots for a limited time, and games of chance present on the machines, are just some similarities they share. However, as Montfort and Bogost mention, what really makes them different is the controllable experience. With video games the player has a certain amount of control over the outcome(s), but with slot machines, it really only comes down to chance and pure luck (6-7). Furthermore, in contrast to a slot machine, arcade machines do not dispense any money back to the player. These machines would continue to increase in popularity, and reached their peak with the introduction and continuous improvement of both arcade machines and Arcades. These were locales created specifically to host these machines and those interested. While video games were still not considered a mainstream media, they could no longer be considered a niche.

Video games of the past are notoriously difficult. In retrospect, these arcade machines could be considered money sinks at the time, had it not been for the cheap price of playing, as the amount of lives or time the player would receive was minimal. This was also worsened by the harsh difficulty of these games, which is drastic compared to more modern game titles such as "The Last of Us" or even "The Elder Scrolls V: Skyrim". These games were often unfair, and designed specifically that way. Comparably, in a sense, it is almost akin to games one can find at an amusement park, or rather, as Nick Montfort and Bogost describe as "The classic midway games".

> "The classic midway games, which involve things like throwing a ball into a basket or knocking down bottles, appear to be contests of skill. But the barker can subtly alter the games to tip the odds in or out of his favor. For example, by slightly, imperceptibly

turning the angle of the basket, the basketball game operator can almost ensure failure, or make success very easy, for a particular throw." (Montfort, and Bogost 2009, 7).

This phenomenon, where there is a sudden increase in difficulty, is especially apparent when looking back at some of the major video games of the time now. The contrast of difficulty in modern video games and retro games is of a widely different margin. To avoid any confusion, I use the words "retro games" whenever I discuss games older than the 2000s, as that has widely become the consensus when discussing older games. Modern video games feature a variety of different mechanics that are designed specifically to help the player progress through the game. To elaborate, one of these mechanics worth mentioning are tutorials, which in most cases, introduces the player to the core gameplay, and is essentially a way for players to learn how to play. Furthermore, the importance of checkpoints in modern gaming is drastically underrated. It is usually something we take for granted today, only really noticing it when we die in-game and are then sent back to the original checkpoint. Before, we did not have the ability to save our game at any point in time like we do today. Older games such as "Resident Evil" or "Silent Hill" had us struggling through doorways and levels to find a typewriter or a notebook in order to save our game. In comparison to games today, when we look back at older and retro games, one could play only to then die and lose all the progress they had made thus far. To make the matter worse, they would then have to pay again, and track back all their previous progress. As Jagoda explains in his article on video game difficulty, the addictive loop of arcade machines was perhaps intensified by the fact that many arcade games had no "terminal goal, offering play without absolute end." (2018, 205). Meaning, there was no "end goal", as the game would last as long as the player survived or had time left. Instead, how long the player lasted, and how well they did would be calculated into a fixed score on a scoreboard, where players could compete amongst each other to achieve the highest scores (Jagoda 2018, 205). "Ghosts 'n Goblins" for instance, is a game which its creators have described as "One of the original "hardcore" games" (Ghost n' Goblins 2023). It is widely considered to be one of the hardest games in the history of video games (Creswell 2020). Moreover, its premise and story are remarkably ordinary, where players are given the task to save and rescue the princess of the land from certain death. A trope we have become too accustomed to at this point. However, the focus when creating this game was clearly not on the story or its characters, but rather on the famously harsh and unforgiving gameplay.

The game is a 2D platformer, where each input requires pinpoint precision, as enemies are likely to swarm the player from every side, leaving little to no room for error. Should the player take damage, they will usually die in just one or two hits, further reinforcing the idea of the game being a brutal and unforgiving game. This is also worsened by, as previously mentioned, the lack of tutorials, and checkpoints as we know them today. However, due to arcades being social venues, players could watch other more skilled players play in order to learn.

It is hard to say if the intent behind making the game this challenging was from a financial standpoint or simply from an aesthetic and artistic standpoint. Regardless, the lack of modern game elements that aim to help the player such as tutorials, consistent checkpoints, and save points, has a lot to do with older/retro games being as hard as they are. The reason for mentioning this particular game has to do with the addicting loop of pay, play, die, and repeat. This is not only present in Ghost N' Goblins, but many of the games released in the same time period. The addictiveness of their design, where in most cases these games lacked a clear end goal (Jagoda 2018), could perhaps reinforce continuous spending on arcade machines. While this may not be as problematic as it seems, it is seemingly, one of the first examples of addictive gaming, not to mention video games becoming a monetized medium for profit. It ultimately shows that methods were potentially being employed to maximize revenue, even in the earlier days of video games. Moving on, arcade machines popularized video gaming to an extent, bringing video games into the hands of the public. However, the industry changed as a whole when games first started to arrive on cartridges, cd's, and later digitally.

2.1.2 Pay-to-play Gaming and Video Game Pricing

The introduction of the video game home console changed how and where people played. While the arcade machine made it possible for people to convene in arcades and play video games alone or with others, video game cartridges and CD-Rom revolutionized the industry. In turn, it changed their methods of monetization. As further described by Johnson and Brock, this was really the first time people could actually have ownership of video games, rather than having to "rent" them as they had previously done (2020, 147). Meaning, people could simply buy the games for a set price, and keep them for as long as they wanted. People were now free to pay for

and play the same games as featured in the arcades. This happened through a one-time purchase, however, and gave players the ability to keep playing without any time constraints, nor a sense of rush. Not only did this change the way games were being monetized, it also drastically affected the price of video games.

Consoles like the *Atari* gave people the ease to play their games at home, even though these were not *cheap* by any means. The original "Atari 2600" launched in the late 1970s, and would cost around $199 at the time (Laing 2004, 25). Going to Arcades was perhaps more accessible and cheaper than purchasing home consoles, even though people never had ownership of arcade games. People also had to go through the effort of commuting to these locales. Nevertheless, since the release of the Atari 2600, the trend of releasing new and improved home game consoles would continue as more and more consoles arrived on the market. This happened over a span of several years. While I do not intend to mention every single console or piece of technology that was influential to the ever-evolving industry of video games, I believe it necessary to at least mention the next big evolvement in video games. More precisely, I am hinting towards the use of CD-Rom. Forms of CD-Rom are still used today. Nevertheless, while its importance has perhaps started to falter in modern times, it further evolved how video games were monetized, going from a cartridge based system to a disk system. Since cartridge-based consoles and games first became the new standard for selling games, the price for a single game has, surprisingly, not been under much pressure since.

The standard pricing of video games is starting to fade. As cartridges, and cd-rom became widespread in the market of video games and film alike, the $60 price tag of video games quickly became the international standard of video game pricing (Johnson, and Brock 2020, 149-150; Rayna, and Striukova 2014, 65). Whether or not the quality of the game was considered particularly good, worthy of praise, or not, did not matter. The price tag of $60 games had, seemingly, become universally agreed upon. The only difference being *Indie-games*, or smaller titles with smaller budgets that cost anywhere between a single dollar to $60. Since the introduction of the $60 price tag, this consistent price cost of video games has lasted a surprisingly long amount of time. In fact, it has lasted longer than anyone might have expected it to last, as the industry continues to grow immensely. I would like to point out, however, that

since the release of Johnson and Brock's paper in 2020, the industry standard pricing of games has started to shift. It is stated in their paper that "Since 1996, the cost of a brand new game has not risen from around $60 - and is likely falling, due to discounts, trade-ins and third-party platform deals" (Johnson, and Brock 2020, 149-150). This has nothing to do with any faults in their research, as they were clearly limited by the information available to them at the time. Nevertheless, recent years have shown a shift to a new increased standard of $70 for games. This shift to higher game prices likely has to do with new and more powerful technology that has started to hit the market in recency. Usually, this is being marketed as *next-gen* by both the public and the developers of these next-gen consoles (Zwiezen 2022). One might argue that the overall quality, time, and cost of developing modern games being much higher is a reason for this price shift. This is certainly something Johnson and Brock touch on in their paper, even without the knowledge of games soon to be increasing in price since the release of their paper (2020, 149-150). However, seeing as profits from sales of video games has never been higher, I would not commit to this being the sole reason for why there is an increase in price. Besides, other games of *lesser* quality have also started to adapt this trend as well, which is a direct contradiction to this argument. When I say lesser quality, I am not in any sort of way trying to discriminate towards games with lesser budgets, as they often are of better quality than that of big budgeted games. It mostly has to do with the expectations of quality that a high budget game is able to produce, not to mention the expenses going into it. Therefore, one could argue that the price of either $60 or $70 is justified in that sense, when talking about big budgeted games.

Johnson and Brock's (2020) paper inspired me to do something similar with how they discuss monetization of the past and present. This thesis, however, mentions specific items of the times. However, with that being said, there is a larger focus on modern methods of monetization in their paper, even though there is some discourse regarding monetization of the past in earlier parts of their paper. Furthermore, my aim with using Johnson and Brock's article here in this part of the thesis was to introduce pieces of technology related to video game monetization. More specifically, those that either reinvented the current monetization wheel at the time or played a central part in video game history. Furthermore, I have also expanded their points by introducing relevant discussions of my own. More specifically, throughout the chapter so far, I have mentioned specific examples that provide more detail and information about monetization

methods during certain time slots. These examples are discussed as it strengthens the thesis by not only discussing general terms, but specifics surrounding them as well. The point here was to detail monetization of the past before moving onto more modern monetization of video games. Moreover, the decision to split the literature review into two parts was made in order to paint the whole picture. This is in regards to the problems surrounding the modern video game industry in contrast to that of the past. By showing this, the thesis is able to detail that the problems surrounding modern game monetization were not always present. Modern games are, in contrast to games of the past, under scrutiny for using intense and aggressive monetization schemes to maximize profits from players. Even while the video game industry is amassing record breaking profits every year, there is still an increase in the pricing of video games. We have explored, in detail, how monetization of games has evolved since their introduction as a mainstream media. Moving on, we are examining modern methods of monetization in the video game industry and their related problems.

2.2 Video game monetization of the present

The thesis has, so far, largely discussed video game monetization of the past. As I feel we have explored enough of the past, it is time we move on to the next part of the literature review. This part will examine video game monetization of the present. In addition, it will simultaneously be used in trying to unveil problematic and perhaps exploitative forms of monetization being used in video games today. The relevance of this part of the thesis will, therefore, be even stronger. This is due to it diving deeper into more modern problems, where the discourse from researchers and the public alike, is at its most active. Moving on, the discussion will start by focusing on the more extreme and less acceptable forms of monetization in video games. Before moving on to less disputed cases. Exploring this will help in realizing the more disconcerting problems related to the grave methods of monetization that plagues the industry today. I want to start this discussion by talking about predatory monetization, as this thesis is largely inspired by the term or concept. The reason for this is due to the nature of modern monetization methods, as they are closely intertwined with predatory monetization schemes. By introducing the concept of predatory monetization first, it will, in my mind, provide us with a better discussion overall. As a

reminder, however, not all modern monetization methods are predatory. This is something we will discover and discuss along the way.

2.2.1 Monetization techniques in video games have become increasingly predatory

As monetization methods in video games have evolved over time, these methods have become increasingly predatory against their consumers. King and Delfabbro's (2018) article on predatory monetization schemes serves as a basis for my understanding of the concept. More closely, how developers, and publishers alike, utilize methods of monetization in games that could potentially be considered predatory and or exploitative towards its players. While previously stated, a more comprehensive definition of predatory monetization is, as defined by Daniel L. King and Paul H. Delfabbro:

> Predatory monetization schemes typically involve in-game purchasing systems that disguise or withhold the true long-term cost of the activity until players are already financially and psychologically committed. Such schemes are designed to encourage repeated player spending using tactics or elements that may involve, either singularly or in combination, limited disclosure of the product; intrusive and unavoidable solicitations; and systems that manipulate reward outcomes to reinforce purchasing behaviors over skillful or strategic play. (2018, p. 1967)

More specifically, we are talking about microtransactions, e.g., loot boxes, their randomized chances, and unwillingness to reveal the actual chances one has to obtain specific items. They, more often than not, reveal chances to acquire certain types of content. However, this type of content is usually divided into different rarities, such as rare, epic, or legendary, and can possibly be misleading to players. King and Delfabbro have compared these predatory monetization schemes to the concept of "*entrapment*", where players have seemingly convinced themselves that they have already invested too much money to quit (2018, p. 1967). Consequently, this only furthers their spending habits in-game, as their desire to acquire certain items is too great. Researchers within business ethics, Elena Petrovskaya and David Zendle (2021), have also built upon the concept of predatory monetization as termed by King and Delfabbro. They have

explored unfair, and misleading monetization techniques used in video games. One microtransaction that is explored is *Battlepasses*. To elaborate, a battle pass is a form of monetization within video games that has, in recent years, exploded in popularity. These are usually seasonal, meaning they last for a specific amount of time, and are required to be purchased again after the season ends. Furthermore, a battle pass provides content which the player can only earn or unlock by playing the game, and completing specific objectives, or by simply paying an additional sum. On the topic of entrapment, it is argued in their paper that "Battle passes" can exploit both a player's time and money. Moreover, in their large-scale player survey on microtransactions and their predatory nature, some players feel as though buying a battle pass "traps you into playing that specific game to get your money's worth out of it." (Petrovskaya, and Zendle 2021, 1075). This is as players only have a limited amount of time to unlock the content present in a battle pass. Once the time runs out the content is unobtainable.

One has to buy virtual currency before buying virtual items or battle passes. These currencies cannot be used for anything else, and have no value outside the game. Petrovskaya and Zendle find that in-game currency can potentially hide the actual price for in-game items as they are "obscuring the true price of in-game items and making decision-making harder.". They find the confusion can be worsened when there is more than one type of currency (Petrovskaya, and Zendle 2021, 1072). The argument of players finding virtual currencies to be confusing is also supported by Martin Ivanov, Helmut Wittenzellner, and Marcin Wardaszko (2021), who argue that there is no clear sense of the value of virtual currency, as it differs from game to game. As such, it intensifies player confusion surrounding the value of the currency they might have bought (Ivanov, Wittenzellner, and Wardaszko 2021, 392). Currency may also have to be bought in bundles, for instance, a bundle might consist of a 1000 currency, whereas the specific item the player seeks to buy costs 1100 currency. Consequently, the player needs to buy a more expensive bundle of virtual currency to be able to afford it. Thus, players might be *tricked* into buying more virtual currency than they want (Petrovskaya, and Zendle 2021, 1072).

Video games are using player data to personalize in-game storefronts. Moving on, Petrovskaya and Zendle find that many methods are manipulative towards players, as they are "using elements of intrusive solicitations, limited disclosure, and manipulation of reward outcomes." (2021, 1065). This is further strengthened by King and Delfabbro's work, which

mentions that the video game industry is using data collected by individual players to create personalized offers. Data collected from players can include their preferences, available funds and spending habits. This is done in order to increase the likelihood of those players spending money on in-game content (2018, p. 1967). This more than likely happens without the players even knowing for certain. King et al. (2019) also discusses similar topics in their article on exploitative monetization. They find that most patents for in-game monetization schemes include data collection of players. Additionally, these patents:

> involve the collection of player data and analytics to present individually tailored offers or purchasing opportunities to the player. The systems are designed to optimize the nature and scheduling of purchasing offers to increase the probability that the offer will be desirable to the player. (King et al. 2019, 138).

Discussion surrounding data collection from users has in recent years been at an all-time high. Every time someone enters a new website, they have to manually agree to data collection and cookies. This is no different in video games, but the issue worth mentioning here is that almost no one is willing to read through a games' terms of service. These can be several pages long, and are written with complexity. This is not necessarily a bad thing in itself, however, this data can be manipulated to pressure players into spending more (King, and Delfabbro 2018; King et al. 2019). An example of this are limited-time offers. These display in-game items that can only be bought and collected within a certain timeframe. When the time runs out, usually consisting of a 24-hour or one week period, the displayed items cannot be obtained further, and then replaced with others. Furthermore, this system can also make use of a limited item stock, which only increases the pressure already on the players. Meaning, players have only a short span of time to decide if the item on sale is required or not, which might trigger them to buy it regardless. This is also worsened when younger players are involved, as they "may be particularly less equipped to critically appraise the value proposition of these schemes." (King, and Delfabbro 2018, p. 1968).

King and Delfabbro's (2018) article on predatory monetization provides researchers with structured research on monetization schemes that can be considered exploitative towards its players. This was also the same case when diving into Petrovskaya and Zendle's (2021) paper.

This is especially useful for my thesis, as it is my intention to dive deep into certain games that potentially use similar schemes. While some of these systems are or can be used in an exploitative way, there is no certainty that they are. Meaning, one could argue simply having a storefront, where items are being sold in a certain time frame, as not exploitative. The main issues arise when, for example, data is being manipulated to be personalized to a player's available funds, spending habits, and playtime in order to increase the likelihood of purchase. In addition, if the game is centered and designed around these predatory monetization models. As we progress through this literature review, we will both discover and discuss examples or elements of modern monetization that could be considered predatory towards players more explicitly.

2.2.2 An increase of gambling-like elements in gaming

Gambling in video games has become an increasingly popular feature in recent years. As such, research concerning gambling as a feature in modern video games has become more frequent as controversy surrounds the monetization of games (Brock, and Johnson 2021). Several studies on this phenomenon have linked loot boxes as a primary cause for its increasing popularity, as it shares distinct similarities with real-life gambling (Johnson, and Brock 2020; von Meduna et al. 2020). Notably, Ivanov, Wittenzellner, and Wardaszko state that "Loot boxes are currently considered the state of the art and by far the most financially effective form of microtransactions in the video game industry." (2021, 393). Both gambling and loot boxes present randomized, and usually very low chances of obtaining something of value. The difference being that in gambling one plays with real-world money for money, while the prizes within loot boxes are traditionally cosmetics, boosts, and ways to make a player's character stronger. These cosmetics can vary, and be anything from a character or weapon skin, but also emotes, or even a spray tag, and so forth. Additionally, skins or other cosmetics in any game are, generally, not predatory towards players. These, more often than not, do not give players a competitive edge or advantage over others. However, the methods used to advertise and sell these items to players are problematic. These cosmetics are, in some cases, locked behind almost impossible odds, where repeated spending needs to occur to acquire these. They are, therefore, unobtainable for many casual gamers who are not willing to spend any additional money on games. As the popularity of gambling systems

such as loot boxes has increased, it has become a core part of game design. The long-term cost of buying loot boxes is an area of study that has seen much discourse since.

Gambling in video games has become a must have feature. In their article, Mark Johnson and Tom Brock examine "The 'Gambling turn' in Digital Game Monetization" (2020). Their research indicates that a gambling microtransaction, such as a loot box system, will keep players more engaged in the pursuit of their wanted item(s), all the while presenting players with the chance to obtain something very valuable for small amounts of real-world money (Johnson, and Brock 2020, 155). The issue lies with the long-term cost of these loot boxes. While it may seem like small amounts of money at first, it can quickly turn into hundreds or thousands in order to succeed in obtaining the wanted item (von Meduna et al. 2020; King et al. 2020; Li, Mills, and Nower 2019). Meaning, there is a "sunk cost effect", which hides the long-term cost of these loot boxes from the players, by making it seem like they are spending small amounts of money, and that encourages players to keep spending (King, Delfabbro 2018, p. 1967). This can be potentially worrisome when present in video games targeted for young audiences. As the interest and presence of loot boxes have increased, researchers within the field have identified potential issues related to gambling targeted toward younger audiences. Mark Johnson and Tom Brock find the accessibility of loot boxes to be concerning as "loot boxes seem to get "around" relevant legislation" that can prevent them from appearing in games targeted for younger audiences (2020, 152). If loot boxes are to be considered an aspect of gambling, then I find the ease of access to these systems in children's games especially worrisome.

The amount of research surrounding loot boxes and its related issues is vast. Additionally, the majority of academic articles featured so far, and gathered in total for this thesis, indicate a critical view on gambling systems within video games. This critical view is fair, as generally, gamers and academics are against these forms of gambling systems in games. Consequently, I feel as though there has been too much focus on loot boxes solely in research on this field of study. However, I also realize the reason for this is largely due to the problematic links between loot boxes and gambling, as we have discussed. As such, they are potentially highly problematic elements of monetization, and especially so when featured in games made for younger audiences like children or teens. Interestingly enough is also the success these games usually see, even

though loot boxes are facing the most criticism from gamers and researchers alike. This is even more apparent when discussing games that give paying players advantages over non-paying players. I am more specifically hinting towards games that are considered "pay to win". One game (FIFA franchise) such as this has already been mentioned earlier in the paper. Continuing the discussion on monetization in games, we are moving towards subscription-based games and downloadable content.

2.2.3 Subscription-based games and Downloadable content

Martin Ivanov, Helmut Wittenzellner, and Marcin Wardaszko conduct quantitative research, where they reveal that gamers are well aware of the different microtransactions featured in modern games. Moreover, there is a small minority of players actually willing to buy these on a monthly basis (2021, 395-396). Furthermore, while their survey plays a big part in their article, they also discuss different monetization models, or mechanisms as they call them (Ivanov, Wittenzellner, and Wardaszko 2021). This is largely the focus of their paper, and while all of the contents of this article is useful for this thesis as a whole, there are particular elements of the article that are especially relevant to this part of the paper. As such, I want to discuss subscription-based games, as well as downloadable content, commonly referred to as *DLC* at this moment. Additionally, the article also provides insight into other forms of monetization model as well, but this is something which we will dive further into later in the paper. As this literature review also is a timeline of sorts, I want to firstly discuss what came before these.

The video game industry is following the footsteps of streaming service giants such as Netflix. "*World Of Warcraft*", the massive multiplayer roleplaying game, is perhaps the most well-known example that has continuously used a subscription based monetization model, since its release in the early 2000s. Subscriptions in, or of games, work similar to how other forms of media make use of them. Similarly, like paying for a monthly Netflix subscription, video games subscriptions also usually operate in monthly payments, where players are expected to pay for access to the game for a certain amount of time (Ivanov, Wittenzellner, and Wardaszko 2021, 390; Cobb 2017). However, the main difference when comparing video games and other forms of monthly subscriptions, is the difference in how and what content one receives when paying for

a monthly game subscription. When paying for a subscription for Netflix, one is receiving a limited library of movies, series, documentaries and so forth. During this month, one can watch as many movies, series, etc. as one would like. The only limit that stops the viewers from watching a finite amount of movies is the thirty day or monthly time limit one has paid for, as consumers have to pay a set amount each month to continue watching. There are, of course, exceptions to this, as some present the ability to pay for a six-month period, or perhaps even a year. These are often *discounted* and attempts at convincing the consumer to pay a one-time fee for a larger amount than the standard price, but without having to *worry* about the next due payment. Furthermore, by presenting a discounted price consumers can potentially be convinced to pay for more than they really need. The reasoning for this being that a person(s) using the service every single day is seemingly unlikely, and less so the longer one is subscribed considering the limited amount of content available. Subscription in video games, however, work similar, yet different.

Three forms of subscription-based services are common in the industry. Firstly, there is the subscription-based service that games such as *World Of Warcraft* utilizes. Each month players have to pay a monthly fee in order to continue having access to the game's servers (Ivanov, Wittenzellner, and Wardaszko 2021, 390-391; Cobb 2017). As such, the players do not actually own their own copies of the game, as opposed to buying a physical or digital copy of the game. In a sense, it is comparable to earlier discussions found in the paper regarding rental of games rather than owning them outright. Furthermore, while this form of monetization is found less frequently in modern games, in comparison to the early 2000s, this sort of service cannot be found in any other media. To elaborate, while some might argue that rental of movies is a similar service, video games are able to evolve and change as time goes on, otherwise known as "games as a service" (Jarrett 2021, 106). Films, however, generally stay the same. Therefore, video games are able to offer a service in which other forms of media cannot. Additionally, the price of a subscription for a single game is usually more expensive than paying for a whole library of films and series. This may have something to do with, again, video game's ability to change over time. Secondly, like paying for a Netflix subscription, companies have in recent years started to adapt this monetization model in the gaming industry as well. In these subscription services, gamers are able to pay monthly for a varied library of games. Take "*Xbox Game Pass*" for example, where each month there is a new variety of different games being introduced into the

library. However, as newer titles are introduced to the service, some older titles disappear from the service as well. Similarly, there is the cloud streaming service. While a service like Xbox Game Pass requires one to download the games they wish to play before playing, a cloud streaming service does not, as it provides instant access to the game. Surprisingly, this type of subscription-based service is the least popular considering the fact. However, there are of course some drawbacks to cloud streaming services, such as input delay, or in simpler terms, a small but noticeable delay each time a player presses a button on their controller.

Lastly, it is important to keep in mind that the variety between game-to-game monetization can be substantial, as some games offer their own unique takes on subscription based services. To name a brief example, Petrovskaya and Zendle find that improvements on quality of life issues within a game can be locked behind subscription paywalls (2021, 1071). Quality of life improvements in video games can vary, but they usually boil down to making the overall experience of playing smoother, and less tedious for players. Also, these changes are usually not game changing. As such, making these improvements exclusive to paying customers only means it can provide these players with a much more trouble-free experience from that of non-paying customers. I realize this argument can be made to several of the examples featured in this literature review. Nevertheless, developers locking improvements on basic necessities in a video game behind a paywall is distressing. It only revitalizes the issues I and other academics have with the ongoing and increasingly predatory nature of modern game monetization. Moving on, however, I want to briefly discuss DLC.

Downloadable content are addons that can alter or provide new content for an already existing or upcoming game title. As mentioned in Ivanov, Wittenzellner, and Wardaszko's article, DLCs are expansion packs or digital additions to a basic game (2021, 390-391). DLCs, as termed by the gaming industry, first started as simple story addons. These could, and still can, provide players willing to pay with an expanded look at the world of the game, along with an entire new story. As such, its purpose was, at first, to give players more of what they had already experienced. Discussing all these different types of monetization and or microtransactions so far, is not only done because it predates the current and potentially highly problematic monetization methods being used today. When Ivanov, Wittenzellner, and Wardaszko discuss DLC, they specifically mention how "the evolution of microtransactions (a.k.a. monetization) has evolved

even further, bypassing the major idea of the content adding DLC." (2021, 391). As we have discussed in the paper, the gaming industry is constantly evolving. Regarding DLC, how and what types of DLCs are being sold has changed drastically as well. More specifically, what first started as post-launch downloadable content has, over time, been transformed into things such as pre-order and day-one bonuses or DLC. As discussed by Debabrata Dey and Atanu Lahiri in their article on the economics and strategy of DLC: "A zero-day DLC is one that becomes available the very day the game is released". Additionally, "the features included in such a DLC were all fully developed and ready for use at the time of release. Yet the manufacturer held them back just to sell them separately." (2016, 547-548). The conscious decision of developers and or publishers holding back features that otherwise would be included in the game may seem strange. However, there is a very specific reason as to why modern game developers do this. Limited-time content such as a pre-order or day-one DLC which requires one to purchase something within a certain time-slot, is something King and Delfabbro (2018) finds to be predatory towards players. Furthermore, they find these limited-time offers to be "pressuring tactics to incentivize purchases" (King, and Delfabbro 2018, p. 1968). While players are never *forced* to buy this type of content to begin with, should they for whatever reason need it or want it badly, they are required to pay for it. The predatory nature of limited-time content or DLC is also an area of discussion in which Elena Petrovskaya and David Zendle believe can "artificially create a sense of fear of missing out and anxiety in players, and push them to engage with the transaction." (2022, 1074). To elaborate, should a player want to acquire these items for their character they would need to pay, as pre-order or day-one content is only acquirable in a limited time frame. Meaning, a specific type of content, such as a new weapon or an outfit might be locked behind a timeslot or a more expensive version of the game. Once the time-window to buy these items is over, they are usually never obtainable again. There might be an obvious answer as to why developers would knowingly hold back features, whether it be cosmetics or new mechanics that alter the gameplay in any sort of way. A game that holds back features for a price means players need to pay for what they otherwise would get for free in another game. As such, these games earn an additional profit from sales. While there is not anything outright wrong about doing this per se, it might push consumers to pay more than they can actually afford. This seemingly is a commonly found trope found within research on video game monetization.

As stated by the authors, buying a game is not as simple as it used to be. When one bought a game twenty odd something years ago for the price of $60, the expectation was to receive the game and its content in its entirety. However, when someone buys a new game today, there is not just a single copy available for purchase. In fact, there are several editions, each with their own *bonuses* and price ranges. Usually, as new big budgeted games releases there are, as mentioned, a standard $60 or $70, a "deluxe edition", and perhaps even a "collector's edition" for sale (Cobb 2017). Furthermore, as one might guess, the more expensive editions provide more bonuses and additional content than the standard $60 or $70 edition. As a matter of fact, a collector's edition, which is usually the most expensive of them all, provides physical real-world items such as an artbook from the game. These can also perhaps include a specially made map of the game world, rather than just digital bonuses such as in-game attire etc. This just goes to show how much a once simple endeavor of buying a video game has changed, for the better or worse. The original concept of the DLC is largely the reason why we have such a variety of different microtransactions today, which is something Ivanov, Wittenzellner, and Wardaszko also touch on (2021, 391). This entire idea or phenomenon behind post-launch content, such as an entirely new expansion, or simply providing additional content available for purchase at launch, has in recent years transformed the entire industry. This is because more and more games are becoming free-to-play.

2.2.4 Free-to-play Gaming

The video game industry is moving towards free-to-play gaming. In recent years, we have seen a huge shift away from the standard pay-to-play monetization model. Modern video games today are moving towards a free-to-play model, where monetization occurs through different means than just paying for the game itself. The reason for this shift in movement is worth discussing further, but one could simply narrow it down to the success the monetization model has seen. As Josh Jarret describes in his article on the economy of "League Of Legends", the success the model has seen has simply become too big for developers and publishers alike to ignore (Jarett 2021, 106). This is also supported by Erkki M. Lassila, where Lassila notes that "free-to-play gaming is no longer a marginal phenomenon, and has significant economic and social value" (2022, under "Introduction"). This does not mean, however, that all video games of the

free-to-play model are a large success, far from it. Rather, when we look at the most popular video games of today, it has become increasingly difficult to find games that continue using the standard pay-to-play method of monetization. To be more specific, this is when we examine the most popular video games today that hold the most concurrent players either daily, monthly, or yearly. At the same time, a large percentile of games today are still one-time purchases. However, using the third-party database "SteamDB" of the PC gaming platform known as "Steam", we can discern how the top five games with most concurrent players daily and of all time are all of this model. Steam is essentially a big PC platform where users can buy games. While SteamDB is a third-party website, meaning, it is not an official Steam page, its data on player count comes directly from the source. This is as it uses data that is already being provided by Steam, and they are only displaying those same numbers for information's sake (SteamDB 2023).

Figure 1: Screenshot of "Most played games" on SteamDB (2023).

These games are as follows: "Counter-Strike: Global Offensive, Dota 2, Apex Legends, PUGB: Battlegrounds, and Lost Ark" (SteamDB 2023). It is important to note here that this is only for PC gaming, as well as users on Steam. Meaning, the numbers are actually expected to be drastically bigger than what we see here when taking all the platforms these games are available on into account. However, for the sake of keeping to the topic at hand, I am only going to use these numbers for the time being. The most imposing detail I can find here when looking at these numbers, is the all-time peak of these games, where the games peaked in concurrent players. I

find it interesting that PUBG holds the record for the most concurrent players, as it too started as a pay-to-play game, only later becoming free-to-play. The main reason I chose to include this is to display how successful games that are or have later become free-to-play are. Consequently, this just goes to show that, again, games are becoming free-to-play due to not only the demand, but the success of this monetization model. Rather than releasing a game for a set price of 60$ and simply abandoning it once it is done, the industry has shifted towards making live-service games, or rather "games as a service" (Jarett 2021, 106). These live-service games are designed specifically to encourage spending on in-game purchases. The games as a service model is one that sees a game receive continuous updates throughout its lifespan (King et al. 2019, 131). This happens through the means of updating the game in various ways. For example, by adding a new map or area for players to explore, or by introducing seasonal themed skins for characters that players can buy, it keeps a game fresh. In short, a game's lifespan can increase dramatically because of this. However, a live-service game's lifespan can also dramatically shorten given that the quality of updates, and new content does not meet the expectation of recurring or even new players. "Babylon's Fall" was one such game, where it was deemed *dead* (lack of players) only weeks after its initial release due to lacking features and content. Reading through various sources, it was challenging to make a clear distinction of which free-to-play games were considered *freemium* or not.

This shift from one-time purchases of games to the free-to-play model with in-game purchases has resulted in a similar, yet distinct model taking form. This monetization model has been labeled as the "Freemium" model. While it is in many ways similar to the free-to-play model, it differs slightly. This is considering that in a free-to-play game a player is never required to make a purchase throughout their time spent playing, even if they may be enticed to do so (Hamari, and Järvinen 2011, under "2.4. Customer Relationship"). In contrast, a freemium model means players can play a lesser version of a full game, where the full game is accessed by a purchase fee (Nieborg 2016, 233). Therefore, a freemium game may allow players to play up to a certain point before needing to make a purchase for further access in order to continue playing (Lassila 2022, under "3.2."). As such, whereas a free-to-play model does not require players to buy additional content or in-game purchases even though there is an option to, a freemium model does. These *obstacles* players will come across in freemium games are seemingly only there to

justify the game being free, as players will not be able to progress further in the game if they do not pay. Retrospectively, these obstacles presented in freemium games translate well in consideration to King and Delfabbro's work on predatory monetization, as they closely resemble traps for players (2018). To briefly elaborate, by creating *fake* obstacles that are seemingly unavoidable, players who feel as though they have invested too much time and effort into the game to quit, might be persuaded to pay in order to progress. As such, players are essentially faced with an ultimatum. They can either pay to continue playing or quit and lose all their progress, and not to mention the *wasted* effort it took to get there to begin with. Where there is free-to-play, there is also usually pay to win elements.

2.2.5 Unfair play

Unfair play can be characterized as having advantages over others in online play. In other words, unfair play is termed as "Pay2Win" or pay to win in online gaming spaces. In video games with Pay2Win elements, there is a stronger incentive among players to pay rather than play, as "gamers who grind to unlock content by completing in-game challenges are at a disadvantage compared to those who obtain the same rewards instantly with cash." (McCaffrey 2019, 485). This is essentially like taking a shortcut that allows players to skip the process of play by paying. The incentive to pay is stronger as one can save potentially hundreds of real-time hours. As a result, "Many players have complained that microtransaction systems are unfair because they encourage paying to win rather than earning rewards through grinding and unlocking (i.e., through skilled play)." (McCaffrey 2019, 485). When discussing *grinding* in video games, it usually comes down to a player spending a considerable time doing the same or similar activities in-game, but with little progress each time. Therefore, a player needs to complete an activity a number of times before they can truly progress.

In their article on loot boxes, their relations to gambling, and its potential harmfulness, von Meduna et al. characterize Pay2Win games as "a type of Free-to-Play-Games". Furthermore, by "free access to the game combined with the possibility to make payments during the game to significantly increase the chances of winning compared to players not paying." (von Meduna et al. 2020, under "3.1.1 Pay2Win"). By paying with real-world money, players are given privileges

over other players who do not do the same. However, Pay2Win gaming can also be present in games that require one to purchase a game beforehand. In relation to this paper, an example of this is the "FIFA" franchise of games. Consumers are required to pay full price for the game, but can also buy optional microtransactions in-game that can possibly give players an advantage. There are also other numerous examples of Pay2Win games that are not free-to-play, such as the "2K NBA" franchise, but I feel as though my opinion on the matter has been clear. Elements of Pay2Win microtransactions are, more often than not, ways to make a character stronger, but they can also be cosmetic items such as character skins.

Cosmetics can potentially give advantages to players. In their article on video game monetisation, David Zendle, Rachel Meyer, and Nick Ballou describe how cosmetics "do not confer any in-game boosts or advantages in terms of fighting: They simply look different." (2020, 2). They are specifically referring to the game "Anthem" in this reference. Nevertheless, I would like to point out that cosmetics, such as skins that change the appearance of a character, can potentially give players an advantage over others. A video on Youtube titled "15 BROKEN Skins That BUFF Your Champion: Pay To Win? - League of Legends" (Proguides Challenger League of Legends Guides, 2020) has over a million total views, and displays how some skins can have an advantage over others. These advantages do not necessarily make the character stronger by increasing their stats. They can, however, offer other advantages such as visual projectiles that are harder to see, and look smaller in size than they actually are. A better known term for this is "hitboxes". Hitboxes in games represent the area of a character that can be damaged or hit by another player in online games. When players equip different skins for their characters, these hitboxes do not change, but they can be perceived as if they do. This can be part of the reason why players are motivated to buy these forms of microtransactions.

2.2.6 Purchase motivations of players

In their empirical study on purchase motivations of players, Hamari et al. (2017) converge six main dimensions of motivations from a set of questionnaires. These are "Unobstructing, Social, Competition, Economical, Children, and Unlocking content." (Hamari et al. 2017, 545). Motivations for unobstructing play happens when players come across an obstruction, such as a cooldown timer that prevents players from progressing further before the timer runs out. Players

can then pay to increase the speed of these timers, and avoid waiting several hours before they can play again. Should they choose to wait rather than pay, players can in some cases fall behind, causing them to weaken. This is especially occurring in online PVP games, or player versus player games, that pits either two or numerous players against each other. Social motivations arise when players are playing with friends, which can encourage players to spend money on gifts, or simply to keep up with their friends' progression rate. Competition occurs when players play games that are Pay2Win, which can result in players paying for ways to increase their strength, giving them an advantage over others. The economic rationale relates to price drops, special offers or sales, and is simply deemed by Hamari et al. as rational reasoning. It makes perfect sense for players to spend money on an item they have perhaps wanted for a long period of time, when that item eventually drops in price, or is part of a special bundle. An interesting conundrum that arose when reading through this section of the article is if players do in fact save money on these limited time sales, as they were perhaps not willing to spend anything before a sale might occur. However, I quickly realized this can be applied to almost anything, such as clothes or food, and so it did not seem relevant for this paper as a whole. The second to last motivation is purchasing for children. This was closely associated with parents not wanting their children to miss out on limited time content, such as when an event is happening, or when there is a danger of losing access to unique items. Lastly, motivations for unlocking content happen when players want to unlock new characters, maps, and so forth. A good example for this are DLCs, which in most cases introduce new characters and maps. These can also, on some occasions dependent on the game, introduce an expansion of an already established story, providing a potentially different take on the game (Hamari et al. 2017, 541-542).

The motivations converged by Hamari et al. provide researchers with definitive answers as to why players are motivated to buy in-game content, by constructing the six main dimensions through sets of questionnaires with people who actually play games. This further legitimizes their reasonings behind the research, as it consists of genuine answers from a variety of gamers from different ages and different genders. As such, this article is one of the few mentioned so far that includes the voice of gamers as a core part in their research, which is something I greatly appreciate.

2.3 Video games chosen for analysis

This section of the literature review will not go into further detail on important and perhaps crucial academic research on themes and ideas found within video game monetization, as a large portion of this already exists. As such, this section will be used to discuss the two games I have chosen for analysis that will happen in the main body of the paper. Namely, *Diablo: Immortal* and *FIFA 23*. These are both very different games in terms of their genre and gameplay. However, this thesis' main focus is not on the games' gameplay, but rather on methods of monetization found within them. By picking two different cases, the results gathered from these two can possibly differ on a large-scale as well. This is in terms of their use of predatory monetization schemes. The discussion will start by first examining existing academic research done on FIFA23, before moving onto Diablo: Immortal where we will do the same.

2.3.1 FIFA 23

The discourse these annually released games receive is on a massive scale, at least in terms of the wider community of gamers. While there are a variety of game modes within FIFA 23, this thesis will focus on FIFA *Ultimate Team,* or FUT for short. Consequently, this game mode is what other academic research has focused on. This is, largely, due to the divisiveness among players regarding the game mode. Ultimate team is a gamemode that has continued to exist within sports games developed by EA, including the annual FIFA games since the early 2010s. In this case, it is a gamemode where players can create their own team of football players, either through spending and earning in-game currency or buying it for real money. This gamemode within the FIFA franchise has seen immense success. Indeed, in their annual report from 2022, EA announced that the sale of primarily microtransactions within their game franchises had generated 4,998$ million dollars (Electronic Arts 2022, 34). While this includes a variety of EA developed and published games, they note that a substantial amount of this stemmed from *FIFA Ultimate Team* (Electronic Arts 2022, 3-4). Notably, this statement does not include sales of individual copies of games. It only includes the sales figures from microtransactions present within their games, including FIFA Ultimate Team, where microtransactions in the form of loot boxes have become a core part of the gamemode. This gives a more accurate idea of EA's

reluctance to stop producing and creating these games, even while facing criticism from academics and players alike.

Researchers Siuda and Johnson conduct a deep dive into the community of FIFA ultimate team in their paper and discuss the "Microtransaction Politics in FIFA Ultimate Team" (2022). Their research indicates that there is a critical view among the FIFA community on the annually released games. Particularly, they find that FIFA gamers are growing tired of essentially buying the same each and every year for full price, even though it is in their power to do so (Siuda, and Johnson 2022, 97). While the games are not the *same*, the gameplay mostly is, unsurprisingly perhaps. I say unsurprisingly as the game and rules of football have been the same for some time now. As such, one would expect that there is an understandable lack of innovation in these games. However, the problems related to gameplay are not linked to the rules of football, but rather "broken or flawed mechanics" (98) that pushes most players into using the same player cards as everyone else. When some player-cards are considerably better than the others, players will naturally be drawn towards using them. This is as the point of the game is to compete, win and improve a player's team. Additionally, they find that players are becoming increasingly frustrated towards microtransactions in the game(s). There is an underlying expectation towards microtransactions being not only a feature in ultimate team, but an integral or core part to the gamemode in every new release (97). One could argue the reason for this is largely due to loot boxes being directly interwoven within the gamemode of ultimate team. Through opening these, players can obtain new football player cards in these loot boxes to improve their team. Similar research based on FUT has also been conducted by Jeroen S. Lemmens (2022). Lemmens bases their research on gaming disorder, and conducts an online questionnaire on people aged sixteen or older playing FIFA ultimate team. Lemmens' research exhibit players' need to open loot boxes in the FIFA games to be able to compete against other players. As Lemmens describes, there is a sense of "pleasure from acquiring rare players in packs" which in turn, "leads to the pursuit of opening even more packs because the urge to obtain their content is difficult to resist." (2022, under "Discussion"). This is largely similar to earlier discussions found in the thesis, regarding the addictive nature of loot boxes. If players are not able to stop themselves from opening these loot boxes, or in this case, player packs, there is an even larger incentive for me to further examine why this is the case with this particular game. Lemmens' research also indicates that FUT is largely Pay2Win, as teams will undoubtedly improve the more one spends on

microtransactions. While one can certainly *own* a good ultimate team without further spending, there is a larger incentive to buy packs, due to the competitive edge of the game (2022, under "Discussion").

Siuda and Johnson's (2022) research detail how there is an increasing amount of frustration from players based on the unfairness of FUT's loot box-like mechanics. Similarly, Lemmens' (2022) paper displays the addictiveness of their design. However, I do still believe there is more room to explore, as I intend to do a deep dive into the game's storefront among other things found within the game.

2.3.2 Diablo: Immortal

Diablo: Immortal is one of the worst received games in recent years. The Diablo games have a long history behind them. Seemingly, there has not been any major academic research conducted on Diablo: Immortal as of yet. This was also something I was familiar with when choosing it for analysis. While there are potential worries with this, it also might work in this thesis' favor. The reason for this is due to the recency of the game, as it was released not even a year ago as of writing this thesis. Even though there is not any major academic discourse surrounding the game (as of writing this thesis), the game has been the subject of several gaming news outlets' outrage, as well as of the general public. These articles detail how Diablo: Immortal has been under scrutiny since before its release. Moreover, the announcement of the game was met with heavy backlash and controversy from lifelong and casual fans alike (Laato, and Rauti 2021, 196-197). More importantly, they detail the financial success the game has been for developers Blizzard Entertainment regardless, as it produced a whopping 100 million dollars during its first eight weeks (Peppiatt 2022).

The game currently sits at a combined score of 59 by critics on Metacritic, a website focused on creating a shared consensus score for games, series, and film (Metacritic 2023a). This score is estimated by combining a variety of critics' reviews that score the selected medium from a rating of 0-100, 100 being the highest (Metacritic 2023c). In comparison, its predecessor, "Diablo III", was given a rating of 88 (Metacritic 2023b). Nevertheless, this demonstrates how Diablo: Immortal, the lowest rated Diablo game of all time, is still a major financial success for

Blizzard Entertainment. As for why, this is something we will go into greater detail later in the thesis, but one can narrow it down to its intense monetization features. Whether or not these monetization methods can be considered exploitative, or of predatory nature or not, is also something we will discuss later in greater length when we analyze it. To briefly demonstrate, however, maxing out one's character can exceed a total of 100,000 dollars (Tassi 2022). As a note, when we talk about "maxing one's character" we are, in reality, talking about becoming as strong as one is able to in the game. Lastly, spending this amount of money in any game is severely unlikely by any rate. Being able to use this amount and still not be as strong in-game as one can be is worrying in itself, however.

2.4 Method(s)

2.4.1 The app walk-through

Previous academic work in this field has utilized a method which engages in an "app walk-through" of apps or games. This method was first presented by Ben Light, Jean Burgess, and Stefanie Duguay, which researchers can use to critically analyze apps (2018). However, more recently, Daniel Joseph utilized this method when exploring "Battlepasses" (2021) in the game "Apex: Legends", a battle royale type first person shooter. Battlepasses are just one form of microtransactions that have exploded in popularity in recent years. Furthermore, there are two parts to this method. In utilizing this method, Joseph's process of doing an app walk-through, originally intended for apps, firstly looks at the game's environment of expected use (2021). In other words, how the app or games are supposed to be accessed, and played. In examining a game's environment of expected use, it involves looking at how players are expected to play. Specifically, there are three areas to look at: vision, which looks at the purpose of the game, as well as its intended target audience. Operating model, which focuses on the game's business model and sources of revenue, and governance, which explores how user or player activity is managed and regulated (Light, Burgess, and Duguay 2018, 889-891).

Second, the next part of this method is to do a technical walk-through of the game, from a player's position. The technical walk-through can be done by gathering and collecting data in the form of screenshots of the app's or games' user interfaces and menu screens. Additionally, by looking at its "*mediator characteristics*, which provide indications of how the app seeks to

configure relations among actors, such as how it guides users to interact (or not) and how these actors construct or transfer meaning." (Light, Burgess, and Duguay 2016, 891). In this stage of Joseph's analysis of Apex: Legends, he focuses on how the game tailors its user interface to encourage money spending on virtual currencies within the game (Joseph 2021, 78). It is my intention to do something similar, yet different in this thesis, by examining how users are incentivized to spend real-world money repeatedly on microtransactions. Additionally, I am not looking into one type of microtransaction, such as a battle pass, as Joseph (2021) has generally done. I am looking into every monetized system an equal amount. Nevertheless, the presence of some specific systems will, perhaps, be more evident than others.

No method is without its limitations, and this also applies for the app-walkthrough method. "While walking through an app can provide a sense of user engagement, the walkthrough does not directly collect and analyse user content, activity or attitudes.". As such, the method *can* benefit from combining methods, or by collecting additional data through other sources to get a better understanding of how players interact with the app or game. It is not required, however (Light, Burgess, and Duguay 2016, 896). Lastly, a key takeaway from Joseph's article is that the menus within modern video games have become very reminiscent of shops (2021, 81). Modern video games, and especially those considered free-to-play, usually have dedicated menus or tabs just for "shopping". This is mainly the place where players can buy a variety of in-game purchases.

3. Methodology

The research done in this thesis is qualitative research. There were a few questions that were explored. Predominantly, this thesis looks at if and how specific modern games are using predatory/exploitative monetization schemes to incentivize spending on microtransactions. Additionally, if their methods of doing so differ, and if so, how. While I would not call my main topic (video game monetization) necessarily under-researched, there is a gap in the research regarding how these exploitative systems are used in *specific* games. Furthermore, the problems related to modern video game monetization have been researched on a larger-scale, but not necessarily on a case-by-case basis. Realizing how predatory systems are used in individual

games can further the conversation regarding these. Games may utilize existing concepts of monetization in their games, but these can be transformed and changed to fit the individual game. In other words, their methods of using existing models of monetization can be very different from game to game. Examining this is different to past research as they have generally looked at the problems surrounding game monetization on a wider scale or in more general terms.

In order to achieve this thesis' goals, several qualitative methods were considered, one of which directly involved players/gamers from the selected games. However, due to much of the past research within this field already having done something similar, it was decided against. Furthermore, it seemed unlikely that I would get vastly different results from doing this, as previous academic work had over a thousand participants in their survey on predatory monetization. Therefore, I draw on existing surveys (Petrovskaya, and Zendle 2021) and add to that by taking a different approach. As mentioned, what had not been done before was to apply the theory of predatory monetization to specific games. In order to do so, a method that directly interacted with a game's user interface, menus, and overall gameplay was needed. Moreover, Daniel Joseph's (2021) academic article on battle passes within one game provided me with the method needed to successfully do this. More specifically, Joseph had used the "app-walkthrough method" to research battle passes within *Apex: Legends* (2021). This method was entirely unknown to me at first, but it ticked a lot of boxes which reinforced my decision of also using it. This was because the thesis was already planning to directly interact with the games, and visually show this using screenshots. All screenshots were taken by myself. When collecting screenshots of the games' user interfaces and menu screens, there were some possible ethical problems or concerns. More closely, these concerns involved the anonymity of other players (Light, Burgess, Duguay 2018, 896), as both games chosen for this were multiplayer focused. Therefore, in collecting this data, the thesis avoided using any screenshots where other players' usernames and characters were present. This did not limit the data collection process, however. This was because most of the menus where in-game purchases are found were outside of the gameplay itself, where other players' usernames may be otherwise present.

The app-walkthrough method is a method that Ben Light, Jean Burgess, and Stefanie Duguay first introduced in 2018. It largely serves as a method where researchers can critically analyze apps (applications) (Light, Burgess, and Duguay 2018). However, as mentioned, this method was previously used by Daniel Joseph on video games, where he also justified his use of the method. To elaborate, as argued by Joseph:

> "While the method as described by Light et al. (2018) is tailored towards smart phone apps, I find that following the contours of the method for a downloadable game like *Apex Legends* on a console like the PlayStation 4 or the PC is a natural fit. This is largely because that while software becoming 'apps' is, as Nieborg and Poell (2018) argue, a process of platformization, console games have long been 'platform native' and similar in design and function to contemporary apps (p. 10)." (2021, 73-74).

To continue, the way modern online digital games are designed today, their menus contain much of the same information otherwise present in a smart-phone app. Furthermore, the gameplay part is usually separate from that of the menu screens. In a game like FIFA23, the majority of time is spent in the menu screens of the game, and not in gameplay. This is because much of the activities and features present in the game are found there. In other words, many of the activities a modern game may present to players can be found in the menu screens of the game, and not in gameplay. Diablo: Immortal for instance, can also be played on mobile devices. As such, there is much likeness of the game's menu screens to a standard smartphone app.

The app-walkthrough method describes itself as qualitative research, where researchers are directly interacting with an app, or in this case a game's user interface. This is done to "examine its technological mechanisms and embedded cultural references to understand how it guides users and shapes their experiences." (Light, Burgess, and Duguay 2018, 882). In addition, the app walkthrough method serves researchers as a method of data gathering, as well as analysis. In starting the analysis of both games, there was a moment of consideration of doing this method the other way around. This process would have then started by first assuming the position of a player (technical walkthrough). Afterwards, the next process would involve moving on to the purposes of the games (vision), how they are generally monetized (operating model), and their

rules and guidelines (governance). The reason for this was largely due to the thesis trying to ease the reader(s) into the analysis of the games. Meaning, by first presenting the screenshots of the games, as well as analyzing these from a player's perspective, it would give readers a better overview of what the thesis was dealing with. Additionally, this would also introduce the reader(s) to the games, their look, and feel, and familiarize them with the games. However, as soon as this process began, it became clear that readers who may be unfamiliar with these games would have a hard time following this. This was due to the purpose of the games not being entirely clear. In addition, there was a certain complexity of the games' mechanics which had not been explained in much detail yet. As such, the thesis moved on to the original starting point, looking at the games' visions, or their purpose and intended use (Light, Burgess, Duguay 2018, 889).

There was a certain ease of accessing information regarding these two video games. Due to the nature of video games, much of what was needed to understand the games' purposes could be found within the games. This could be ascertained from the games' informational screens and tutorials. Furthermore, there was already a sense of familiarity between myself and the chosen games, having previously interacted with or played them before. As such, most of what was ascertained from the games' visions could also be explained from past knowledge of these games. Nevertheless, the thesis predominantly utilized the information gathered from the games themselves. What was focused on here was what and how players were supposed to play. In more detail, the thesis looked at certain game mechanics that could explain the basics of the games. An example of this would be FIFA23 tutorial screens, where players could better understand how to play, and what the ultimate goal was. The next process of the analysis of these games involved examining how they were being monetized. In other words, how these games generated money. Specifically, I examined the games' place of purchase and access, their prices, as well as any in-game purchases. Again, this was accessed in-game. These games (FIFA23 and Diablo: Immortal) were available (and still are) on various platforms and video game consoles. However, as both games were accessed on PC platforms for this thesis, there was no initial need to discuss the varying prices of these games on other platforms. In analyzing FIFA23, the difference in terms of cost on various platforms was mentioned, however, as to show the contrasting price tags of the game on different platforms (PC and Playstation). There was no need to mention this for Diablo: Immortal, as it could be accessed freely without needing to

purchase it beforehand. Moving on, the last stage of expected use, namely governance, did require the thesis to look elsewhere. Following the advice of Light, Burgess, and Duguay, this information was predominantly gathered through the games' terms of service or TOS (2018, 890). These were available in-game as well, at least at first, but prompted me to external websites once I tried to access them afterwards. As this thesis' focus lied on video game monetization, it specifically looked at information that regarded the purchase of the games themselves. In addition, any information regarding in-game purchases. Due to FIFA Ultimate Team being a gamemode within FIFA23, there was also a separate rule section for this game mode. This was also accessed separately to the game, and included information regarding rules specifically centered around this game mode.

The next part of the app-walkthrough method involved doing a "technical walkthrough" of the games. This part of the method was the main area of data collection. This can occur by "working through screens, tapping buttons and exploring menus. Walking through the app requires the researcher assume a user's position" (Light, Burgess, and Duguay 2018, 891). Furthermore, the technical walkthrough part of the app-walkthrough method, presented by Ben Light, Jean Burgess, and Stefanie Duguay, involves careful engagement analysis of an app's user interface (2018, 891). While the gameplay aspect of these games was a necessary area of discussion as well, in order to paint the whole picture, this thesis predominantly focused on the user interface outside of the gameplay itself. This was largely due to the fact that the spending of real-life money on microtransactions in-game happens outside of the gameplay part of the games. However, one could also argue that simply browsing the menu of a game is, in this case, part of the gameplay itself. Conducting a technical walkthrough also involved examination of the games' *mediator characteristics*, or how the games tailored or guided their players to interact with certain features or activities. Using the guidance of Light, Burgess, and Duguay (2018), the thesis examined several possible aspects of this. More closely, the thesis examined the placement and order of menus, how players navigated through them, and how certain activities were incentivized through the use of pop up windows (small screens) etc. Additionally, how the games instruct and inform players through the use of text and color (Light, Burgess, and Duguay 2018, 891-892). The larger focus of this was to look at how the game tailor, guides, or encourages its users, or in this case its players, to spend real-life money on featured microtransactions. This was inspired by how Daniel Joseph conducted his research when analyzing *Apex Legends* (2021).

However, Joseph's focus was more on the battle pass present in the game. In retrospect, a clear difference between this thesis and Josephs' article was that the microtransactions present in both games chosen for analysis in this thesis directly impacted the gameplay aspect of the games. This happened in terms of upgrading a player's team or character to become more powerful. The genres of these games were also vastly different, meaning, how microtransactions were utilized differed. Additionally, as this thesis examined predatory monetization mechanics, this was taken into account when analyzing both games. Again, this was done to examine how and if the games took advantage of players by using potentially exploitative methods of monetization.

While the app-walkthrough method contained methods of analysis as well as data gathering procedures, the thesis also took advantage of using a comparative analysis. As a note, the app-walkthrough method more than sufficed in the collection and analyzation of data. However, one of the main questions of this thesis involved examining how the games may have taken different approaches to using predatory mechanics. As such, a comparative analysis was conducted. This was done to highlight the main differences between the two games, in the event of them utilizing exploitative means of monetization. Doing a comparative analysis of these games, in terms of their uses of exploitative monetization methods, also helped the thesis highlight some of the similarities between them. In other words, it was useful as it suggested that some things were more general, while other things were more specific to one game.

4. Walkthrough of FIFA 23

4.1 Vision

Modern video game monetization is increasingly predatory and exploitative towards players. Moreover, modern games utilize predatory monetization schemes to incentivize spending on microtransactions. This is not only in the chosen games, but a larger problem surrounding modern games. Furthermore, in analyzing FIFA23, we can discover how this specific game may utilize existing or new concepts of exploitative schemes, but mold and transform them to fit this particular game. This analysis will also detail that there is a large presence of microtransactions

in games regardless of the monetization model. In other words, microtransactions, which could be considered predatory towards players, are not restricted to only one monetization model of games, such as free-to-play.

FIFA 23 is the latest entry in the AAA game franchise, and its basis is on the sport of football or soccer. The latest entry in the franchise (FIFA 23) has been developed by in-house EA Canada and EA Romania of Electronic Arts, where Electronic Arts acts as publishers. There are elements of both singleplayer and multiplayer features in the game, but the general focus of this thesis at least, is on the multiplayer aspects of the game. Therefore, Ultimate Team will be the focus here. The game features football teams from the biggest football leagues in the world, but also smaller and less known leagues. This allows people from around the world to control their favorite and local football teams, as well as their favorite players. Just like any other football match in the real world, matches in-game consist of 11 football players versus 11 on the pitch. While the game simulates the real time of 90 minutes per match, it is really only five minutes per half, as there is a break at the 45-minute mark. This makes the total time of a single match around 10 or so minutes. During this break, players have a set time of 40 seconds where they can change in-game tactics, such as making the team play more offensively or defensively. In addition, players also make substitutions during this time. Graphically, the game features a realistic take on the sport, and is able to replicate the likeness from a large number of individual football players. This realism is also heightened by the use of its "Hypermotion2" technology, which is able to create and convey, in real-time, "true-to-life animations" using data capture and machine learning (Electronic Arts 2023a). In other words, how the football players behave and react to what is happening around them in-game feels more natural than in previous entries of the franchise. The gameplay present in the FIFA 23 Ultimate Team game mode differs from the rest of the game, and is therefore a particularly interesting topic of discussion. To elaborate, it is really divided into two parts. Firstly, there is the squad building aspect of the game.

In FIFA Ultimate Team, gamers compete with one another to create a team of their favorite and best football players from past and present time. There is, of course, an actual gameplay element to this, where players play against each other using their built teams. This is, however, the latter part of the two gameplay parts. For now, I want to discuss the team building aspect of the game mode. Each football player featured in the game has their own *card*. My

reason for describing these cards in such detail is largely due to it being interconnected with the monetization aspects of the game. Knowing why these cards are *valuable* to players is vital. It is vital in order to understand why players seek to purchase them, or otherwise obtain them through packs. It also helps to fully understand how the game encourages players to spend real-world money on these cards, and if the methods the game is using are of predatory nature.

These player-cards, as I will call them, have their own positions, club, and league associated with them. They also possess several different statistics, each one resembling a trait or quality. These statistics, or stats, also have their own sub-stats which accompany them in varying numbers from a range of 0 to 99, where 99 is considered the best. There are a total of six main stat categories which I will discuss in general terms. To avoid any confusion, for the moment when I mention a player, I am referring to the player-card. Additionally, the figure below will help to visualize this forthcoming explanation. "Pace", is used to determine how fast the player is able to run and reach their top speed in-game. "Shooting" is used to determine how well the player can strike the ball in different situations, such as when the player is one on one with the goalkeeper, or when they shoot the ball from a distance. The "Passing" stat is used to determine how well the player can pass the ball to their teammates, from short or long distances, among other things. "Dribbling" is used to determine a player's reaction and dribbling ability, such as keeping the ball close to their feet, or when turning quickly. The "Defending" stat is used to determine how well the player can snatch and seize the ball from an opponent player. Lastly, "Physicality" is used to determine the strength and stamina of a player. While there are a variety of different sub-stats accompanying them, these are their general purposes. The different sub-stats found within each of these are combined, which in turn, creates an average number for that certain quality. To bring it into perspective, each of the six qualities' ratings then creates an average total rating for that player. Like before, these numbers also range from 0 to 99, where the highest is considered 99. From experience, the total ratings are inconsistent when averaging the main statistics (pace, shooting, passing, dribbling, defending, and physicality) found on the card. As such, the total rating numbers are often higher or lower in view of the average ratings on the six qualities found on the card. As for why, there is not really a conclusive answer to this, as the developers of the game ultimately chose the numbers and ratings given to each player-card. Furthermore, these player-cards come in varying rarities such as bronze, silver, and gold, that is

determined based on their total rating. Ultimately, the higher the total rating of a player-card, the better the card is considered to be.

Figure 2: Screenshot of a player-card detailing the different stats that accompany them.

Moving on, the purpose of Ultimate Team is for gamers, or rather players, to collect these player-cards and create the best team possible. A team consists of 11 outfield player-cards, but also have their own bench and reserves function that holds a limited amount of player-cards, first of which can be used to substitute players in-game. Every player-card can be used in tandem, but receives bonus stats if the team consists of several player-cards from the same club or league. This is known as the "*chemistry*" mechanic. As such, players will generally have to have three or four player-cards of the same league or club in their team in order to fully make use of them. There are different ways for players to acquire player-cards. For now, however, I want to discuss methods players can use outside of the gameplay itself, or rather in the menu. The most common way of earning and acquiring player-cards through the different game mechanics found in the menu, is by completing challenges or by purchasing them. Doing different challenges will reward players with either individual player-cards, or with *packs*, which are loot box-like microtransactions. These packs contain player-cards as well as cosmetic items used to change the

look of certain elements in-game. Due to the multiple virtual economies in the game mode, player-cards can also be bought separately from packs in the inbuilt transfer market. Here, players can buy or sell cards to other players. Cards can cost up to several millions in coin price, but these price points are usually reserved for the best cards in the game, or those of low quantity. "FUT coins" is the most common virtual currency found in the game, and is spent on player-cards, as well as packs. Furthermore, there is a strive and incentive to constantly improve upon one's team by swapping out old cards, and acquiring new and better ones. This is due to some cards having several different versions of themselves, some of which are considered *special*, which improve upon their base stats. This, in turn, makes the cards more powerful. More powerful cards means older cards fall out of favor by players, as the game is heavily stat dependent.

Special versions of player-cards are, predominantly, only available in packs before players can sell them on the transfer market. This at least applies to special cards that are not released weekly, and can be obtained through completing objectives. "*Promo*" or promotional cards, however, are released during different times in the month. The possible changes these cards can have are too many to mention every single one. However, these cards have a different visual design than those of bronze, silver, or gold rarity, and can change a player-cards' stats, as well as their position and more. As such, some already existing player-cards of lesser rarity have a chance to be upgraded every month or so. This keeps the game from getting stale quickly, as the variety of different usable player-cards increases every month. This also means players have a ton of options to improve upon their team, by replacing player-cards with entirely new cards, or with special cards of an already bought player. Keep in mind, players still have to buy these special cards or be *lucky* enough to acquire them through packs that are awarded to players, or bought separately. This applies even though they might have the base version of that card. Additionally, players only have a limited amount of time to acquire these special player-cards through packs. Once the new promotional player-cards are introduced, past ones are usually not acquirable anymore. This applies to packs only, and not the transfer market. Furthermore, this means that there will be a limited quantity of these special player-cards available on the market once they are removed from packs. A limited quantity of items means there is more pressure on players to purchase packs, hoping that they are lucky enough to obtain even a single special card.

As the game is constantly introducing new player-cards, some players are bound to fall behind others in terms of the quality of their team. This is also the case when features such as monetized loot box-like pack mechanics exist. Players can buy these packs with either in-game currency or with real money, hoping to receive player-cards of great value that can be used to improve their team. As mentioned, these player-cards can also be sold on the transfer market, but they can also be discarded for various amounts of coins. Meaning, players who buy these packs can earn a much higher sum of coin currency than players who do not buy packs. This currency is then used to buy additional player-cards or packs, creating a cycle of repeating events. In other words, this game, or game mode specifically, stands heavily on the Pay2Win side of gaming, as it gives certain players (players who buy microtransactions) an advantage over others (McCaffrey 2019; von Meduna et al. 2020). Acquiring player-cards of great value is not guaranteed, however, no matter how many packs one player chooses to buy. The chance a player has in obtaining just a single highly rated card from a pack varies, but can be less than one percent. Furthermore, the better the card, the less of a chance players have to acquire it. As such, the likelihood of obtaining the very best cards is almost impossible. This can possibly intensify the spending habits of players in their mission to acquire their favorite players or those considered powerful in the game. We have discussed a fair bit on the gameplay elements players can find in the menu. As such, we will now move on to gameplay elements that players can experience by actually *playing* the game. This will also explain in greater detail why this game mode is favored by and tailored to players willing to buy microtransactions.

Secondly, a player's team has met the requirements of play when they have a starting eleven and a full bench of player-cards, totaling eleven outfield players and seven substitutes. Players can then use their carefully crafted team in matches against other players or against A.I opponents. A.I opponents are computer opponents, and not real opponents. As Ultimate Team features elements of PVP (player versus player), there is also naturally a competitive edge to the game. The competitive nature of the game mode is also intensified by the fact that the game features a ladder or ranking system consisting of several divisions, where players can rank up or down. This is known as "Division Rivals", and is available at any time during the week. Each week, players are encouraged to play and win a certain amount of matches. This is because rewards are given on a weekly basis. Therefore, players have a week to win four matches to

qualify for the first bundle of rewards. Moreover, winning a total of eight matches during a week will maximize their rewards. In turn, the higher division a player is in, 10 being the lowest and "elite" division being the highest, the better rewards one will acquire. Rewards are only able to be claimed after reaching these total win requirements, however. After reaching the day in the week where rewards are to be given out, these past wins are then reset to zero. Players will need to win a further four or eight matches to qualify for rewards next week, again. Furthermore, each weekend a competitive competition, which has become known as "weekend league" among the FIFA community, becomes available. The actual name for this competition is "FUT Champions", and is marketed by the game to be a highly competitive competition, where players can *possibly* obtain the best rewards imaginable. This event also has a qualification aspect to it, where players need to earn a number of points to be able to enter. In addition, players will need to win a certain amount of matches to be able to even qualify for this weekend event. This further revitalizes the competitive edge of the game. In this competition, players each have 20 matches to reach the highest rank possible. There are multiple ranks, and each win means players are getting ever so closer to the next. After completing these matches, a variety of rewards in the form of special and non-special player-cards, packs, and more becomes available for players to claim. While reaching a high rank means players qualify for better rewards, almost nothing is guaranteed. To elaborate, every reward, excluding coins, contains random chances of obtaining something of actual value. Furthermore, a player that has reached the highest rank might be rewarded certain packs that contain better chances of receiving higher rated player-cards, than those of lower ranks. As mentioned, however, because almost everything is random, there is almost no guarantee that the higher ranked player will receive better cards in these packs.

The general idea of Ultimate Team is to craft and perfect a team, and use this team to make further improvements by receiving rewards through various competitions. This only happens over several real months, however, when a player chooses not to buy packs with real money. This has been the case for my playtime of the game, as I have been actively avoiding in-game purchases. This was done for different reasons. For one, to discover how long of a time is needed to create a team that can actively compete against players who otherwise purchase microtransactions. As mentioned, this only happened over several real months, whereas players who frequently buy microtransactions are easily able to compete and frequently win due to the

nature of the pay-to-win formula. There is, of course, also a certain amount of skill involved, but buying microtransactions certainly gives players an extra edge in PVP matches, and massively so.

4.2 Operating Model

By examining an app's operating model, or rather in this case, a company's or a game's operating model, we are looking at how the game seeks and tries to earn revenue. In other words, the game's methods of monetization. FIFA 23 contains various amounts and methods of monetization. While some have already been mentioned, in the form of purchasable packs, there are still some methods which have not yet been discussed in detail. As a first point, FIFA 23 is not a free-to-play or freemium title like so many other games of today. Players are required to buy the product for a premium price before playing. This price point varies, meaning, there are several versions of the same product that contain additional content which change between each version. At the moment of writing this section of the thesis, the game currently has two versions available for purchase. These versions both contain full access to the game itself, and contain various amounts of additional content as well. The standard version of the game on PC platforms has a premium price of 700 NOK, which is around 70 US dollars (Steam 2023). This has become the new industry standard pricing for AAA games in recent years (Zwiezen 2022), and is also the cheapest version of the game available for purchase. As such, the amount of *bonus* content one receives with the purchase of this version is very limited, only offering one special player-card. The "Ultimate Edition" version of the game, however, offers the most amount of bonus content at the expense of it costing 900 NOK, or around 90 US dollars. This version promises more, but it also costs substantially more. In comparison, should players choose to buy the game through a different platform entirely such as the Playstation 5, the price increases even more. Even though they are the same product, there is a 100 NOK increase to both versions' prices on the Playstation. As such, the ultimate edition costs 1000 NOK on Playstation consoles (Playstation Store 2023). This is one sixth of the console price itself. One could argue this is due to the Playstation 5 being a "next-generation" console. However, considering the game is the same on both platforms (PC and Playstation) this argument is faulty. Moreover, as I have only examined the PC version of the game, I will not discuss the Playstation version any further. By buying this

version of the game, players will receive two different special player-cards, as well as 4,600 "FIFA Points". FIFA points are one of three virtual currencies found in the game mode of Ultimate Team, and is also the only currency that players can buy additional amounts of. Furthermore, this currency can be used to purchase packs, as well as cosmetic items. The amount of FIFA Points players receive by buying this version roughly translates into 400 NOK. Meaning, players are essentially *saving* 200 NOK by buying the ultimate version of the game. This at least applies to players who would otherwise buy these points anyway. This version of the game presents a better deal for those specific players.

While this is not available at current date, initially, players could pre-order the game before it was released. This is common practice for almost all video games of today, and buying the ultimate meant that players would receive "early access" to the game. As this very much is a competitive game/mode, it meant players could receive a three day head start by paying for a more expensive version. By pre-ordering the ultimate version of the game, players could also receive additional bonus content in the form of a special *hero* player-card at launch. These cards were considerably better than practically all other cards which players could obtain at the time of launch. As such, it gave these players a distinct advantage over those who were not willing to pay 90 US dollars in order to obtain these cards. Additionally, players only had a limited amount of time to obtain these cards. Not only did they have to pre-order the most expensive version of the game, but they also had to do so within a certain timeframe. Pre-ordering the game after August 22. would not guarantee players a special hero card. By definition, players had to be committed to pre-ordering the ultimate version more than a month before the game would initially launch, in order to obtain these cards.

In-game purchases are the second major form of monetization found within FIFA 23 and Ultimate team. Notably, this is also the most important method of monetization. Its importance even surpasses the premium price tag players are otherwise required to put money into for them to play the game at all. While this might seem like a bold statement, I am about to explain exactly why this is the case. EA announced that the sale of primarily microtransactions within their game franchises had generated 4,998$ million dollars (Electronic Arts 2022, 34). While this includes a variety of EA developed and published games, they note that a substantial amount of this stemmed from *FIFA Ultimate Team* (Electronic Arts 2022, 3-4). While these are numbers accumulated from a previous entry in the franchise, there is still relevance to this statement. This

is considering that the popularity of these games have not lessened in any major way since. Furthermore, the most recent entry (FIFA 23) is consistently ranked among the most played games on the platform Steam (SteamDB 2023). As discussed, the main form of in-game purchases or microtransactions are firstly in the form of virtual currency (FIFA points). This currency can then be spent by players on various microtransactions, but for the most part, it is spent on packs, loot box-like mechanics. Packs come in various price ranges and versions, each one offering a slim chance of obtaining high value player-cards. Some packs only include player-cards, while other packs are mixed with items and cards. Predominantly, packs that only contain player-cards are rarer, and more expensive as they usually contain a higher chance to pack rare cards. As a note, this currency cannot be withdrawn from the game. Meaning, once players make the purchase, the currency can then only be spent on in-game purchases. As such, the actual real-world value of this currency is void once players decide to purchase it.

In-game purchases are encouraged by the fact that the game is a heavily Pay2Win live-service based title. Being a live-service game, the game is constantly updating, and introducing newly limited-time promotional cards every month. This creates a cycle of repeating events where older cards that over time become less powerful, fall out of favor from players, and are replaced with newer and improved cards. This cycle only happens through constant grinding, however, as it can take several weeks for players to afford them. As the in-game transfer market is mostly player controlled where players set the prices of cards, the market is also constantly fluctuating. This can increase the already time-consuming grinding experience of earning coins, and selling cards. Due to the rarity of some special cards, this can also be worsened. When there is a lower quantity of cards available, their price naturally increases on the transfer market. This makes it even harder for players to obtain them through traditional means of playing and earning coins. At the same time, players always know in the back of their mind that there is an easier way of earning coins, through the purchase of packs and by selling its contents. This means players can skip the majority of grinding otherwise needed to earn it, if they are lucky enough. As this is or has been a yearly released franchise of games for some time now, it means once the new title is released, the majority of the playerbase moves on to the next game. Consequently, this means the cards and items players might have spent hundreds of hours to obtain no longer hold any significant in-game value. Once the new title is released, updates in the form of new cards and so forth are stopped completely. This might discourage players from spending too

much time grinding for coins, as all that effort is essentially wasted once the new game releases. Therefore, the game offers an additional method of acquiring players, by giving players a shortcut in the form of FIFA points, which can then be used to open packs. Doing this can reduce hundreds of hours of playtime otherwise needed to own a team of the same standard.

4.3 Governance

When looking at the governance of an app or a game, we are looking at how it enforces its rules in order to fulfill its grander vision. In doing so, we can also discover how it creates a sustaining operating model (Light, Burgess, and Duguay 2016, 890). In relation to games, as well as apps, this is done by mainly looking at the games' terms of service or "TOS". As this analysis is focusing on the monetization aspect of the game, this will be the main focus when examining the game's governance. FIFA 23's terms of service are dictated through Electronic Arts' *user agreement* policy (Electronic Arts 2023c). Every player wanting to play Ultimate Team needs to agree with these terms beforehand in order to play. The terms of service acts essentially as a rulebook or guideline for players, and determines how players are supposed to and not supposed to act. Furthermore, the game itself has an age rating of three years old or above, making it appropriate for almost all age groups. However, Ultimate Team is restricted for those under the age of thirteen, as players need to own an "EA account". In order to create an EA account, players will also need to be aged thirteen or above. Whilst owning an EA account is required to be able to play Ultimate Team, it is not required for most game modes otherwise found within the game. This, at least, applies to game modes that do not require online services, where players can play against A.I opponents. Consequently, by creating an EA account players are accepting the terms of service or user agreement laid out by Electronic Arts. Players who seek to use the online services in the game therefore have no other choice than to agree with said terms, and the consequences that follow should the player choose to violate these rules (Electronic Arts 2023c).

The user agreement makes it clear that players do not have ownership over their virtual items. Generally, when one makes a purchase, the expectation for that person is to have full control over their newly acquired possession. However, purchases made in any EA game does not grant players ownership over that item, or in this case, currency or player-card(s). It is explained in further detail in the user agreement that these virtual items are merely *licensed* to

players. Furthermore, these virtual items are *entitlements* granted to the players, and as quickly as these are granted, they can be revoked just as quickly. The entitlements granted to players include, but are not limited to: virtual assets, virtual points, coins, and currencies. Additionally, any virtual currency that players buy, are only theirs for a limited amount of time. Like virtual items, any currency is also licensed to players and can be revoked from players. In other words, players do not own cards which may have been obtained through the purchase of packs with virtual currency. In fact, they only license or borrow them for a limited amount of time. This is also apparent when, as mentioned, the game only has a lifespan of about one year. Players do not lose these cards with the release of the newest title. However, any sort of value the cards might have had is virtually gone due to the faltering economy of the game, as a result of a lack of players (Electronic Arts 2023c).

Ultimate Team contains its own sets of unique rules. There is also a separate rules section that applies solely to FIFA 23, and many of these rules only concern the game mode of Ultimate Team. One statement specifically stood out to me when first reading as it mentions how EA wants their FIFA games to be a *fair* experience among other things. This is quite paradoxical considering that Ultimate Team is nothing short of an unfair experience when players do not spend additional sums of money on in-game purchases. This is something we have explored a fair bit already. Among other things, these rules highlight and actively discourage the action of buying and distribution of virtual coins. As mentioned, coins cannot be bought separately in-game. However, third-party websites exist solely for this purpose. These coins can then be used in the transfer market, essentially skipping the entire process of playing and earning these coins. Breaking the rules comes with consequences, and as such, EA reserves their right to remove a player's ability to play Ultimate Team temporarily or permanently. As such, breaking the rules can mean a player loses access to their entire virtual *inventory* of cards perhaps collected over several months. There are also some more severe punishments, which in the event of breaking one or more rules, can result in banning players from accessing their entire library of EA games. While it is stated that these punishments regard player's EA accounts, playing any modern EA game requires one to go through their official app, which also requires an EA account. EA states that they discourage and actively punish players who buy coins from these websites due to it "breaking" the economy in the game. While this is not stated in their user

agreement or rules on FIFA, it is apparent that buying coins from third-party websites makes it so FIFA points become irrelevant. This is as there is always an option to buy packs or cards with coins as well (Electronic Arts 2023b).

4.4 Technical Walkthrough

The variety of microtransactions featured in FIFA23 is not that vast, as the main form of microtransaction is in the form of loot box-like mechanics. It is, however, directly interwoven with the gameplay. As such, it is a core part of the game and the gameplay. Therefore, these microtransactions can impact the gameplay in a major way. Finally, to do this technical walkthrough of FIFA23, analysis will be accompanied by screenshots to reveal how the game might encourage in-game spending in a predatory manner. The elements of FIFA23 that are predatory/exploitative include the use of loot box-like mechanics with almost impossible odds, which are limited in time and stock. Moreover, the game favors players who "Pay2Win", and use intrusive solicitations to encourage players towards purchase of a variety of microtransactions. In the following discussion, I will show how this is the case by directly interacting with the game's user interfaces and menus, where these predatory monetization schemes are apparent.

The menu consists of three main tabs. As shown in the screenshot below, FIFA23 Ultimate Team's user interface is divided into three main categories. These are as follows: "Home", "Play", and "Club". These can be switched between at any time using buttons on the game controller, or as this is on PC, by using the mouse. Within each main category, there are a number of sub-categories or tabs, each with their own separate function. For most of the time spent in the game menu, players will undoubtedly spend most of their time on the home and play screen. This is as most features are present within these tabs.
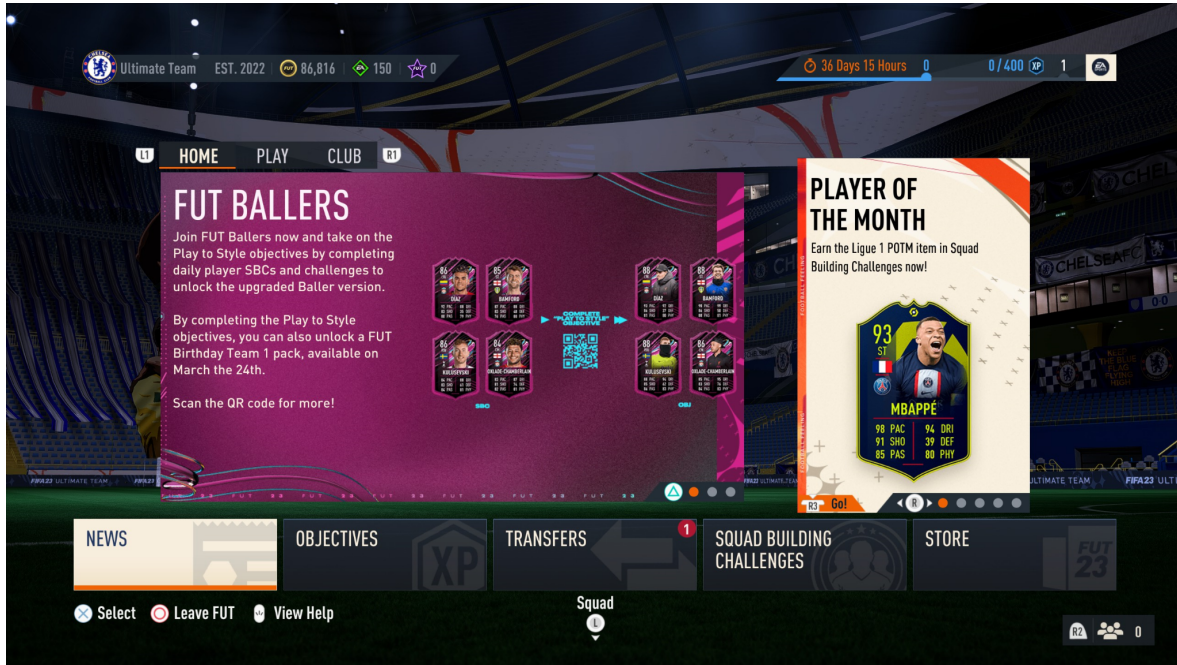
Figure 3: Screenshot of "Home" page in FIFA 23 Ultimate Team.

When players first enter Ultimate Team, they arrive at the home screen. Concurrently, this is where the news sub-tab, found on the home screen, appears shortly thereafter. The news tab contains updates on all the newest player-cards, as well as the newest packs available for purchase in the store, located to the far right. While costing full price, FIFA23 is still a live-service based title, or games as a service. Meaning, it is continuously updated through certain means that can change the feel and look of the gameplay (Jarrett 2021). As such, every time a player enters Ultimate Team they are first met with the most recent news surrounding the latest additions to the game mode. Additionally, once players stop hovering over the news tab, there is also a separate tab to the right side of the screen that works similarly to the news tab. In this instance, if we look at figure 3, one of the newest player-cards available is the "Player of The Month" Kylian Mbappé. While the player is in the menu, this tab will continue to be there, and acts as a reminder to players of the newest additions of player-cards to the game. This also applies when players move from each separate main tab, where it is prominently featured in the same spot. As such, players are being constantly exposed to the latest addition of cards, and where they can find and obtain them (in the store) when moving throughout the menu.

To the right side of the news sub-tab, the "objectives" sub-tab lies. The objectives tab consists of several optional objectives players can complete for certain rewards. Some are as simple as scoring 10 or 20 goals, while others require the player to reach a certain skill division. The rewards usually consist of either loot boxes disguised as *packs*, or XP (experience points) that is used to progress the game's season pass, which is similar to a battle pass. Although, it can also include special player-cards that are only obtainable through completing a series of objectives. Finishing these types of objectives are often much more time consuming than completing an objective in which the players receive a particular player pack. I say this due to there being a variety of different packs, each containing a different set of players or items. The mentioned seasonal pass works similar to how a battle pass found in other games function. Differently to so many other big budget titles, however, is that this seasonal pass is not paid for. In order to progress the seasonal pass, players must complete certain objectives to gain XP. At the same time, players who subscribe monthly to "EA Play", EA's answer to the widely successful Xbox Game Pass subscription service, will receive an XP boost each month. This allows players to skip a number of steps required to progress the season, and lets them earn certain rewards before non-subscribers of the subscription service have a chance to. As for the rewards found within this seasonal pass, they are likened to those found in other objectives, such as player packs, cosmetics, and sometimes coins.

The following sub-tab "transfers" is where players can buy, sell, and trade player-cards with other players using the coin currency. The coin currency is just one of three different virtual currencies present in the game, and is located on the top left of the screen at all times. When taking the screenshot, I had 86,816 FUT coins. This currency cannot be bought separately, and needs to be earned through other means. Usually, players obtain these coins by simply playing the game, earning rewards, or as mentioned, selling player-cards to other players through the transfer market. The next sub-tab found within the home tab is, as previewed in the screenshot, "squad building challenges". Similar to the objectives tab, players can complete certain challenges and receive similar rewards. One of these rewards is as shown to the right in the screenshot above, a special version of an existing player card of the footballer Kylian Mbappé. Special versions of player-cards usually inhabit improved statistics to the base version of the card. These challenges consist of building teams of player-cards, but in a specific manner. Meaning, there are certain requirements or boxes a player must tick to complete each challenge.

Some require a certain number of player-cards from specific nationalities, such as three English or French players, while others require a certain average squad rating. Others can also require a number of player-cards from a specific football league, such as the English *Premier League* or the Spanish league *La Liga*. There are numerous different requirements, and the larger the reward for completing these challenges, the higher the cost. This cost can come in the form of coins if players do not have existing player-cards found within their club. As such, they will need to buy them from the transfer market, or buy packs in hopes to attain the wanted player-cards needed to complete the challenge.
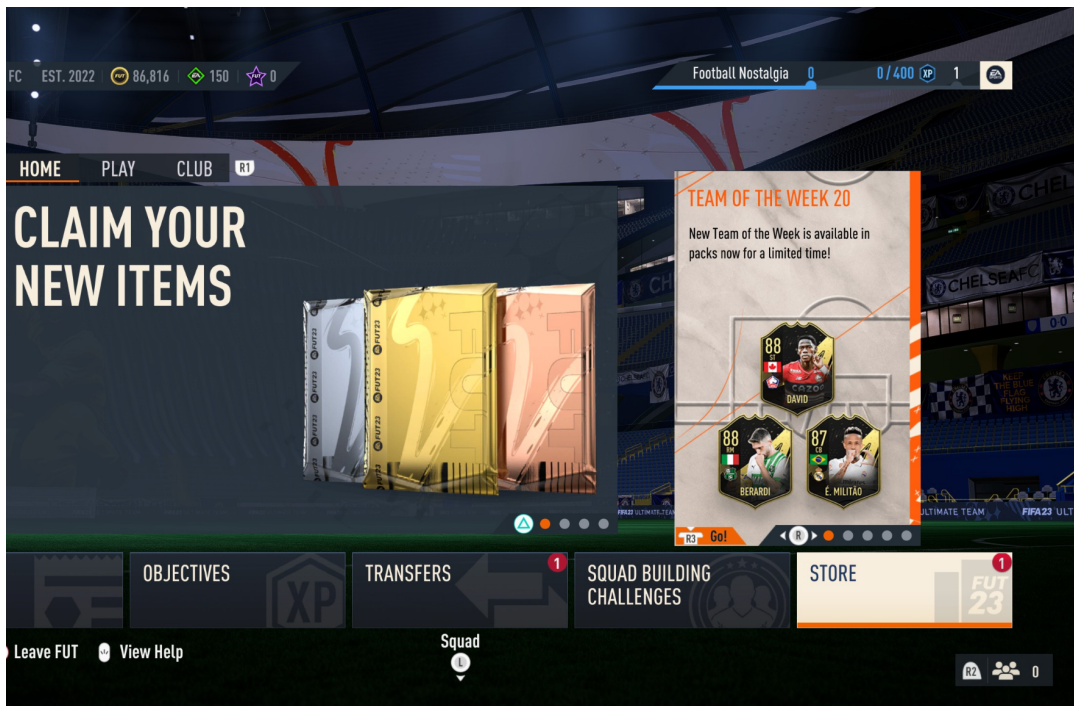

Figure 4: Screenshot of "Store" sub-tab on the "home" tab in FIFA 23 Ultimate Team.

Players are constantly being guided towards the in-game storefront. Lastly, and perhaps the most important sub-tab found on the home tab is where we find "store", which is located on the far-right corner of the screen. The store tab is a fundamental and core piece of Ultimate Team's functionality for several reasons. We have so far talked a bit about rewards, and player packs perhaps even more so. However, I have yet to mention that each time a player completes an objective, a squad building challenge, or earns similar rewards through simply playing the game,

59

they are then *forced* to enter the store tab. As shown in the screenshot below, big letters containing the words "Claim your new items" appear once the player hovers over the store sub-tab. This is also shown by the small red circle in the top right of the sub-tab, which indicates how many items the player can claim. As such, players will have to enter the store each time in order to claim their new items, whether it be player packs or something similar. As a small note, players are never forced to enter the store like I vaguely claimed. However, should the player avoid entering the store completely, they cannot claim their rewards as a consequence. As such, avoiding the store is counterproductive for players, as the goal of the game mode is to constantly replace player-cards with improved ones. Without using the store function to claim or buy player-card packs, players can only obtain new cards by buying them through the transfer market. Doing this will severely limit a player's ability to compete during matches, as some of the best player-cards available can be found within these packs. Although, the chance of getting some of these player-cards is slim. This is why I mentioned players needing to force themselves by entering the store to claim their items. Furthermore, the very best player-cards can often cost hundreds of thousand coins or even millions on the transfer market, depending on the player-card. Meaning, players might need to spend tens or hundreds of hours of game time just to be able to afford and obtain one single player-card that they deem special, or they feel is needed to improve their team.

Once players enter the store, two additional tabs appear on the screen, "Browse" and "FIFA Points". As mentioned, this is where players can both redeem rewards in the form of player-packs, or buy them individually. Players can also buy cosmetics for their team here in the form of football kits and balls, banners, tifos, and so forth. These cosmetics are used to customize and change the look of certain items. They do not change the feel of gameplay. Every player is given two options in order to buy these items. They can either choose to pay with coins that, again, players earn through various ways, or they can buy them using *FIFA points*. This is the second form of virtual currency in the game. In contrast to currency in the form of coins, this currency cannot be earned through playing the game or by completing objectives. It is purely obtainable through players purchasing it using real-life money. Like coins, players can see how many FIFA points they currently have in the top left corner of the screen, to the right of the FUT coins. As seen in the screenshot below, the game currently tells me that I have 150 FIFA points available. This is the equivalent to 15 NOK, which is not a lot, as it only allows me to buy a

single standard gold player-pack. Player-packs come at a varying cost, and this is the case for both coins and FIFA points.

Figure 5: Screenshot of "FIFA Points" tab found within the store tab in FIFA 23 Ultimate Team.

The screenshot above details the varying quantities of FIFA points a player can buy. These are similar to bundles, which I mentioned earlier in the thesis. A bundle of items, or in this case, a bundle of FIFA points, comes at different costs. The price of these, and number of FIFA points one receives when buying a specific bundle is, seemingly, deliberately inconsistent at first look. To further explain, the price of a single bundle is uneven in comparison to the other bundles of points. The first and least expensive bundle tells the player that 100 points is the equivalent to 10 NOK. As we move towards the more expensive bundles, however, this seems to change. Now, 100 NOK is the equivalent to 1050 FIFA points, and 145 NOK to 1600 FIFA points. As seen in the screenshot above, this pattern continues all the way to the most expensive bundle one can buy. Specifically, two of these bundles seem to stand out in comparison to others. The reason I say this is due to the bright orange and red-like backgrounds that tells the player what is the "Most Popular" bundle among players, as well as what is considered "Best Value". The bright coloration of the bundle which is considered the *most* popular among players, easily grabs the attention of players. By hovering above these two bundles "Most Popular is defined as the most

purchased bundle worldwide in FIFA 23 between September 30, 2022 and October 11, 2022". In contrast, "Best Value represents the bundle with the lowest per-point cost" (EA Sports' FIFA 23 2022). As such, a player that is paying for the more expensive bundles will receive a base sum of points, and on top of that, an additional or bonus number of points for *free*. This pattern can be observed past the 500 points bundle, where players will first start receiving 50 additional points. As we move on the number further increases, going from 150 points, 350 points, 1050 points, and finally an additional/bonus 2300 points for buying the most expensive bundle available.

Where and how players use these points is something I have continually hinted towards, but never explained in full detail. To the left and beside the FIFA points tab, the "Browse" tab can be found. Once players enter the store, the browse tab is the first thing that meets them. I consciously chose to save this tab for last, as it is here the loot box-like player-packs are found. This is the main method of monetization found within the game mode of FIFA Ultimate Team, excluding the purchase of the full game, and FIFA points. As seen in figure 6 below, there are several different sub-tabs found within the browse tab, varying from cosmetic purchases and player-packs.

Figure 6: Screenshot of "Promo Packs" tab in FIFA 23 Ultimate Team.

"Featured" shows the latest additions in cosmetic items available for purchase. These cosmetics can be found further below in the subsequent tabs, excluding any sub-tabs that are listed as packs. "Gold Packs" and "Classic Packs" are where the most common player-packs can be purchased. As with almost all packs and cosmetics, these vary in both rarity and price. The items included in these packs are also of lesser value compared to others, due to these packs being the cheapest options available. Every pack contains a guaranteed number of items. These items are, however, usually of lower value. Every player can see *vague* probabilities of packing a certain player-card, by pressing the "R3" button on their controller. This will, in turn, bring up a list of probabilities that details the percent chance of packing a player-card with a certain rating, or of a special type. To bring forth an example, opening a "Premium Gold Pack" that costs 7,500 coins or 150 FIFA points, has a 100 percent chance of acquiring a player-card that is rated from 75 or above. The higher the rating of the player-card, the less of a chance a player has to acquire it. As such, acquiring a player-card rated at 84 or above only has a 8,1 percentage in comparison. Furthermore, this specific pack also presents the chance of acquiring a special "Team of the Week" player-card. When collecting the screenshots for analysis, the chance of acquiring a player-card of this sort was 2.0 percent. The chance of packing the very best cards, such as those rated at 90 or higher, is not given. As such, this list details the probabilities of packing a player-card within certain ratings, but not all. As we list the chances players have here, we can see the almost impossible odds players face when buying and opening these.

"Promo Packs", on the other hand, is where players can find the best available packs for purchase. These are *promotional* packs, and are much more expensive in comparison, in terms of both coins and FIFA points, due to the value of items and player-cards players can *possibly* obtain. Figure 6 also does not show all the packs available for purchase, since players can move from left (least expensive) to right (most expensive) based on the price of packs. When collecting screenshots for analysis, the least expensive option was listed at 25,000 coins or 350 FIFA points. As seen in figure 6 above, the most expensive pack available at the time was listed at 400,000 coins or 3000 FIFA points. A single pack can, therefore, cost around 250-260 NOK. When comparing the cost of these packs to the bundles of FIFA points available for in the tab beside it, there is an inconsistency. Namely, there is an inconsistency regarding the amount of points players need to purchase to afford these packs. Players are not able to just buy 3000 points

outright from a single bundle, rather, they would need to purchase multiple bundles of different price costs. Only then do they have enough points to purchase a single one of these packs. The same can be said regarding the second most expensive pack featured in figure 6, players cannot buy 2000 points outright. They are required to purchase more points than they perhaps require in order to afford these, leaving them with points to further spend on packs. To give an idea of how long it would take to earn an amount of 400,000 coins would be impossible. This is due to the varying rewards every individual player receives when playing, as the better one performs, the better rewards one receives. This amount of coins is not a lot considering some player-cards can cost millions of coins. It is, however, also not a small amount, considering that a player can easily build a decent team from this amount of coins. This is especially the case during the later stages of the game's lifespan, as there is an abundant amount of different and viable player-cards in contrast to when the game was first released. The specific pack highlighted in figure 6 is also of an "untradable" sort. While it may explain itself, I feel the need to at least explain in some detail. This directly ties into the larger transfer market found in the game. Items or player-cards that are considered untradable cannot be sold or bought on the transfer market. Meaning, they have no actual coin value. This is highlighted by the specific design of the pack, as well as a tiny yellow icon placed on the top right of the pack itself. As such, players may spend 400,000 coins or 3000 points, and not be able to regain the coins from the contents of the pack. The only way of really regaining some value from these packs is by packing player-cards that are otherwise worth more on the transfer market than the cost of the pack itself. Additionally, player-cards that are considered untradable can still be used to complete certain challenges, like those found in the mentioned squad building challenges tab. This can, however, be applied to any pack, as there is never a guarantee of making the coins one spent back. At the same time, players are not able to make any of the points they have spent back, as they are gone the second they make use of them.

Unlike standard gold packs, these promotional packs are also limited. Meaning, they are limited in terms of how many packs of a specific sort a single player is able to buy. As seen above in figure 6, only one pack of the "Elite New Year Review Pack" remains. Additionally, this can also be community-based where, for example, only 200,000 packs of a single type can be purchased. As this is community-based, players share this number of limited packs, and once this number reaches zero the pack will no longer be available for purchase by any player. As such, players will need to race and compete in order to be counted as one of the few *lucky* ones

who are able to purchase the specific pack. These packs are also not limited in terms of how many a single player can buy. As for why these particular packs are so enticing to players, it largely has to do with the content inside them, as these packs often present the best chances of packing something worth value, both in terms of coin value and how good the player-card is in-game. Furthermore, while these promotional packs present a limited stock, they also usually come with a time-limit. This can be viewed to the left of the remaining pack number in the screenshot above, in orange writing. Once this time-limit runs out or expires, these packs will be removed from the store, and will no longer be up for purchase by any player. Combining both time-limits and a fixed amount of packs increases the pressure on players, as they will not get a second chance in purchasing these. Players are therefore competing against each other in trying to purchase as many community-based packs as possible before the quantity of packs is reduced to zero. On the other hand, players are left with a choice to either purchase a specific pack before its time-limit runs out, else they may not have that same chance again for the foreseeable future. While new promotional packs are introduced in the store at various moments in time, this does not guarantee that the specific type of pack players seek to purchase will be there. As mentioned, these packs might contain higher chances of acquiring a certain special card, which may just be the card a specific player is looking for.

The two last main tabs of three, that consist of home, play, and club are generally more straightforward in view of their functions. These tabs can be found by moving from left to right. Majority of gameplay modes and features that can be found in the play tab have also been covered in the vision part of the analysis. However, there are still elements worthy of discussion, nonetheless. "Play" is where players can enter or search for a match, either against other players or against A.I driven opponents. Similarly, to the home tab, there are several sub-tabs found within play, where each one presents a different type of match or game mode. Additionally, each game mode comes with their own ways and methods of earning rewards, in the form of coins, player-cards, and packs. Some game modes also allow players of two to team up, where their opponents also consist of two players. This lets players team up rather than playing solo, which means they must cooperate in order to win. I do not intend to mention every game mode found in the play tab, but each game mode presents different methods of earning rewards through playing. This is also where players can earn the last of three virtual currencies, which resemble a purple

star. Like coins, this currency is not purchasable, as it needs to be earned through completing challenges in the "moments" tab. To complete these challenges, players usually have to do something specific within a given time, such as scoring a goal within 20 seconds or retrieve the ball from the opponent. This currency can then, in turn, be spent on rewards, where a larger sum means better rewards. Again, like other challenge-based rewards found in the game, these rewards consist of player-cards or packs which have to be claimed and opened through the store.
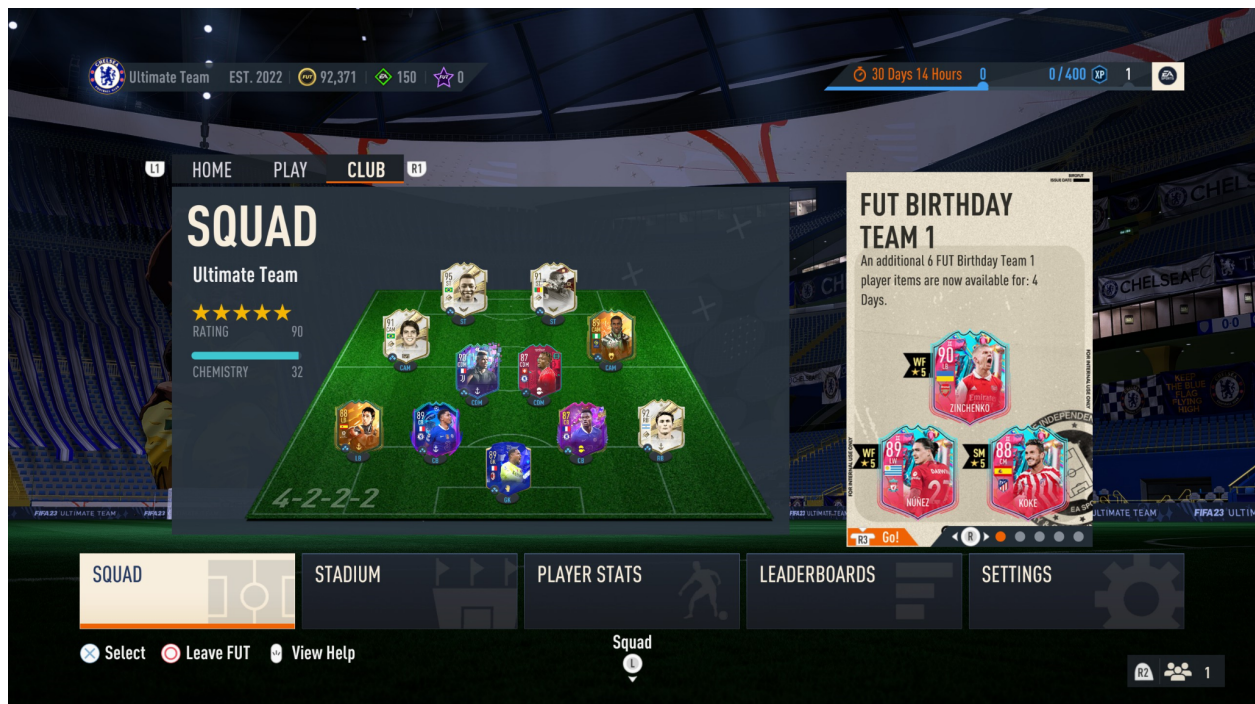

Figure 7: Screenshot of "Club" tab in FIFA 23 Ultimate Team.

The following tab, "Club", can be found to the farthest right of the three main tabs. The club tab is where players can view their squad as a whole and make changes to their team if need be. Moreover, the club tab is also where players can customize the look of their team and stadium, using cosmetic items earned through playing, or by buying them in the store. This is done through the "stadium" sub-tab. There are a variety of different cosmetic items, ranging from football kits, colors or banners, and even celebrations that are used to celebrate scoring a goal in-game. Again, these can be earned, but players are bound to find the most unique cosmetic items in the store. Each time an individual player-card scores or makes an assist (last pass given before goal) the game keeps track of this, and can be viewed by players through the player stats

sub-tab. "Leaderboards" let players *compete* against their friends outside of actually having to play a match of football against them. To elaborate, the leaderboards sub-tab keeps track of certain statistics that players or friends can use to compare to each other. As an example, players can compare how much of a profit they have made through selling and buying player-cards, either through the transfer market or from packs. Additionally, the average rating of a player's squad can also be viewed and compared to each other. Players can also compare stats on a world-wide basis, and not just to friends. Providing a leaderboard feature means players always have access to their friends' progress in various ways, such as how many coins they have earned or how good their squad is. By making this information available at any given time, the game is telling players either two things when entering this sub-tab. They are either being told that their team is much worse in comparison to their friends and other global players, or vice versa. Of course, players can also have even rated teams. As a note, however, the overall objective of the game is to compete, and this is just one of many ways players can do so, against their friends or other players. Using the motivations of purchase as concluded by Hamari et al. (2017), I would argue that the leaderboard can potentially increase a player's desire to purchase in-game microtransactions. This is due to the urge to not only compete, but also the feeling of being left behind by having a worse squad. As such, the leaderboard can not only act as a leaderboard of various statistics, but as an encouraging factor to improve a player's team, through playing or through the purchase of packs. How much of a profit each individual player makes through selling cards such as those obtained through packs is also tracked, as mentioned. Meaning, players are competing to own the best squad, consisting of various cards, and how much money (coins) they have made through the process of acquiring them.

Lastly, the "settings" sub-tab is used to change a club's name among other things, but it can also be used to set personal limits of individual play times, as well as keep track of how much one is spending on packs or FIFA points. It is a rather strange feature to find in a game such as this, as it is something one would otherwise find on gambling websites, and not in a game about football. Nevertheless, the game is open about this informational system, and does not try to conceal it. This is a positive, might I add, but it also reinforces the idea of the similarities between a loot box and gambling system. As mentioned earlier, the second news display also continues to appear prominently on the right-hand side of the screen (as seen in figure 7) even when moving from the play tab to home or club, or vice versa. Players can turn

the joystick on their controller horizontally to view different news, most of which are new player-cards, or packs available for purchase in the store. Players can also press the right joystick to promptly be moved to the store almost instantaneously through this smaller news tab. This is highlighted by the "Go!" message in the bottom left of the news display. Furthermore, this lets players easily enter the store while on different tabs, instead of having to manually switch tabs, and then enter the store through the home tab. In other words, players always have the ease of access to the store and news regarding the latest additions of player-cards and packs found in the store. This also means players will almost never miss out on the latest promotional materials available for purchase, as it is featured prominently on every major tab.

5. Walkthrough of Diablo: Immortal

5.1 Vision

The intricacies in Diablo: Immortal's mechanical features are vast, featuring combat, story elements, trading, and more. This game has been a topic of dispute since before it was even released, and for good reason. Furthermore, the game's monetized aspects are a core part of this. It is intensively monetized, and features a wide variety of microtransactions that each serve their own purpose. Again, the focus here lies on the game's use of existing and perhaps new predatory and exploitative monetization schemes, and how the game utilizes these in its own way.

Diablo: Immortal is an action roleplaying game, and is the fourth entry in the series of Diablo games. Developed by Blizzard Entertainment and NetEase Games, the game is available for both mobile devices and PC. This analysis does not utilize both the mobile and PC versions of the game, however, and only looks at the PC version. Notable is the fact that the PC version of the game is not the full release of the game, rather, it is in an "open beta" state. Meaning, features that the game might have promised may or may not be present, as it is technically still not a finished product. The game's setting takes place in a dark fantasy world where players fight against monsters and demons to save the world. This is a multiplayer game, and players are bound to come across various other players and individuals in the world. As this is a dark, violent and brutal world, the game is rated at ages from 16 and above. Players start by first

selecting one of several classes for their character. Classes include, but are not limited to, monks who fight using martial arts, or wizards that attack with spells from a distance. Each class has their own unique abilities that, as players progress and level up, become stronger. The gameplay features include both player versus environment (PVE) and player versus player (PVP) content. Players can choose to strictly fight against non-playable characters and enemies, or fight against other players in the "battlegrounds" mode. There is also a story aspect of the game, which is narrative driven, and lets players face various threats of demonic monsters.

Through playing the game and completing various missions, players receive *gear* which increases their character's stats in various ways, becoming even more powerful. Different gear pieces are equipped in specific slots such as armor, rings, weapons, and so forth. These also come in varying rarities. Rarities of gear range from lower quality gear to gear of the highest quality, such as normal, magic, rare, and legendary, where the latter is considered the best item rarity. Legendary items also come with bonuses in which other rarities items of lesser quality do not possess. This is largely due to legendary items being the rarest form of gear for players to acquire. While the game does present players with a narrative driven story, this is for many players not their reason of choice when playing. In the end, players are constantly trying to get stronger by increasing their rarities of gear and the stats that accompany them through various means. This can happen through playing the story where players are met with various threats, and through completing dungeons, where players face various amounts of enemies in an enclosed space. These dungeons also contain a more powerful enemy at the end of the dungeon, usually called a *boss*, which is much harder to defeat than normal enemies. In defeating these enemies, players are rewarded with various pieces of gear and experience points. Similar to past Diablo titles is the addition of procedurally generated "Rifts". These work similar to dungeons otherwise present in the game, but are randomly generated, and present various challenges that players need to complete for rewards within a given time. Players are able to enter "Elder Rifts" once they have reached the main city and have a total level of at least 20. Reaching level 20 is not as time consuming as it may seem, only requiring a few hours' worth of playtime. Once players have entered the city and have a qualifying character level, they are immediately guided towards these rifts by an NPC. As a note before going deeper into this rift mechanic, I am specifically focusing on this aspect of gameplay as this is where the main issues with the game's monetization methods lie.

Rifts let players cooperate in groups up to four, as well as compete against other players. There are two aspects to these rifts. Firstly, there are the "elder rifts". Players can choose amongst themselves if they want to cooperate with other players in a group of four, or they can choose to play solo. The reason these rifts are so enticing to players is because of legendary "gems". These are part of the larger gear system, and players can *socket* these gems into their individual gear pieces. How many gems a specific gear piece can hold is based on its rarity, where the better the rarity means a larger amount of gems to socket. Additionally, legendary gems, like gear, come in separate rarities ranging from one to five stars. Moreover, five-star legendary gems each have their own *quality* (1, 2, and 5) attached to them, where five is considered the highest quality. While these gems can be acquired through other means, these rifts present the best chance of obtaining them. This is also part of the reason why players are encouraged to do these the minute they enter the main city. Even so, the chance of acquiring these gems is minimal, and even less so in a player's attempt to acquire the highest rarities of gems, in addition to the varying qualities that accompany them.

This is where "crests" come into play. While all of this may seem confusing, understanding the complexity of these rifts is needed to paint the whole picture. Furthermore, like gear these crests have different rarities which includes rare, legendary, and "eternal legendary" crests. The purpose of these crests is to increase the probability (percentage) of acquiring certain items or gear in rifts which, coincidentally, includes legendary gems. Additionally, these present "modifiers" that can positively or negatively impact the rift. These modifiers can, e.g., increase the number of enemies, and consequently, increase the difficulty of these rifts. A single player can use up to three crests at once before entering the rift, but only those considered *legendary* or *eternal* guarantee a legendary gem. Excluding the guaranteed gem, these crests (legendary and eternal) contain the same probabilities of acquiring more legendary gems. Otherwise, when using a *rare* crest, players have a five percent chance of acquiring a one-star legendary gem. Notably, this is the worst type (star) of gem one can obtain through playing these rifts. Players cannot buy either rare nor legendary crests using any of the several currency in-game or by using real-world money. These need to be earned through other means such as completing objectives in the battle pass. They can, however, buy *eternal* crests using real-world money. These are the best form of crests as players can, in contrast to rare or legendary crests, trade and sell gems acquired in the rifts on the in-game market when using this

type of crest. As such, this means Diablo: Immortal can be considered a Pay2Win game, as it gives players who buy microtransactions an unfair advantage over non-paying players (McCaffrey 2019; von Meduna et al. 2020). This is also strengthened by the fact that the ultimate goal of the game is to increase the strength of a player's character. Buying these eternal crests means players can not only skip a larger portion of the grinding needed to acquire some of these legendary gems. It also means that some pieces of gear and legendary gems are almost exclusively awarded to players who buy these specific crests. This is as they guarantee a legendary gem upon completing a rift when using an eternal crest. Nevertheless, the quality of these gems is a factor as well, as players still only have a one percent chance of acquiring the best quality gem available, even when paying for and using these eternal crests. In retrospect, when combining the uses of these rifts and crests, including how they operate, there is a striking similarity to loot boxes. Moreover, these rifts present unrealistic and extremely low probabilities of acquiring gear and gems that can be considerably better than what a player might already own. These rifts do require players to play the game as well, rather than just opening randomized containers outside of the gameplay itself. The elder rifts gameplay feature is therefore, virtually a *playable* loot box in which players can *gamble* using a variety of crests. Some of which guarantees or otherwise increases the chances of acquiring better gear/gems. Considering the fact, this might be one of the very first examples of a loot box where players are directly involved in the outcome of opening these. There is still a second part to these rifts, namely, the competitive aspect of it.

The second part of these rifts is where players can compete against each other for rewards. This happens through entering the "challenge rift" feature in the main city. As previously stated, these rifts can be completed either solo or by working together with other players. I mention this as there are separate leaderboards for both solo and party rifts. The challenge rift works similar to the elder rifts, but rewards are granted more frequently the more one plays. Players start at level 1 and are moved to the next level upon completing the rift. The maximum level players can reach is 300, and each level guarantees a limited number of rewards upon first time completion. Each time a player moves to the next level, the difficulty of these rifts also increases. As such, the higher the level the harder it gets. As the leaderboard resets every week, players have a week to complete up to 300 rifts, where each one lasts around five or so minutes. Players are encouraged to complete as many challenge rifts as they can, not only due

to the first-time rewards, but due to the leaderboard system. To elaborate, each week the top ten players of each class available in the game are rewarded with various gear and items. This is based on the level of the rift reached, as well as the time needed to complete it. As this very much is a Pay2Win game, non-paying players will always be at a disadvantage when competing for the spots on the leaderboard. The constant increase in difficulty also means non-paying players will have a much harder time than paying players, as gear defines how powerful a character is. Meaning, players who buy microtransactions (crests) for a *chance* to obtain highly powerful gear through the rift system are always at an advantage in competing for the top ten spots. This is as their gear will, in majority of cases, be much more powerful than non-paying players. Furthermore, players that spend the most amount of real-world money are able to defeat enemies at a much faster pace. This directly impacts a player's spot on the leaderboard, as the overall time needed to complete a specific rift is a factor in estimating their position on the leaderboard.

Thus far, Diablo: Immortal already qualifies for at least two *motivators* of purchase, namely "social motivations", and "competition". In this instance, social motivations can arise from simply keeping up with one's friend. Crests can be bought to increase the probabilities of acquiring certain types of gear, some of which can be exceedingly powerful in the game. Motivators of competition occur through the "challenge rift" as well as the "battlegrounds" mode (PVP mode), where players compete or fight against each other. However, one can also argue that "unobstructing play" is also a motivator in the game. To elaborate, unobstructing play might happen indirectly due to the increase in difficulty the higher level one reaches in a challenge rift. While players cannot buy their way through levels, they can buy crests to increase the chance of acquiring higher level gear. This can potentially help a player if they are stuck on a specific level in the challenge rift, as better gear ultimately makes the game easier (Hamari et al 2017). How players might get affected by the "sunk cost" effect is also apparent already. Players might regard the continuous purchase of *crests* as an investment, where the likelihood of acquiring certain gear or gems of certain quality increases the more one buys (King, and Delfabbro 2018, page 1967). This sunk cost effect can be intensified by the fact that the game guarantees players one five-star legendary gem every 50 crests (legendary or eternal) used. As noted by the game, the counter for these are separate. Meaning, players are required to use 50 legendary crests or 50 eternal

legendary crests separately to make use of the "guarantee counter", which guarantees a five-star gem. If players are to use 25 of both types of crests, they will not qualify for a guaranteed five-star gem as, again, these are counted separately.

5.2 Operating Model

Diablo: Immortal is monetized through several different means, some more noteworthy than others perhaps when discussing predatory means of monetization. First, the game does not present players with a premium price tag of 60 or 70 dollars for access to the game, which is the industry standard. Rather, the game utilizes the free-to-play model, where there is no purchase required to be able to access and play the game. Therefore, monetization happens through other means. This monetization model has slowly, but surely, become a giant economic success in the industry of video games. The game is also a live-service title, where a variety of content, including in-game purchases, is provided through continuous updates (King et al. 2019, 131). Noteworthy is the fact that players can play through the entirety of the story without needing to make additional or micro purchases. However, as microtransactions are the main form of monetization, players are heavily encouraged to buy these throughout their playtime. In this case, monetization happens through a large variety of in-game purchases, otherwise known as microtransactions. Virtual currency, for example, is just one of many microtransactions players can buy.

There are several currencies in the game each serving their own purpose. While I do not intend to go deep into every currency, as there are several, there is still need to mention those that players can buy using real-world money. This is, largely, due to the fact that currency is required when buying other microtransactions present within the game. Paid currency comes in two forms, "platinum" and "eternal orbs". These currencies are intertwined as platinum can only be bought with eternal orbs. Players are, therefore, required to go through several steps when trying to purchase platinum. One virtual currency in the form of eternal orbs is purchased using real-world money, and later used to buy another in the form of platinum. In other words, one currency is used to *trade* for another. The sense of value of these currencies is, consequently, hard to follow. This was especially apparent for me as a new player, even though I did not make any purchases in the game. Furthermore, these two currencies are used for different reasons.

Whereas eternal orbs can be used to purchase cosmetics such as character skins or eternal legendary crests, platinum is mainly used in the in-game market. One of these microtransactions has already been touched upon, namely, crests. These crests are used by players to enhance and increase the probabilities of acquiring rare gear and gems when playing the game mode known as *elder rifts*. This game mode is, to an extent, a loot box in itself and a playable one at that. While we have discussed these crests a fair amount already, there is still relevancy surrounding these as they are one of the major forms of microtransaction in the game. Their function is already known to us, however, the methods of acquiring them are mostly not. Platinum can be used to purchase certain crests, but there is a drawback. Because platinum can also be earned through playing, and is not solely acquired through buying it, only a certain number of crests can be bought each week. While separate, both legendary and eternal crests can only be bought once per week using platinum. Using eternal orbs, however, there is no limit to how many eternal crests one can purchase. The game also offers what the game describes as *services*, which players can buy directly using real-world money.

There are two forms of services in which players can buy. Firstly, the game features a "battle pass" like so many other modern video game titles do today. This specific battle pass comes in two forms, free and *empowered*. While this may be self-explanatory given the state of the monetization in the game, the empowered version of the battle pass is purchased rather than earned. The word "empowered" is used here instead of simply stating that it is the paid version of the battle pass. Why this name was chosen can be discussed. Moreover, I see it as a way to, as the name suggests, *empower* paying players. This version of the battle pass gives paying players access to powerful items, gear, and cosmetic skins through the battle pass that directly empower players. Furthermore, I would argue that the name itself also serves to justify the purchase given the name, as there is a clear difference between the names free and empowered. Secondly, a service in the name of "Boon of Plenty" is offered to players through purchase with real-world money. Unlike the battle pass, this service focuses on daily rewards, where each day players can claim a certain type of item as a reward. Additionally, this service also increases a player's inventory space, and gives them direct access to the market anywhere in the in-game world for 30 days. This *service* works noticeably similar to how a subscription service otherwise works, where a monthly payment is expected to continue using the service. A particular interesting detail about this service is that it requires players to log in daily for 30 days in order to claim all

the rewards. Missing just one day means players will not be able to claim the specific item awarded to them that day. Players are, therefore, required to log in to the game every day to get the most out of their money. On the topic of subscription services, I would also argue that the structure and function of a paid battle pass is similar to a subscription service. A monthly payment is not expected or required when purchasing a battle pass, given that they are *seasonal* and can last up to several months. However, battle passes do present a limited-time service where players can earn in-game items, skins, and gear for a paid fee. This is not so different to how a subscription for a streaming service works, where they give subscribers access to a limited-time library of movies and series. Battle passes do require players to spend time in-game and complete time-limited objectives in order to get the most out of the service, however, and can be incredibly time-consuming. There are several more examples of in-game purchases like buying materials for crafting. Nevertheless, these were the ones that I believe are most notable, and subsequently makes up the defining operating model of the game.

5.3 Governance

Diablo: Immortal's governance is ruled by the "Blizzard End User License Agreement", and this is also the case for any Blizzard produced video game (Blizzard 2023). Anyone who plays the game on PC must go through Blizzard's own application or platform "Battle.net" to play. In addition, to buy and play any game application on this platform, one must own a Blizzard account. Creating a Blizzard account requires one to be of legal age or above in their respected country, or have parental consent. Installing the "battle.net" client or creating an account ultimately means one agrees to the user agreement presented by Blizzard as well. The parts of the user agreement I am predominantly looking into are those focused on monetized aspects. Furthermore, the agreement makes it clear that games or microtransactions purchased in these games are merely licensed to players. As such, players have no real ownership of their games or in-game items, which in this case is gear, materials, skins, and so forth. Additionally, in the event of players violating these agreements where players are, e.g., using third-party tools to hack or cheat, players also risk losing the *licenses* granted to them. Meaning, players might lose access to their entire library of games and in-game items by doing so. The license agreements for in-game items are worrisome for reasons I am about to state. While digitally purchased live-service games in the video game industry are getting more frequent, these games can be incredibly hit or

miss in the sense that no one really knows how long they last. Previously mentioned games like "Babylon's fall" was a fully priced live-service game that quickly shut down after its initial release. While Diablo: Immortal initial success was on a much bigger basis, and its popularity is still apparent today, we can see how corporations can quickly revoke one's license to their in-game items. Additionally, shutting down access to digital games is becoming more frequent as a result of a lack of playerbase and source of revenue, due to lack of new content and updates. This ultimately means players are no longer able to play their purchased games or make use of items they have purchased. Diablo: Immortal is a free-to-play game, but offers several microtransactions for purchase to players. A player who is consistently spending money in this game on these microtransactions is also potentially risking losing all they have spent. This is not just due to the consequences one might face in the event of breaking one or more rules. It has to do with the free-to-play live-service monetization model of the game itself, and the always online requirement as a digital game. Blizzard reserves the right to revoke any license granted to players including access to their games as we have touched upon (Blizzard 2023). Moreover, given that the game is free-to-play, and therefore players never really own the game to begin with, there is an even bigger risk in losing virtual purchased items as a result. A live-service title like this will eventually stop introducing updates, and once it does, the player base is sure to shrink as well. As a result, the game may shut its servers down entirely, removing any access to it that has been previously granted to players.

The lack of any ownership and risk of losing virtual items is also apparent in a separate section regarding Blizzard games in a beta or testing state. Diablo: Immortal is, as previously mentioned, in an open beta state on PC. Any purchase of a license such as a virtual item is non-refundable. In addition, as the game is in a beta state, any items or service purchased by players may or may not be transferred over once the game fully exits this beta stage. The user agreement does make a notion of what happens if this occurs, however: "Blizzard will provide you with information that explains what, if any, credit you would receive for your purchase of digital goods or services for real money" (Blizzard 2023). While there are several more aspects to this agreement, my focus was on the monetization of their games, which included Diablo: Immortal. In turn, I have discussed parts of the user agreement that predominantly focuses on microtransactions. We are, therefore, moving on to the technical walkthrough that will be focused on the various storefronts and menus present in the game.

5.4 Technical Walkthrough

Similarly, to the previous technical walkthrough, we are looking at their mediator characteristics that encourage players to spend real-world money on microtransactions. Players can be affected by these, as they will come across a multitude of microtransactions in their playtime of the game. These may be unavoidable for some, but players are constantly incentivized (intrusively) by the game to purchase these. Specifically, some predatory schemes that are utilized include loot box-like mechanics, multiple currencies, and a favor towards Pay2Win mechanics.

A player starts their journey by creating a character and choosing an appropriate class for them. Once this is done, players can enter the world of the game. Choosing to do a specific activity within the game happens in real time where players need to control their characters movement and action towards it. While there is a separate "menu", this does not pause the game as it is a living breathing multiplayer world. As I focus on mediators that encourage players to spend real-world money on in-game purchases, I can predominantly look at the different menus in the game that exist outside of the gameplay itself. This is where the store, among other things, is located. Examining the gameplay itself is, therefore, not a hugely important requirement which, in turn, makes the analysis more focused as a result.

While not all different menu tabs are always accessible, there are some in particular that players can access at any given time. This menu is accessed using the "escape" button on one's keyboard, and in doing so, separates the screen into three parts. On the left part of the screen, players can find four different tabs: "battle pass", "events", "activity calendar", and "first kill of the day". The game is still active in the middle part of the screen while on this menu, where a player's character is also located. As such, while on this specific menu screen, players can see their characters and others as well at all times. Moving on, the third part of the menu, located on the right of the screen, is divided into several tabs, where some are more notable than others. To start, the in-game "shop" tab is located on the very top of the right corner of the screen in addition to the "skill" tab. Every other tab is listed vertically beneath the shop tab. These are: "paragon", "codex", "bestiary", "party finder", "friends", "warband", ending with the "leaderboard" tab. These are perhaps less important as the thesis' focus lies on the monetized behaviors within the game, rather than the all the different functions of the game itself.

As players press on the shop tab, they are quickly brought to a separate menu where a variety of in-game purchases can be bought by players. As seen in the figure below, these are located in their own sub-tabs within the store tab itself, on the left part of the screen. While in the shop, players can also see how much currency of different kinds they hold in the top right of the screen. There are two kinds of purchasable currency in the game. Platinum currency is joined by a square silver icon, while the eternal orb currency is joined by a purple circle icon that differentiates the two. Clicking these icons will bring up a small window where players can choose to be immediately transferred to the point of purchase (the shop). As I discovered during my playtime with the game, these are also present at the same place when accessing a player's inventory. Accessing one's inventory is a regular occurrence for players when playing, as this is where they can change and equip different pieces of gear. Unlocked and locked cosmetics can also be seen in the inventory, where players can press on locked cosmetic items to preview their look or be brought to its place of purchase by the press of a button. As such, players always have an easy path of access to the in-game shop even while on separate menu screens.
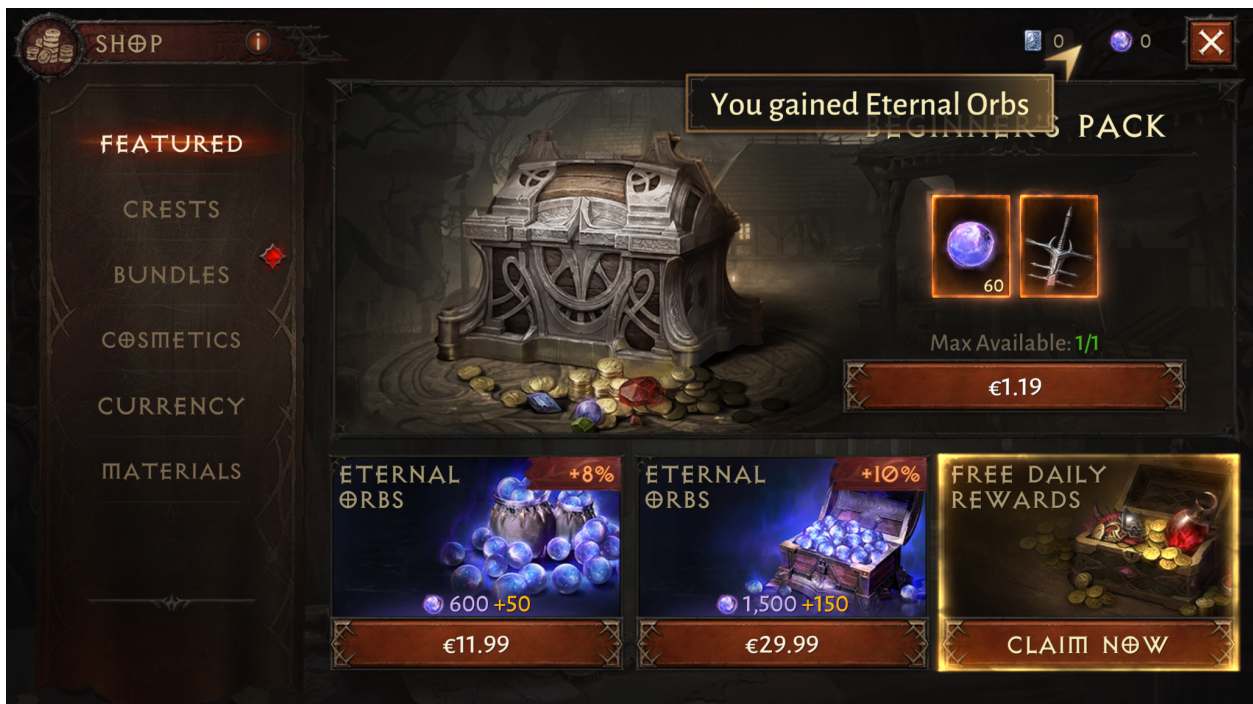

Figure 8: Screenshot of the featured sub-tab found within the store tab in Diablo: Immortal.

The "featured" tab details the latest additions of purchasable items, as well as featured offers. These featured offers are priced the same as the usual price even if it does not seem that way at first glance. When taking the screenshot, different bundles of virtual currency were available for purchase by players at different prices. These featured offers are also joined by text that details what type of currency is for sale. Additionally, buying these bundles of currency, as seen in the figure above, will benefit players as they are granted *bonus* amounts of currency on top of the existing bundle. This is highlighted by using different coloured text, where purple is used for the standard amount of currency. At the same time, orange coloured text beside it is used to highlight the bonus amount of currency that players receive by buying these specific bundles. This is further highlighted by the percentage numbers in orange text above that tells players how much bonus currency (in percentages) one receives when buying these. As an example, buying the bundle of currency priced at 29,99 euros would grant the player 150 more currency, which is 10 percent of the original amount. As such, there are two separate numbers that mostly serve the same purpose, but they are divided into two separate parts. One details the amount of bonus currency in total, and the other one in percentages. When examining the storefronts of the game, my initial thought was that these were *special* offers that were on sale. Furthermore, it seemed as though the orange text which joins them showed its increase in value compared to buying them at a standard cost. However, further analysis provided me with information that disproved this. These specific bundles on screen can also be found in the "currency" sub-tab where they hold the same amount of currency, and are also priced the same. As I am explaining these bundles of virtual currency, there is already a certain amount of confusion surrounding these. It is not clear why players are granted *bonus* amounts of currency, rather than presenting the total amount in one number. Moreover, it makes it seem as though players are receiving more currency than what they pay for, but as we have discussed, this is not the case. Buying a specific bundle several more times will still grant the player the same amount of currency as it did the first time. As such, there really is no bonus currency one receives by purchasing these bundles, it is only made to seem that way. This is worsened when buying more expensive bundles of currency, as there is an even larger increase in the amount of *bonus* currency one receives when purchasing these. As a final note, the word "bonus currency" is never used by the game itself to identify this *additional* amount of currency players receive when purchasing these. Moreover, an argument regarding the intent behind this could be that the game

is to convince players that they are getting good value for their money, which provides further encouragement towards spending. This is done by presenting additional or bonus amounts of currency on top of the existing amount.

The shop also features several more sub-tabs where each tab contains a separate type of microtransaction. Players can, among other things, buy cosmetic skins that change the look of their character, or materials used for crafting and upgrading gear. These cannot be bought directly, as players will need to use virtual currency (eternal orbs or platinum) to buy these. To do this, players will need to enter the "currency" sub-tab, where a variety of bundled currency can be bought at different costs. Players can also exchange one virtual currency for another here, as platinum can be earned by either playing or bought using eternal orbs. The "crests" sub-tab exclusively sells eternal legendary crests, and players can only buy one or ten at a time. The price for ten of these is 29,99€ or roughly 350 NOK. The price of one of these is, therefore, not hugely expensive, coming to around 3€ or 35 NOK. There is not a limit to how many of these players can buy with real-world money, even if they can only buy one or ten at a time for every purchase. There is a limit, however, when players buy these using currency (platinum) that can be earned through playing, where only one can be purchased during a week. As such, there is clearly an incentive to buy these with real-world money, as players are not limited by any restrictions telling them how many they can and cannot buy. As players progress, they also gain access to new forms of in-game purchases.

Services are unlocked as players progress and reach a high enough level. When discussing services in Diablo: Immortal there are specifically two different kinds one can purchase. These services are not immediately unlocked as there is a level requirement, and is why the tab cannot be viewed in figure 8. As seen in the figure below, there are two services available for purchase, namely, "battle pass" and "boon of plenty". As mentioned earlier, the battle pass has both a free and paid version attached to it. Both versions of the battle pass have an equal number of ranks (40), where each rank rewards players with certain amounts and types of gear, materials, skins, and so forth. These ranks are slowly progressed as players complete activities and quests to earn "Battle points", but only a limited amount of battle points can be earned each week. However, there are substantially more items to unlock when players own the "empowered" version (paid version) of the battle pass, not to mention cosmetics. Furthermore,

the paid version of the battle pass also comes in two versions, namely, "empowered" and "collector's empowered". The main difference between the two is the immediate rewards players unlock, as buying the latter will instantly reward players with cosmetic rewards (character skins etc.), as well as a rank boost. This boost immediately unlocks 13 ranks of 40 for the player, but buying this version of the battle pass also costs triple the price, as seen in the screenshot below.

Figure 9: Screenshot of "services" sub-tab found at the shop in Diablo: Immortal.

This version of the paid battle pass therefore acts as a time-saver. Players who bought the least expensive version will still need to grind and unlock each individual rank of the battle pass. Moreover, should players find themselves in a rut, the game also features "rank purchase". To elaborate, virtual currency (eternal orbs) can be spent to unlock each and every rank of the battle pass from the very beginning. Meaning, players are able to skip the entire process of leveling the battle pass, given that they have around 6000 eternal orbs, which translates into approximately 120€ euro or 1400 NOK. Seemingly, there is always an option to skip the majority of playtime otherwise required to progress the different functions of the game. Players have to, otherwise, play the game on a consistent basis each day in order to unlock every rank. As the battle pass is seasonal, meaning it lasts for roughly a one-month period, these ranks also need to be unlocked

before the season ends. Else, players will not be able to unlock everything in time. There is, therefore, a certain amount of pressure on players even if they have paid for the premium version of the battle pass. This is intensified by the cap on activities, meaning, players can only earn a certain amount of battle points each week, which increases the time of progressing the battle pass by a substantial amount of time. Nevertheless, given that the game has an option to skip several if not all ranks, this means players always have a failsafe where they can avoid missing out on rewards. This happens, as we have discussed, through purchase and use of virtual currency. While this is not required, it allows players to unlock the same rewards, but at a much faster rate. It does so by skipping the process of grinding and manually unlocking ranks through several hours of gameplay.

The "boon of plenty" offers a different kind of service in providing additional log in rewards for players. These need to be collected every day for up to 30 days. Missing one day also means missing out on the reward granted to players that day, as these are not obtainable afterwards. Extra "benefits" are also provided when purchasing this service. These benefits come in the form of expanding one's inventory space and stash, as well as giving players immediate access to the in-game market anywhere in the world. These services are very much subscriptions, in the sense that they are provided as a purchasable service to players every month. While we did briefly discuss this, I noticed a certain theme with the services the game provides through in-game purchases. Meaning, these are both time-limited services where players are either required to play every single day (to collect daily rewards), or several hours almost every day (to progress the battle pass). Buying the battle pass or the boon of plenty does not guarantee in-game rewards without the player being committed to logging in and spending a number of hours of playtime. The pressure is, therefore, on the player to spend a number of hours grinding almost every day or every day to rank up, else the value of these services is slowly being drained on a day to day basis.

A huge part of the game are these randomly generated rifts. We have touched upon these rifts previously when we spoke about the vision of the game. The "elder rift" gameplay mechanic is where players use crests to increase their chances of acquiring rare loot. Looking at the figure below, we can begin to explain exactly how this occurs. Players will first need to move to a

specific place in the game world to access the rift, and once they do, this separate menu screen will pop up.

Figure 10: Screenshot of the "Elder Rift" menu screen in Diablo: Immortal.

Players can use up to three crests during one run. How many crests of each type/rarity (rare, legendary, eternal legendary) a player currently has is always displayed on the top of the screen while in this menu screen. As seen in the screenshot, I currently hold one crest of rare and legendary rarity. These change the probabilities of acquiring legendary gems, as well as add *modifiers* to the rift, which can negatively or positively affect the challenge. Beside the large text that says, "Elder Rift", players can press on the circular "i" icon to bring up a list of probabilities or drop rates. This list explains to the player the different probabilities of acquiring legendary gems using every type of crest. To start, using a rare crest will not guarantee a legendary gem, nor will it give players the chance of acquiring a gem with a higher star rating than 1. There are three star ratings, namely, 1, 2, and 5, where five is considered the best. Five-star gems also have a numbered quality attached to them that ranges from 2-5. To acquire these high rated star gems, players are required to use either legendary or eternal legendary crests, else they will not have a chance. Even so, the chances of obtaining these are also incredibly low, and even lower the

higher rated the gem is. Adding multiple crests of the same rarity also does not increase one's chance to acquire these, as they are independent of each other. As there are separate rarities (star and quality) for the gems, players will not only roll dice of chance to acquire a gem that is of a high enough star rating, but also for the quality of the gem. This only happens if they manage to obtain a five-star gem through pure chance, however. To detail how low of a probability a single player has in acquiring a five-star gem of the highest quality, players have a 75,395 percent chance of acquiring a 1-star gem. Moreover, a 20,105 percent chance of acquiring a 2-star gem, and lastly, a 4,5 percent chance of obtaining a five-star gem. On top of that, every 50 legendary or eternal crests used will guarantee players one single five-star rated gem, but the guarantee counter is also separate for both of these. If a player is *lucky* enough to obtain a five-star gem through chance or by using 50 of one rarity of crest, separate numbers of probability are used to determine the quality of this gem. These can be seen in the figure below.

Figure 11: Screenshot of "Elder Rift Overview" that details the drop chance of legendary gems.

To put this into perspective, players first have a 4,5 percent chance of acquiring a gem of the highest rating before needing to *roll* a second time, where they have a mere 1 percent chance of acquiring the highest quality gem. I realize these numbers can be hard to follow, but it is necessary to understand the complexity of this, in order to fully understand just how little of a chance players actually have. This is also one of the more prominent game modes in the game, and one players are immediately guided towards during their playtime. To fully discern the players' view of the game, we must understand how this game mode is presented to players. This is as they will undoubtedly deal with the complexity of this game mode in their playtime too.

While time spent in the rift can be limited by the fact that only a certain amount of high rated crests can be obtained each week, this is not the case for players who purchase them with real-world money. In fact, players can purchase them directly through the menu of the rift up to a total of 99 at a time. There is, therefore, a separate number of crests players can buy at a time when purchasing them directly through the rift menu, in comparison to going through the in-game shop. To put this into perspective, buying the max number of crests at a time would cost the player 15840 eternal orbs (virtual currency), which roughly estimates to 250€ or 2900 NOK. Buying these is not a requirement, but the objective goal of the game is to become increasingly stronger, and as such, the elder rift is the best way of doing so. This is clear even when considering the almost impossible odds players face when doing these rifts.

The elder rift is a loot box disguised as a separate gameplay mechanic or mode where players can earn rewards. A remark I previously made was the likeness between rifts and loot boxes. To elaborate, much like loot boxes in other games, the elder rift presents players with a chance or an opportunity to acquire virtual items of potential in-game value. I say in-game value as there is, generally, no direct financial gain from buying and opening loot boxes in video games (King, and Delfabbro 2018, p. 1967). While loot boxes in other games are, generally, randomized containers that present the opportunity for players to acquire rare in-game items, they are usually separate to the gameplay itself. Players might be rewarded with these after reaching a certain requirement in these games, such as reaching a certain level. In Diablo: Immortal, however, loot box-like mechanics are directly interwoven with the gameplay itself. In a sense, the elder rift is, therefore, a playable loot box. Containers of items are not opened just by the press of a button, they have to be earned through skillful play as well as through chance.

Diablo: Immortal presents players with in-game purchases during the middle of gameplay. While we have discussed several microtransactions thus far, including methods players can make use of to purchase in-game purchases, one stood out when I spent time playing the game. Specifically, I am pointing towards the game presenting in-game purchases to players in the middle of gameplay. As an example, after completing a dungeon in the game, I was met with a pop up screen of a "trove" that included a variety of materials, crests, and currency. This is significant as it happened right after I had completed a dungeon while still playing. Moreover, this was marketed by the game to be a *one-time* purchase that I was only granted access to after

completing this specific dungeon. As I had completed the dungeon, I now had the *privilege* to buy this trove of items for a total of 1,19 euros. Additionally, as seen in figure 12 below, this trove presented me with items worth "570" percent more than the price tag. This was one aspect of this pop up screen that was hard to miss, given the size and coloration of the font, not to mention the value players seemingly *save* by purchasing this trove. The price for this treasure trove is not a large amount by any means, but these troves are also not a one-time occurrence. In fact, these regularly appear once players complete certain dungeons within the game. Previously we have discussed how quickly small purchases can turn into hundreds or perhaps thousands of dollars. More specifically, the long-term cost of microtransactions (von Meduna et al. 2020; King et al. 2020; Li, Mills, and Nower 2019). Given the regular occurrence of these pop ups of one-time purchases, we can see how the game tries to tempt or encourage players to buy these throughout their playtime. The extra *value* players supposedly get out of these is certainly another aspect of this. This is just one of many in-game purchases players can buy, but it is especially notable as they are presented to players in the middle of gameplay.

Figure 12: Screenshot of a "trove" pop up offer in Diablo: Immortal.

6. Comparative Analysis

The grounds of this thesis is to analyze and discuss potential predatory means of monetization in specific modern video games. More specifically, how and if FIFA23 and Diablo: Immortal take advantage of predatory or exploitative monetization schemes to trick or encourage players into spending real-world money on microtransactions. How spending is incentivised in the games is also a hugely important part of this thesis' focus. Comparing these two games on their methods of monetization will allow me to get a closer and fuller understanding of how this is done. Furthermore, it allows me to detail how modern games may use similar or different monetization techniques to perhaps fulfill the same goal. Just because both games may use, e.g., loot box-like mechanics in their games, it does not mean that their methods of utilizing these are the same. I purposely chose two games of very different genres in order to provide insights of how this can be. This is one aspect of this thesis that I firmly believe differs it from most of the previous research conducted into similar topics. When comparing these two games I will use parts of what has been analyzed so far using the app-walkthrough method. We have already talked about the gameplay of these two games in vivid detail, therefore, I will mostly avoid going into detail on this part of the games. Nevertheless, how the monetization of the games are designed and centered around the gameplay will still be useful for this comparison.

These games already differ in their ways of granting players access to them. Whereas FIFA23 has a premium price tag of 70 dollars, Diablo: Immortal does not, as it is free-to-play. No purchase is ever *really* required as well, meaning, players can play through the entirety of the latter game's story elements without needing to buy microtransactions. Whether or not the narrative driven story of Diablo: Immortal is the main part of the game for most players can be argued, however, as the gear one acquires through playing it is severely limited. Furthermore, FIFA23 also offers players not one, but multiple versions of the same game when purchasing it. The main differences between these versions are the additional content one receives when purchasing one of them. This additional content comes in the form of player-cards, virtual currency, and more. The most expensive version (85 dollars) of the game also provides a substantial amount of bonus content in contrast to the regular 70 dollars version. As such, players are generally encouraged to buy this version of the game. This is considering the amount and

type of content they receive will ultimately help them when competing against other players in the Ultimate Team game mode. One of these games being free-to-play and the other paid for, showcases that there is a large presence of microtransactions regardless of the monetization model.

These games are both live-service titles, where they receive continuous updates. These games being live-service is something we have touched upon, but we have not necessarily discussed how these games provide content to players. This is important for several reasons, one being that the different in-game purchases players can buy are directly impacted by the games being live-service. As such, understanding how and why these games are live-service will help when discussing their potential problematic monetization methods later in the comparison. Various content is provided to players in a seasonal format in both games. These seasons generally last the same amount of time, where a season can last somewhere between a month or five to six weeks in total. Individual seasons can also be inspired by a certain theme, for example, Halloween themed in-game items and cosmetics during the month of October. As seasons only last a limited amount of time, the content (skins, player-cards, gear, etc.) for that season follows suit, in terms of players having a limited time to purchase specific items. This is as once the season is over, the majority of items disappear and are no longer obtainable by players. I say majority, as player-cards in Ultimate Team, for example, can still be purchased using coins through the in-game market, even though there are only a limited amount of them left. They are limited because they are no longer available in packs once the promotional event that features these cards ends. These games providing content in seasons directly impact how the battle passes in both games operate. Furthermore, both battle passes are also seasonal in the sense that they last the same amount of time, and the items they provide players can have distinct themed look. Once the season ends, a new battle pass featuring a variety of in-game items replaces the old one. Whereas Diablo: Immortal presents its battle pass as a free or purchasable service, FIFA23's battle pass only comes in a free format. Players are first and foremost incentivized to purchase the battle pass in Diablo: Immortal, due to the sheer number of in-game items they can *possibly* earn. What is similar between these two games' battle passes is that they are incredibly time-consuming. From my experience playing both games, progressing the ranks of the battle pass requires several hours a day to do. This means players will likely have to spend multiple hours each day to fully progress through the entirety of the battle passes before the

season ends. How the games have chosen to deal with this potential conundrum differs, in terms of their methods and monetization practices. Unlike the battle pass present in FIFA23, players can choose to use real-world money to progress the battle pass' ranks in Diablo: Immortal. Doing this will severely minimize the amount of time needed to otherwise progress the entirety of the pass, but ultimately comes at a cost. This is because players can, otherwise, only progress a certain amount of ranks each week even if they have purchased the service. As a note, this is limited by the game itself. As a result, there is an underlying pressure on players who have either purchased the battle pass or not. This is because missing a timed quest or objective to progress can negatively impact a player's progression rate. Furthermore, missing several timed quests can result in players being unable to fully progress each rank of the pass in the end of the season. They are then unable to essentially *earn* the in-game items they might have already paid for or not. How FIFA23 deals with this is different. As the game does not feature either a paid battle pass or a direct method of progressing it using real-world money, players have to continually grind and complete objectives to earn experience points. As an avid player of this game, I have experience of reaching the very end of its battle pass. Nonetheless, the time needed to do this is almost like working a part-time job, meaning, several hours are needed to complete specific objectives every day. The rewards players receive in doing so are also lackluster. The reason for this is, largely, due to the fact that the battle pass is an entirely "free" experience. While players cannot progress the battle pass directly using real-world money, they can in fact purchase Electronic Arts' subscription service "EA Play" to progress at a faster rate. Meaning, as long as one is subscribed to this service they will receive a number of experience points at the start of each month, as the subscription renews. Both games therefore present players with optional "time-savers" that can reduce the time needed to progress the battle pass. Players in Diablo: Immortal, however, are able to skip the entirety of the playtime otherwise needed by buying ranks with real-world money. This is one of the few examples where players can directly buy a microtransaction without needing to first buy virtual currency.

Multiple virtual currencies are used for different purposes within both games. A shared feature is the use of multiple virtual currencies. These are used for different purposes, and some can be earned through the act of playing, whilst others can be bought with real-world money. In both games, however, there is an obvious bias towards the purchase and use of paid currency. The reason I say this is because paid currency is used for virtually every in-game purchase

players can make, with battle passes in Diablo: Immortal being one exception. In contrast to Diablo: Immortal, however, FIFA23 allows players to choose which currency to spend when purchasing a microtransaction. Even if paid currency (FIFA Points) is incentivized, there is always an option to use currency (coins) used through gameplay. Considering the different genres of games, what types of microtransaction players can buy differs vastly. Even so, there are some shared elements, for example, cosmetic items that can change the appearance of certain elements. During the technical walkthrough of both games, I also found that they use different tactics in guiding players towards the use and purchase of currency and in-game items. Notably, as the majority of a player's time may be spent in the menu screen of FIFA Ultimate Team, small windows of newly added player-cards are almost always visible. The constant requirement of Players may interact with these to be instantly transferred to their place of purchase, or rather, the store. As everything happens in real-time when playing Diablo: Immortal, the game goes as far as to present pop up windows to players during gameplay. More specifically, I am talking about the "troves" that players grant access to and can purchase. These are generally small purchases, but are continually pushed towards players as they progress and complete quests. The distribution of virtual currency is also similar, in the sense that players buy a *bundle* of currency that come in varying amounts and prices. Despite that, Diablo: Immortal makes a clear use of *bonus* currency which makes it seem as though players are receiving more than what they pay for. While this additional currency is never specified to be a bonus amount of currency by the game, how players might perceive it as that is clear. This is as the game presents it as a separate amount to the standard amount one receives at purchase. Whereas FIFA23 only features one paid currency, Diablo: Immortal features several. Additionally, one virtual currency can be exchanged for another, but this only happens one way. The sense of value of virtual currency is already difficult to discern. Having multiple paid currency, which is exchangeable, furthers the challenge that comes with knowing the sense of value of these currencies. As a result, it makes them even more difficult to comprehend for players. There is a lack of consistency in the amounts of virtual items one receives by purchasing these, and this is apparent in both games, e.g., the seemingly random amounts of currency within a bundle. In-game purchases can be further incentivized by the competitive nature of both games.

Competition acts as one of the main motivators for in-game purchases. What has become clear to me as I have spent time with both games, and after conducting the analysis, is that both

games heavily rely on competition. Competition is used as an encouraging factor for players to purchase microtransactions. In the case of FIFA23 (Ultimate Team) this is perhaps more apparent, as its focus generally lies on competing weekly against other players. The competitive nature of this game is intensified by the weekend league (FUT Champions). As the name suggests, this game mode within Ultimate Team is only available during weekends. It consists of 20 matches where players pit against each other for the chance to earn rewards. Other than simply purchasing packs using real-world money, this is the best chance for players to earn huge in-game rewards. Due to this, the act of purchasing loot box-like mechanics (packs) is further encouraged. This is because the game is heavily Pay2Win, where the strength/rating of a player-card ultimately matters in most gameplay situations. Players can acquire a team of great worth through simply playing, but it comes down to time. As we can see, this is a recurring factor in these games. There is always a method of playing and earning rewards without needing to pay extra. However, given the time needed to do this, buying microtransactions allows players to avoid most of the grinding needed for this. In the case of Diablo: Immortal, there is a larger focus on PVE action, where players mainly fight against A.I driven opponents rather than other players. However, during my analysis of the game, I found several methods where players can compete directly or indirectly. Most notably, is the "battleground" game mode where players fight against each other using the gear they have earned or acquired. While there is a certain amount of skill involved, the type and rarity of one's gear ultimately decide which side wins. One can imagine two sides or two players constantly *investing* time and money into this as they both desperately want to win. As such, it essentially becomes a battle of who spends the most amount of real-world money to achieve victory over the other. There is also the separate "challenge rift" mode where players indirectly compete as they try to complete as many of these rifts (time-limited challenges) as they can during a weekly span of time. These progressively become more difficult as players complete them. Due to this, the purchase of in-game microtransactions that can directly increase one's chance in obtaining more powerful gear (crests) is incentivized. Furthermore, the more powerful gear one has obtained, the less of a challenge players will ultimately have in completing these rifts. Similarly, is the games' use of leaderboards. Whereas a leaderboard is integrated into a specific gamemode within Diablo: Immortal (challenge rift), players can always view the leaderboard within FIFA23 (Ultimate Team) while in the menu. This leaderboard contains specific statistics regarding a player's team,

such as their squad value and rating, and how much currency they have earned through selling player-cards. As such, this is just one of many ways players can compete among and against each other. This is because they can compare their statistics to other players, including their friends, at all times. Diablo: Immortal's leaderboard is used rather differently, where the top ten players are rewarded with in-game items on a weekly basis. Both these games feature loot box-like mechanics, but their methods of operation and utilization differ.

Loot box-like elements are prevalent and one of the leading gameplay features in both games. There are several reasons why loot boxes have become so disputed in video games, and as a result they have gained an increasing amount of coverage in academic works. Notably, the slim chances they present for players in their efforts to acquire certain items/gear, and their similarity to real-life gambling (such as slot machines). Therefore, the presence of these mechanics in both games is concerning for several reasons. How loot box-like mechanics are utilized in the respected games is particularly interesting, as their methods of doing so differ. Almost the entirety of FIFA Ultimate Team is centered around these mechanics, where they are disguised as "packs". These present players with the *opportunity* to receive something of in-game value, such as a rare player-card, after committing to a purchase. An important takeaway here is the word "opportunity", as the chance for this happening is incredibly slim even while using real-world money. The chance of obtaining a specific player-card of a certain rarity can be less than one percent, but these chances can be increased by purchasing packs of higher costs. Whether or not the player uses in-game currency earned through gameplay, or currency bought with real-world money is ultimately their choice. Players will also get a taste of these packs while playing as they are the main form of rewards granted to players, excluding currency (FUT coins). These can only be opened in the storefront of the game, and as such, players must continually navigate towards the store to open these. Being a live-service title, different types of packs are shuffled throughout each week in the store, where new versions of packs appear, and old ones disappear. The use of a limited-time or limited quantity of packs is very apparent here. These can compel and pressure players to purchase them using different methods or by using them all in tandem. First, players may only have a certain amount of time before a specific pack disappears from the store. Second, players may only have a certain amount they can buy during this time. Third, the pressure that comes with limited quantities of a specific pack can be further enforced by it being community driven. The pack being community driven means a set number

of a specific pack is available for purchase within a certain time, but for all players. In other words, the pack quantity is shared among all players. Furthermore, players of the FIFA Ultimate Team community may then, essentially, compete against each other by buying as many of one pack as they can before the time, or the number of packs runs out. These packs are often some of the best a player can buy as well, which provides further encouragement for players as they decide. Whereas FIFA Ultimate Team's loot boxes are disguised as packs containing cards that players can open with the press of a button (using currency), players are actively involved when "opening" these in Diablo: Immortal. This occurs as players enter the "elder rift" game mode. Players are then given the option to use up to three *crests*, some of which can guarantee a legendary gem used to increase a player character's power. While these crests can guarantee one gem, additional gems are obtained through pure chance. This is where the similarities to loot box-like mechanics begin to become apparent, as even with purchased crests (eternal legendary crests) players still have very slim chances to acquire these gems. Of course, as there is a variety of rarities of gems (1, 2, and 5 stars), players may have a better chance to acquire one of lesser quality. However, ultimately, players will take their chances to acquire those of supreme rarity (five-star gems). While these should be harder to obtain for players, else there would be an overflow of these, there is a clear disparity. To elaborate, five-star gems have a 4,5 percent chance of dropping, but there is an additional "quality" drop rate that contains separate chances. In simpler terms, players who do obtain a five-star gem then have a 1 percent chance for this gem to be of the highest quality. The disparity here lies with, firstly, the slim chance to acquire a gem of supreme rarity in comparison to those of lesser rarity. On top of that, an even slimmer chance to have this supreme rarity gem be of the highest quality it can be. As a note, these chances presented here are those given to players who might have purchased crests using real-world money, or by slowly earning enough virtual currency to afford just one of these. Players who invest a substantial amount of time and effort into this game are the targets here, as they have the most cause of doing these rifts. This is because completing these rifts is necessary, as they contain the best chance for players to acquire legendary gems. This says a lot, considering the minimal chances players have. What I believe is an evolution from previous loot boxes in games, is the fact that players are directly involved in the outcome of these rifts. This not only happens through the use of crests, but as players need to *play* these. These are timed challenges, where players must clear a number of enemies before facing a much stronger one.

There is, therefore, a certain amount of skill involved in "opening" these loot boxes. Players may not lose the crests which they have potentially bought in the event of failure, but these rifts need to be completed to get one's money worth. Only by completing these do players have a chance to acquire a legendary gem. Consequently, I would further argue that this is one of the first examples within modern games where a loot box has become a "playable" feature. What this ultimately shows is how the concept of microtransactions such as loot boxes can differ from game to game. Furthermore, they are no longer just boxes where players press a button to open them like in FIFA23, as players actively take part in these.

  Players have no ownership of their purchased in-game items. What became clear to me when analyzing the governance of these two games was that players, seemingly, own none of their purchased games and in-game items. In both games, when a player purchases an in-game item, they are then licensed to players. Additionally, Electronic Arts' FIFA23 takes this a step further in calling their purchasable virtual items "entitlements" which are granted to players. The problem with this is linked to the games' encouraging behavior towards the purchase of in-game items using real-world money. Furthermore, the gamemode Ultimate Team within FIFA23, and the entirety of Diablo: Immortal is only playable while online. Both being live-service titles, there is an uneasiness of not knowing how long they will last, as these types of games come and go in the modern video game industry. When putting these two ideas together, we can see how problems may arise consequently. In other words, the games are incentivising and pushing players towards the purchase and use of microtransactions which players, subsequently, have no real ownership over. Diablo: Immortal being a free-to-play title means players never had any ownership of the game to begin with. Moreover, being a online live-service title, the game and any in-game item purchased by players are constantly at a risk of being lost. Video game companies therefore hold all the power, as players neither own their purchased games and items. In addition, live-service games eventually stop providing updates, and in turn, they are shut down. This is perhaps more apparent when looking at the annual franchise of FIFA games. I say this as every purchase made within the game loses virtually all their "value" once the new title arrives.

This comparison of key points detailed in the analysis of both games detail how both games use similar or different means of monetization. Furthermore, it details how repeated spending is

incentivised by both games, which mostly happens through the use of virtual currency and loot box-like mechanics.

7. Discussion

The research problem this thesis predominantly looks at is how specific video games are using predatory/exploitative monetization schemes to incentivize spending on microtransactions. Additionally, if their methods of doing so differ, and if so, how. Through analysis and by drawing comparisons between the two games (FIFA23 and Diablo: Immortal), this thesis supports the existing idea that certain monetization systems within video games are predatory or exploitative towards players (King, and Delfabbro 2018; Petrovskaya, and Zendle 2021; King et al. 2019). The importance of microtransactions in these two games also showcase the prevalence of these in modern games regardless of their monetization model (free or paid). Through careful analysis of these two games' purpose, monetization models, terms of service, and their in-game menus, there have been some shared and dissimilar findings between the two. Notably, as the games are both of the competitive "Pay2Win" formula, these games favor players who purchase microtransactions to increase their chances in becoming stronger in-game. There is therefore an underlying pressure on players who do not buy microtransactions. These players are likely to fall behind, and will not have a good of a chance as those that do when competing. Furthermore, findings include pressuring tactics to entice players towards purchase of microtransactions. Moreover, these games utilize, among other things, time-limited and limited-quantity content, multiple currencies (bonus currency), frequent one-time purchases, and loot box-like mechanics to do so. The prevalence of loot box-like mechanics is especially apparent, where these games base entire game modes around them. How they ultimately utilize some of these exploitative monetization schemes differs, however.

Many of the tactics used to incentivize in-game purchases can exploit both a player's time and money. The time and effort otherwise needed to progress in these games, whether it be the battle passes or the ranking systems, can be many hours' worth. It can take a considerable amount of time, and a certain amount of skill, without spending additional money on in-game purchases.

This is especially so considering the Pay2Win nature of these games. The battle pass present in Diablo: Immortal, for instance, has been designed to hold back players in terms of their progression rate. Players can only complete certain amounts of quests/objectives every week, which lengthens the overall time needed to earn rewards that they might have paid for. Of course, players do not pay for these directly, they buy a service where they have the opportunity to earn them. In turn, this may keep them from jumping ship or so to speak. In other words, it keeps them active in the game every week, as this is required to earn all the rewards in the battle pass. The pressure is, therefore, on the player to spend a number of hours grinding almost every day or every day to rank up. Else, the value of these services are decreasing as every day goes by. Petrovskaya and Zendle have noted that battle passes essentially "traps" players into spending time with the game (2021, 1075), and we can see how this takes effect in Diablo: Immortal. Notably, battle passes are presented as *services* to players in this game, and are highly reminiscent of how a subscription service otherwise operates. These are seasonal (monthly), but rather than give subscribers of this service control over their purchased service, players must essentially earn what they have already paid for.

These games make use of multiple virtual currencies that each have their own use. The problems related to virtual currency, and multiple at that, are perhaps not as apparent as other microtransactions. The main issue that arises from having multiple currencies is the difficulty that comes with keeping track of these for players. Currencies are seemingly bundled and priced at random, and there is therefore almost no sense of value. The same can be said regarding the prices of other microtransactions, such as cosmetic skins. This is a remark that this thesis has made, but has also been previously discussed by Petrovskaya, and Zendle (2021, 1072) and Ivanov, Wittenzellner, and Wardaszko (2021, 392). What is a particularly interesting insight regarding the game Diablo: Immortal, however, is how one virtual currency is exchangeable for another. Having several currencies for different purposes in a game is confusing in itself. Making these exchangeable, however, can ultimately intensify the confusion already surrounding the value and price of virtual currency, and other microtransactions present in the game.

Past research within this field of study has focused on microtransactions and exploitative monetization systems in games, but they have done so on a wider scale. More specifically, these have not looked into specific examples of games where these microtransactions or systems might

be prevalent. There is also an abundant amount of academic research that has gone into the concept of loot boxes and their likenesses to gambling (Johnson, and Brock 2020; Brock, and Johnson 2021; von Meduna et al. 2020). The groundwork laid by King and Delfabbro (2018) has provided this thesis with insights into what types of monetization systems can be considered predatory/exploitative towards players, and why. This has been further explored by Petrovskaya and Zendle, where they have examined misleading and aggressive monetization techniques using a survey of gamers (2021). The research presented in this thesis supports the idea of certain monetization systems in modern games being exploitative. This thesis, however, takes a step in another direction, by detailing how specific examples of games may utilize these in their own way. The significance of this research details and provides new insights into how games may take existing concepts of predatory monetization systems (time-limited offers, loot boxes, etc.) and mold them into something that fits that particular game. Interacting with, analyzing, and comparing specifically two games that are prevalent in their use of microtransactions has ultimately allowed me to exhibit how this may be. Furthermore, it shows how different a specific type of microtransaction (such as a loot box) can be in two games, even though the basic concept might still be similar (randomized container of in-game items). The dissimilar implementation and utilization of predatory monetization mechanics such as loot boxes in these two games is especially interesting, where one is essentially playable and the other is not. Realizing how these are used in individual games is something I find furthers the conversation and discourse surrounding monetization of games and their potential predatory nature. This is as their methods of doing so can be very different.

In both games analyzed in this thesis players are, to an extent, directly involved in the outcome of these loot boxes, or rather, their success. The variety and rarities of packs in FIFA23 means players can pay more to increase their chances in obtaining high in-game value football cards. In comparison, players can choose to use a variety of "crests" that have their own rarities to increase their chances in Diablo: Immortal. In addition, the loot box-like mechanic present in this particular game is an entirely separate game mode. Here, players actively take part in the outcome of these loot boxes, with the use of crests as discussed, but also through skillful play. The "elder rift", which is essentially a playable loot box, consists of time-limited challenges that players have to complete in order for players to *open* and receive their rewards. This does not

happen by simply pressing or clicking a button. These are challenges, and as such, there is a certain difficulty to these. This is intensified by the "modifiers" that come with crests. These can negatively affect a player's chance in completing the challenge by increasing the number of enemies, and so forth. As such, even while purchasing crests players will have difficulties in completing these. Additionally, even while purchasing either packs or crests, players still have a minimal chance of acquiring in-game items, which comes with the nature of a loot box. These "elder rifts" are not dissimilar to how an arcade game otherwise would work. These do not present players with a "terminal goal" (Jagoda 2018, 205). While the overall goal of Diablo: Immortal is to increase a player character's strength, these rifts are designed to be repeatable and fresh for players due to their randomness.

These games are apparent in their uses of pressure tactics towards players, and are inherently unfair when players do not spend additional amounts of money on them. Much like apps, games make use of "mediator characteristics" (Light, Burgess, and Duguay 2018) in their in-game menus. The placement of tabs, how players navigate through them, use of text, color, pop up screens, etc., are designed to draw people towards the storefronts in the game, where further spending on microtransactions might occur. Their methods of presenting in-game purchases to players are both aspects of "intrusive and unavoidable solicitations" (King, and Delfabbro 2018, p. 1967). Their uses of these differ, however. While in the menu of FIFA23 Ultimate Team, an almost permanent advertisement window follows players as they switch between tabs. These usually contain information regarding the latest purchasable player-cards and packs, and offers a quick and easy way of navigating towards these. In comparison, Diablo: Immortal presents purchasable microtransactions in the middle of gameplay. These *troves* that appear in pop-up windows are one-time purchases, but are constantly introduced to players as they progress. These are, therefore, unavoidable when playing. Furthermore, these are also advertised in such a way that it makes it seem as though players save large amounts of money in buying these. The same can be said regarding the game's method of incentivizing purchase of virtual currency. More specifically, their use of *bonus* currency as a separate amount to the existing amount of currency one receives. These are designed to give the impression that players are actually receiving more than they pay for, when in reality, they are not. Paying for these multiple times will still give the player as much currency as the first time they bought it.

Additionally, buying more expensive bundles of virtual currency will seemingly give the players even more bonus currency. With the use of "bonus" amounts of currency players are, in a sense, deceived to make it seem as though spending real-world money on currency will reward them with additional amounts of currency.

Whether it be time-limited content (battle passes, limited-time offers), or the pressure that comes with the competitive nature of these games, spending is strongly incentivized over skillful play. An example of this is the community driven competition that occurs in FIFA23, where players are actively competing to purchase as many packs as they can before the time our number of packs runs out. The popularity of these two games, and the amount of money they generate through these monetization systems showcases several things. These games have seen incredible success. Diablo: Immortal generated 100 million dollars in its first 8 weeks (Peppiatt 2022). EA announced that the sale of primarily microtransactions within their game franchises had generated 4,998$ million dollars (Electronic Arts 2022, 34). While this includes a variety of EA developed and published games, a substantial amount of this stemmed from FIFA Ultimate Team (Electronic Arts 2022, 3-4). Moreover, a substantial amount of this number was accumulated from microtransactions in FIFA Ultimate Team, and not sales of copies of the game or others. This was from a past title in the FIFA franchise, but the relevance is the same as these annually released games see continued success. The success these two games have seen, and their evident use of predatory monetization schemes, exhibit that exploitative systems in video games ultimately work, and very much so. These games are profiting through predatory monetization schemes, as they can exploit and directly impact players' purchase decisions. Notably, these games have, e.g., designed entire game modes where purchase of microtransactions is heavily incentivized, rather than playing.

Not all monetization (microtransactions) is predatory or exploitative towards players. Reiterating what was said previously, there are forms of microtransactions in games that are not exploitative. How the games push players towards buying these through the use of certain mediator characteristics (e.g., pop up windows), however, can be. Furthermore, in purchase of these cosmetics, players also have to use virtual currency. The price of these are often inconsistent, and are seemingly priced at random amounts. However, cosmetic skins, for example, do not give players a direct advantage in either game, in the sense that they increase a

player character's power. These only change the look of a character or the look and feel of a stadium within FIFA Ultimate Team.

The methods used to monetize modern video games is inherently problematic. The need for regulation regarding these systems is also clear, as these are evident in games for younger audiences as well as young adults, e.g., FIFA23. While a counter argument could be that these games need to make money somehow, these predatory systems are also utilized in games that have a premium price tag, such as FIFA23. McCaffrey (2019) has explored regulation of predatory monetization schemes previously. This article is already several years old, however. As games are constantly evolving, consequently, so are their methods of monetization. More countries are also becoming aware of microtransactions and their related problems, such as loot boxes and their likeness to gambling. Ongoing discourse surrounding predatory monetization of games is a topic of debate in the European Union. The European Union has taken recent initiative against these predatory monetization schemes, where they have voted to take action against these loot boxes, possibly banning them entirely from appearing in video games (Cox 2023). However, this is still in a very early stage.

An unexpected result in this thesis was finding that players seemingly have no ownership over their purchased games and any in-game items. Rather, these are licensed to players, and as easily as they are granted, they can be taken away. This is enforced by the game's terms of service, where in-game items are categorized as having no value outside of the games themselves. This is true, as in-game items cannot be used in any way shape or form outside of these games. However, I find that the lack of any ownership of the games or in-game items is evident, and indeed worrisome, nonetheless. These games are repeatedly incentivizing players to buy microtransactions. The worry is there due to these games being digital live-service video games. These sorts of games have a recent history of being shelved and shut down, denying players further access to the games in the process. The encouraging behavior towards purchase of microtransactions in these games is, therefore, problematic for more than one reason. This can be problematic as everything a player might have been encouraged to spend money on through their time of playing, can be entirely gone. Due to their success, this may not happen in the near future with these particular games. However, other games who may use similar tactics to incentivize

in-game purchases, that see their player base dwindling, may perhaps become more aggressive in their methods of doing so. In turn, players who remain may be tricked into buying in-game items, which they then lose all access to as the game eventually shuts down. This is more of an assumption or a possibility, however, as the ownership of digital games and virtual in-game items is left unexplored in this thesis, even though we briefly touch on it. Moreover, as more games are becoming live-service, and move towards a free-to-play model (Jarett 2021), research focused entirely on ownership of digital games and virtual items in live-service games can contribute to the field. Similar research has looked into the value of virtual items (McCaffrey 2019), but not entirely on ownership in live-service games, which I believe this field of study can benefit from.

This thesis cannot provide direct information regarding players' opinions of playing and purchasing microtransactions present in either these specific games or others. However, this gap has largely been filled by past academic research, where they have dived deep into how individual players feel towards and if they are affected by in-game purchases (Petrovskaya, and Zendle 2021; Siuda, and Johnson 2022; Lemmens 2022). The thesis is also not negatively affected by this, as it largely discusses the in-game presence and encouraging behavior towards purchase of microtransactions in two *specific* games. The answers the thesis might have gathered from doing additional data collection like surveys/interviews would perhaps align with what past academic research has already done. This is as modern games use much of the same existing concepts regarding monetization of games. As explored in this thesis, their uses of these and how they are transformed to fit a particular game can be very different, however.

8. Conclusion

The research conducted in this thesis has critically analyzed two specific video games. In doing so, the thesis aimed to identify how the games FIFA23 and Diablo: Immortal incentivize spending on microtransactions using predatory/exploitative monetization schemes. Additionally, if their methods of doing so differed, and if so, how. Through careful and critical analysis, the thesis finds that the prevalence of microtransactions within these games to be inherently exploitative towards its players. Furthermore, the thesis finds that both video games use a

number of predatory/exploitative methods to not only incentivise spending on microtransactions, but repeatedly so. The thesis found a number of pressuring tactics being used to pressure and convince players to buy a number of microtransactions in the games. Notably, the games' use of time-limited and limited-amounts of various microtransactions. These games predominantly define their methods of monetization around the competitive nature of both games. There are clear cases where players will be motivated by competition, and some will undoubtedly pay to improve their chances of winning. This occurs as both games heavily lean into the Pay2Win formula, where players can directly or indirectly improve their power/strength in the games through in-game purchases. This theme of competitiveness is found throughout both games, and both favor players who spend money on various in-game purchases over those that do not. The games' utilization of exploitative microtransactions, such as loot boxes or loot box-like mechanics is evident, where entire game modes have been designed and centered around these. A core aspect of this thesis is how their use of exploitative monetization differs. Furthermore, these games share and utilize existing concepts of monetization, but ultimately mold and transform them to fit the individual game. This is especially highlighted by the games' use of loot box-like mechanics. Moreover, both the games' implementations of these are similar, yet different at the same time. The two have taken the basics of a loot box where players are presented with low probabilities of acquiring in-game items of potential great worth, but molded them to fit the theme of the games. In FIFA23 these are implemented and disguised as packs containing football cards, whereas in Diablo: Immortal the loot box has essentially become a playable game mode, where players can earn gear and gems.

By using the app-walkthrough method (Light, Burgess, and Duguay 2018), the thesis has critically analyzed the games' use of predatory monetization schemes. In doing so, the thesis has directly interacted with the games' user interfaces and menus, focusing on their use of *mediator characteristics* and how these guide players towards spending money on microtransactions. This choice has ultimately allowed the thesis to discover and focus on the games' "intrusive and unavoidable solicitations" (King, and Delfabbro 2018, p. 1967) among other things. In other words, how players are incentivized to purchase microtransactions by the games. Moreover, conducting a comparative analysis of the games' use of predatory/exploitative monetization has been done to highlight the key differences and similarities these games share. What makes this

thesis' approach to the issue of predatory monetization of games different in comparison to previous academic research, is that it specifically and exclusively examines two specific games that make use of these methods. Previous research has examined similar issues, but have done so on a much wider scale, or more generally. Therefore, this thesis provides new insights into the issues surrounding modern game monetization, highlighting how two games may take different approaches to using the same existing concept of an exploitative microtransaction. Notably, currency in these games is particularly deceiving. Players can be potentially convinced of buying more currency as the games make it seem as though players receive more than they have purchased through the use of *bonus* amounts of currency separate to the standard amount. Due to the diversity of games, games can take existing concepts of monetization (such as a loot box), and mold and transform them into something that fits that particular game. A loot box can, therefore, differ vastly on a game-to-game basis, even though the basic concept is still similar (randomized container of in-game items). In realizing how specific games may take different approaches to an existing monetization model (such as a loot box), the thesis furthers the conversation surrounding monetization of modern games and their predatory nature. This is as their methods of doing so can be very different, as we have explored throughout this thesis. Moreover, one of these games being free-to-play and the other paid for, showcases that there is a large presence of microtransactions regardless of the monetization model. This shows that microtransactions in video games are not restricted to one model, and that they are widespread in both free-to-play and paid games.

A recurring theme in this thesis is that video games and their methods of monetization are constantly evolving. Therefore, future research on other specific video games can contribute further to the field of video game monetization. The reason for this is due to the variety of genres and gameplay in video games. Meaning, how games of other genres utilize and transform a specific exploitative microtransaction can potentially differ on a large-scale as well. What the thesis did not expect to find was the lack of ownership players have of both digital games and in-game items. In purchase of these, players are only given a license, which does not grant them ownership of their purchased games or items. Considering more and more video games are becoming live-service, and subsequently, move towards having a free-to-play model, there are potential issues that can arise from this. Largely, it has to do with a recent theme in the industry

where live-service games are shut down, and in the process, denies players access to that game and their potentially bought virtual items. To better understand the issues that may arise from this, future research can contribute to the ongoing discourse surrounding video game monetization, by determining how this may affect players negatively.

9. Bibliography

9.1 Academic Sources

Brock, Tom, and Mark Johnson. 2021. "The Gamblification of Digital Games." *Journal of Consumer Culture* 21 (1): 3–13. https://doi.org/10.1177/1469540521993904.

Dey, Debabrata, and Atanu Lahiri. 2016. "Versioning: Go Vertical in a Horizontal Market?" *Journal of Management Information Systems* 33 (2): 546–572. https://doi.org/10.1080/07421222.2016.1205923.

Hamari, Juho, and Aki Järvinen. 2011. "Building Customer Relationship through Game Mechanics in Social Games." In *Business, technological, and social dimensions of computer games: Multidisciplinary developments*, edited by Maria Manuela Cruz-Cunha, Vitor Hugo Varvalho, and Paula Tavares, 348-365. Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-60960-567-4.ch021.

Hamari, Juho, Kati Alha, Simo Järvelä, J. Matias Kivikangas, Jonna Koivisto, and Janne Paavilainen. 2017. "Why Do Players Buy In-Game Content? An Empirical Study on Concrete Purchase Motivations." *Computers in Human Behavior* volume 68: 538–546. https://doi.org/10.1016/j.chb.2016.11.045.

Ivanov, Martin, Helmut Wittenzellner, and Marcin Wardaszko. 2021. "Video Game Monetization Mechanisms in Triple A (AAA) Video Games." In *Simulation Gaming Through Times and Disciplines*, edited by Marcin Wardaszko, Sebastiaan Meijer, Heide Lukosch, Hidehiko Kanegae,

Willy Christian Kriz, and Mariola Grzybowska-Brzezińska, 389–404. Lecture Notes in Computer Science. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-72132-9_33.

Jagoda, Patrick. 2018. "On Difficulty in Video Games: Mechanics, Interpretation, Affect." *Critical Inquiry* 45 (1): 199–233. https://doi.org/10.1086/699585.

Jarrett, Josh. 2021. "Gaming the Gift: The Affective Economy of League of Legends 'Fair' Free-to-Play Model." *Journal of Consumer Culture* 21 (1): 102–119. https://doi.org/10.1177/1469540521993932.

Johnson, Mark R., and Tom Brock. 2020. "The 'Gambling Turn' in Digital Game Monetization." *Journal of Gaming and Virtual Worlds* 12 (2): 145–163. https://doi.org/10.1386/JGVW_00011_1.

Joseph, Daniel. 2021. "Battle Pass Capitalism." *Journal of Consumer Culture* 21 (1): 68–83. https://doi.org/10.1177/1469540521993930.

King, Daniel L., and Paul H. Delfabbro. 2018. "Predatory Monetization Schemes in Video Games (e.g. 'Loot Boxes') and Internet Gaming Disorder." *Addiction* 113 (11): 1967–1969. https://doi.org/10.1111/add.14286.

King, Daniel L., Paul H. Delfabbro, Sally M. Gainsbury, Michael Dreier, Nancy Greer, and Joël Billieux. 2019. "Unfair Play? Video Games as Exploitative Monetized Services: An Examination of Game Patents from a Consumer Protection Perspective." *Computers in Human Behavior* 101 (December): 131–143. https://doi.org/10.1016/j.chb.2019.07.017.

King, Anthony, Gloria Wong-Padoongpatt, Aldo Barrita, Danny Tran Phung, and Ting Tong. 2020. "Risk Factors of Problem Gaming and Gambling in US Emerging Adult Non-Students: The Role of Loot Boxes, Microtransactions, and Risk-Taking." *Issues in Mental Health Nursing* 41 (12): 1063–1075. https://doi.org/10.1080/01612840.2020.1803461.

Korn, David A, and Howard J Shaffer. 1999. "Gambling and the Health of the Public: Adopting a Public Health Perspective." *Journal of Gambling Studies* 15 (4): 289-365. https://doi.org/10.1023/A:1023005115932.

Laato, Samuli, and Sampsa Rauti. 2021. "When Player Communities Revolt Against the Developer: A Study of Pokémon GO and Diablo Immortal." In *Software Business*, edited by Xiaofeng Wang, Antonio Martini, Anh Nguyen-Duc, and Viktoria Stray, volume 434: 194–201. Lecture Notes in Business Information Processing. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-91983-2_15.

Lassila, Erkki M. 2022. "'Free'-to-Play Game: Governing the Everyday Life of Digital Popular Culture." *Critical Perspectives on Accounting* volume 87 (September): 102434. No page number(s).
https://doi.org/10.1016/j.cpa.2022.102434.

Lemmens, Jeroen S. 2022. "Play or Pay to Win: Loot Boxes and Gaming Disorder in FIFA Ultimate Team." *Telematics and Informatics Reports* volume 8 (December): 100023. No page number(s). https://doi.org/10.1016/j.teler.2022.100023.

Li, Wen, Devin Mills, and Lia Nower. 2019. "The Relationship of Loot Box Purchases to Problem Video Gaming and Problem Gambling." *Addictive Behaviors* volume 97 (October): 27–34. https://doi.org/10.1016/j.addbeh.2019.05.016.

Light, Ben, Jean Burgess, and Stefanie Duguay. 2018. "The Walkthrough Method: An Approach to the Study of Apps." *New Media & Society* 20 (3): 881–900. https://doi.org/10.1177/1461444816675438.

Lowood, Henry. 2009. "Videogames in Computer Space: The Complex History of Pong." *IEEE Annals of the History of Computing* 31 (3): 5–19. https://muse.jhu.edu/article/316999.

McCaffrey, Matthew. 2019. "The Macro Problem of Microtransactions: The Self-Regulatory Challenges of Video Game Loot Boxes." *Business Horizons* 62 (4): 483–495. https://doi.org/10.1016/j.bushor.2019.03.001.

Montfort, Nick, and Ian Bogost. 2009. *Racing the Beam: The Atari Video Computer System*. Cambridge, UNITED STATES: MIT Press. http://ebookcentral.proquest.com/lib/bergen-ebooks/detail.action?docID=3338983.

Nieborg, David. 2016. "From premium to freemium: The political economy of the app." In *Social, Casual, and Mobile Games: The Changing Gaming Landscape*, edited by Michele Wilson, and Tama Leaver, 225-240. New York: Bloomsbury Academic. https://doi.org/10.5040/9781501310591.

Petrovskaya, Elena, and David Zendle. 2021. "Predatory Monetisation? A Categorisation of Unfair, Misleading and Aggressive Monetisation Techniques in Digital Games from the Player Perspective." *Journal of Business Ethics* volume 181 (October): 1065-1081. https://doi.org/10.1007/s10551-021-04970-6.

Rayna, Thierry, and Ludmila Striukova. 2014. "'Few to Many': Change of Business Model Paradigm in the Video Game Industry." *Digiworld Economic Journal* 94 (2nd Q. 2014): 61-81. https://ssrn.com/abstract=2534019.

Siuda, Piotr, and Mark Johnson. 2022. "Microtransaction Politics in FIFA Ultimate Team: Game Fans, Twitch Streamers, and Electronic Arts." In *EA Sports FIFA: Feeling the Game*, edited by Raiford Guins, Henry Lowood, and Carlin Wing, 87-104. New York: Bloomsbury Academic Press. https://dx.doi.org/10.5040/9781501375378.ch-004.

von Meduna, Marc von, Fred Steinmetz, Lennart Ante, Jennifer Reynolds, and Ingo Fiedler. 2020. "Loot Boxes Are Gambling-like Elements in Video Games with Harmful Potential: Results from a Large-Scale Population Survey." *Technology in Society* 63 (November): 101395. No page number(s). https://doi.org/10.1016/j.techsoc.2020.101395.

Zendle, David, Rachel Meyer, and Nick Ballou. 2020. "The Changing Face of Desktop Video Game Monetisation: An Exploration of Exposure to Loot Boxes, Pay to Win, and Cosmetic Microtransactions in the most-Played Steam Games of 2010-2019." *PLoS One* 15 (5): 1-13. https://doi.org/10.1371/journal.pone.0232780.

9.2 Websites

Cobb, Chris. 2018. "Video Game Monetization Strategies." *Medium* (blog). 5. February 2018. https://chris-cobb.medium.com/video-game-monetization-strategies-715d78e80fa0.

Cox, Matt. 2023. "The EU Vote to Take Action against Loot Boxes, Gaming Addiction and Gold-Farming." *Rock, Paper, Shotgun*, January 18, 2023. https://www.rockpapershotgun.com/the-eu-vote-to-take-action-against-loot-boxes-gaming-addiction-and-gold-farming.

Creswell, Jacob. 2020. "Ghosts 'n Goblins: Everything You Need to Know About Capcom's Hardest Platformer." *CBR*, 16. December 2020. https://www.cbr.com/ghosts-goblins-capcom-hardest-platformer/.

Electronic Arts. 2022. "Electronic Arts Inc. Notice of 2022 Annual Meeting and Proxy Statement." *Annual Report,* 1-212. Last accessed May 8, 2023. https://ir.ea.com/financial-information/annual-reports-and-proxy-information/default.aspx.

Electronic Arts. 2023a. "EA SPORTS™ FIFA 23 - HyperMotion2 Technology - Official Site." accessed 29. March 2023. https://www.ea.com/en-gb/games/fifa/fifa-23/hypermotion2.

Electronic Arts. 2023b. "FIFA 23 - EA SPORTS rules to know and follow." accessed 4. April 2023. https://help.ea.com/en/help/fifa/fifa-rules/.

Electronic Arts. 2023c. "User Agreement - Official EA site." accessed 4. April 2023. https://www.ea.com/legal/user-agreement.

Federal Trade Commission. 2023. "*Fortnite Video Game Maker Epic Games to Pay More Than Half a Billion Dollars over FTC Allegations of Privacy Violations and Unwanted Charges.*" last updated 19. december 2022. https://www.ftc.gov/news-events/news/press-releases/2022/12/fortnite-video-game-maker-epic-games-pay-more-half-billion-dollars-over-ftc-allegations.

Ghosts 'n Goblins Resurrection. 2023. "Ghosts 'n Goblins Resurrection | CAPCOM." Last accessed 30. January 2023. https://www.ghostsn-goblins.com/resurrection/.

Laing, Gordon. 2004. *Digital Retro*. Lewes : Ilex. http://archive.org/details/digitalretro0000lain.

Metacritic. 2023a. "Diablo Immortal for PC Reviews - Metacritic." Last accessed 16. March 2023. https://www.metacritic.com/game/pc/diablo-immortal.

Metacritic. 2023b. "Diablo III for PC Reviews - Metacritic." Last accessed 11. May 2023. https://www.metacritic.com/game/pc/diablo-iii.

Metacritic. 2023c. "How We Create the Metascore Magic - Metacritic." Last accessed 16. March 2023. https://www.metacritic.com/about-metascores.

Peppiatt, Dom. 2022. "Like it or not, Diablo Immortal has raked in $100 million in 8 weeks." *VG247*, 28. July 2022. https://www.vg247.com/diablo-immortal-100-million-dollars.

Playstation Store. 2023. "EA SPORTS™ FIFA 23 Standard Edition PS5™." Last accessed 2. May 2023. https://store.playstation.com/no-no/product/EP0006-PPSA06275_00-FIFAFOOTBALL2023.

ProGuides Challenger League of Legends Guides, dir. 2020. *15 BROKEN Skins That BUFF Your Champion: Pay To Win? - League of Legends*. Video. 17. July 2020. https://www.youtube.com/watch?v=Y54F5N9wJ_0.

Statista. 2023. " Global video game market value from 2020 to 2025." Last accessed May 1, 2023. https://www.statista.com/statistics/292056/video-game-market-value-worldwide/.

Steam. 2023. "EA SPORTS™ FIFA 23." Last accessed 2. May 2023. https://store.steampowered.com/app/1811260/EA_SPORTS_FIFA_23/.

SteamDB. 2023. "Database of everything on Steam." Last accessed 20. March 2023. https://steamdb.info/.

SteamDB. 2023. "Frequently Asked Questions." Last accessed 20. March 2023. https://steamdb.info/faq/#why-are-we-doing-this.

Tassi, Paul. 2022. "'Diablo Immortal' Player Spends $100K To Max His Character, Now Too Powerful To Matchmake." *Forbes*, 7. August 2022. https://www.forbes.com/sites/paultassi/2022/08/07/diablo-immortal-player-spends-100k-to-max-his-character-now-too-powerful-to-matchmake/.

Zwiezen, Zack. 2022. "The Era Of $70 Games Truly Begins This Fall." *Kotaku*, 28. September 2022. https://kotaku.com/70-dollar-games-60-ubisoft-ea-gotham-knights-ps5-xbox-1849593604.

9.3 Games

Capcom. "*Ghosts 'n Goblins Resurrection*." Capcom. PC/Microsoft Windows. 2021.

EA Canada and EA Romania. "*EA Sports FIFA 23*." Electronic Arts. 2022.

Blizzard Entertainment. "*Diablo: Immortal*." Blizzard Entertainment. 2022.