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BACHELOR THESIS

Monetization Strategies in Video Games: What Factors Affect the Choice of
One and How They Affect Games

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ASSIGNMENT OF FINAL BACHELOR THESIS

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Study programme: System engineering and information science
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Title of bachelor thesis: Monetization Strategies in Video Games: What Factors Affect the Choice of One and How They Affect Games

BACHELOR THESIS GOAL:

First, this thesis outlines the most common ways of how video game developers and publishers get profit from their games. Then, several case studies are presented to illustrate how some strategies were implemented. Both successful and unsuccessful projects are presented. The reasons for success and failure are identified and discussed to help to understand the advantages and disadvantages of the pricing models. Lastly, an original idea of a new monetization scheme is presented. It takes aforementioned case studies into account and tries to find the middle ground, absorbing the best aspects of discussed strategies and avoiding the worst. It is also based on the latest video game industry trends, that are identified in that section. The original strategy is analyzed and potential flaws and limitations are mentioned.

To summarize, the main goals are:

- Educate the reader by defining the main concepts.
- Analyze the real product release and outline the relations between them and ways of their monetization.
- Come up with an own concept to give the reader a well-supported idea ready for implementation.

BACHELOR THESIS PLAN:

1. Outline the main strategies.
2. Choose and analyze several games to show how the strategies are applied in practice and how they affected games.
3. Present own strategy, based on case studies' best features.

RECOMMENDED LITERATURE:

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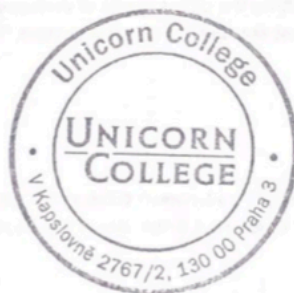
Bachelor thesis consultant: Martin Čmarada

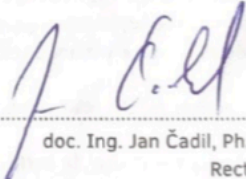
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Declaration

Hereby I declare that I have written my bachelor thesis on the topic of “*Monetization Strategies in Video Games: What Factors Affect the Choice of One and How they Affect Games*” independently under the supervision of the advisor of my bachelor thesis and using only those expert texts and sources of information which are quoted and included in the list of literature and sources. As the author of this bachelor thesis I declare that in the process of writing this thesis I did not violate the copyright of any third parties and that I am fully aware of the consequences of violating provision § 11 and those following in the law on intellectual property rights No. 121/2000.

In on (Leonid Grishchenin)

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I would like to thank the coordinator of my bachelor thesis, Ing. Martin Čmarada, for guiding me throughout the writing process and providing necessary expert advice. Furthermore, I would like to thank the participants of the survey for spending their time on improving my thesis.



Monetization Strategies in Video Games:
What Factors Affect the Choice of One and How They
Affect Games

Strategie zpeněžení ve videohrách:
Jaké faktory ovlivňují volbu jedne a jak ovlivňují hry

Abstract

First, this thesis outlines the most common ways of how video game developers and publishers get revenue from their games. Then, twelve case studies are presented to illustrate how some strategies were implemented. Both successful and unsuccessful projects are analyzed. The reasons for success and failure are identified and discussed to help to understand the advantages and disadvantages of certain monetizations models. Lastly, an original idea for a new monetization scheme is described. It takes aforementioned case studies into account and tries to find the middle ground, absorbing the best aspects of discussed strategies and avoiding the worst. It is also based on the latest technological developments and video game industry trends, that are identified during the work. The original strategy is analyzed and potential flaws and limitations are mentioned.

Keywords: video game, marketing, pricing, monetization, software development, ethics

Abstrakt

Tato bakalářská práce v úvodu popisuje nejčastější způsoby, jakými hráči a vydavatelé videoher dosahují zisků z videoher. Dále jsou prezentovány příklady dvanácti studií, které ilustrují, jak byly implementovány některé strategie. Jsou analyzovány jak úspěšné, tak i neúspěšné projekty. Důvody úspěchu a neúspěchu jsou popsány s cílem pochopit výhody a nevýhody některých modelů zpeněžení. Nakonec je popsána původní myšlenka nového režimu zpeněžení. Práce zohledňuje výše zmíněné případové studie a snaží se najít mezičlánek, který by absorboval nejlepší aspekty diskutovaných strategií a vyhýbal by se nejhorsším. Práce vychází z nejnovějších technologických trendů a trendů v oblasti videoherního průmyslu, které jsou v práci identifikovány. Původní strategie je analyzovaná, potenciální nedostatky a omezení jsou zmíněné.

Klíčová slova: videohry, marketing, tvorba cen, zpeněžení, vývoj softwaru, etika

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Extended Summary

Introduction

The video game industry now is a behemoth; complex, constantly evolving and growing new branches. For a perspective, let's take a look at other forms of entertainment. It has been estimated by the analytical agency "comScore" that the total worldwide revenue of the movie industry was \$39,92B in 2017¹. The other popular mainstream form of entertainment – music – earned a total of \$15,7B in 2016, according to the most recent report from the "International Federation of the Phonographic Industry"². And while both industries grew 3% and 5,9% respectively from the previous years, they shatter before the revenue of the gaming industry. \$116B estimated for 2017 by the "Newzoo's" latest report³, a 10,7 increase from 2016. There is no denying that game industry exhibits a steady growth every year. Technology creates new opportunities for developers and gamers – the mobile market did not even exist 10 years ago and now it accounts for 43% of total games market revenue. Now we have yet another new trend – Virtual Reality It is a relatively young technology, but who knows what it exactly will turn into or what will follow it?

With so many platforms available, with a need to cater to international markets and various target audiences, finding the best way to present and sell your product is not always easy. In fact, the games themselves are a forest you can easily get lost in – the variety of game designs is limited only by developers' imagination and budgets. Games can have different gameplay styles for different purposes and that takes us back to the sheer diversity of products and consumers the market has.

Table 1: 2017 Games Market Breakdown Chart

Market	Projected Revenue (in billions)	Makes share	Growth since 2016
PC	\$32.3	28 %	+1.4%
Console	\$33.3	29 %	+3,7%
Mobile	\$50.4	43 %	+23.3%

Source: Newzoo Q4 2017 Report³

¹ Tartaglione, N. (2017)

² IFPI (2017, p. 12)

³ Takahashi, D. (2017)

Contrarily, it is easy to draw parallels between games, music, and movies in that sense: some movies are supposed to make you stare at a screen with awe, consuming unhealthy doses of popcorn, the others want to make you think and require several views. The same could be said about music: there are party anthems, relaxing songs, perplexing experimental music, classy jazz, the list goes on. However, there is one big difference between them and games. A ticket to a blockbuster movie costs just as much as a ticket to a thoughtful drama; a Drake CD costs just as much as an Apex Twin CD. With games, the story gets complicated.

Games are experiences, not things. Plus, unlike the aforementioned movies and music, games are interactive. How the gamer interacts with them can be different, how they want to interact with the gamer can be different too. Over time the industry defined several well-established schemes of selling certain experiences to certain audiences on certain platforms. In spite of that, as games are getting more technologically advanced, therefore more expensive each year, developers and publishers keep inventing ways of extracting the most amount of money from their products albeit not always successfully. Sometimes, the corporate side turns a game into a money-pumping machine by altering how the game works and that is the beauty of games – you decide what your game is and how it will earn you money. Recently, many debates happened between the publishers and the customers concerning the ethicality of certain strategies, which adds yet another new layer to the problem of finding a strategy that fits – communication. Add a highly competitive environment of the market to that mix and you can truly see that the right way of monetizing can mean life or death for your product.

This work is not only aimed at describing the most commonly used monetization strategies to the reader but also presenting several case studies to illustrate how presented strategies were applied in the real world and how they were treated by different companies. After the theory has been presented and demonstrated with the help of case studies, I will introduce my vision of a modern monetization strategy that feeds on highs and lows of the ones described and analyzed in the first and second part of my thesis. And because nothing is perfect, I will take a critical look at my own strategy and determine the weak points. Finally, I will give examples of games discussed in the case studies which could have benefited if they followed the presented strategy and which should not take it into account.

1. Modern Monetization Strategies

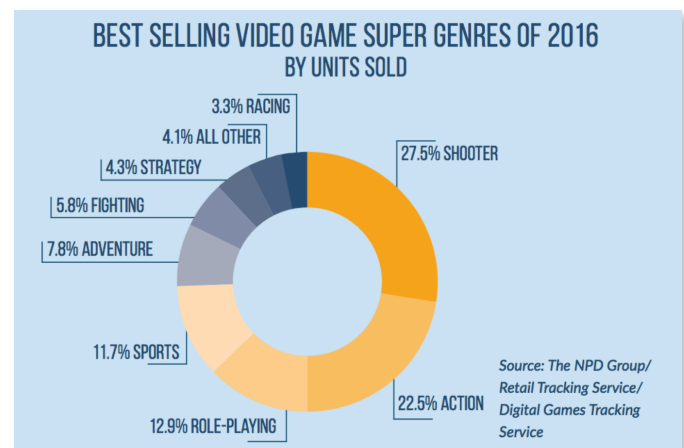
This part is dedicated to outlining the most common monetization strategies, telling when they are appropriate to implement and how they affect the games. Before I start going through them one by one, let me define the concept of “*monetization strategy*”. Monetization is a process of converting whatever you do into money – your revenue. Making a video game obviously does not involve any raw materials – it is a digital product, the game is fully built by people, from scriptwriters and motion capture actors to programmers and sound engineers. The end product is a piece of software that is sold online as a digital download or in shops on storage media. How exactly that piece of software earns you money is your monetization strategy. As the owner of the rights to distribution of your game, you are free to alter the prices of it – use different *pricing strategies*. However, the concepts of a pricing strategy and a monetization strategy are not to be confused. Pricing strategy concerns the price of your end-product, how it is positioned on the market and how it is related to competitors. Monetization is not only related to a game’s price: additional content may be sold within a game, a game might be split into parts and sold separately, additional content for a game might be released post-launch, the game might be even free and generate profits with any of the methods above and then some. Like I have mentioned in the introduction – games are the only *interactive* mainstream medium and might take many different shapes. For each of those shapes, a certain way of monetization is preferred.

In the following chaplets describe the monetizations methods of today. As there are no definite original sources describing those concepts in detail, my descriptions are based on definitions given by developers and press for many years. Many of those concepts are vague and open for interpretation, including because games are a highly creative and constantly evolving medium.

1.1. “Full-Priced” Game

The reason why that type of games is the first in the line is plain and simple – full-priced games are the ones many people *associate* with gaming first. The most popular franchises, such as “Call of Duty”⁴, “Assassin’s Creed”⁵ or “Grand Theft Auto”⁶ are full-priced games. So what does “full-priced” mean, what is the “full price” of a game? In this day and age, the price of \$60 US is considered to be the industry standard. They are usually the most popular, hence the most profitable and have the highest number of units sold. 12 out of top 20 games from Polygon’s “The 50 best games of 2017” list are full-priced \$60 games.⁷ Another term for these games is “AAA” or “triple-A”. Those games bear the \$60 price-tag for a reason. The production of them is very costly, compared to smaller or less popular games, as they often implement cutting-edge technology for exceptional graphical fidelity and require a large amount of labor⁸. The marketing budgets could be massive, nearly doubling the overall costs⁹. Logically, with inflated budgets comes a certain level of cautiousness. Full-priced games are often a part of an *already* established Intellectual Property or try not to be too experimental in terms of gameplay and the data shows that. The most popular genre of games in 2016, according to the study of “The NPD Group” is First Person Shooter with its 27,5% of the market, followed by 22,5% Action and 12,9% Role Playing Games. And as the full-priced games have the largest number of units sold, it is safe to say that this statistics can be applied to them as well. FPS games, such as “Call of Duty” are usually not complex and suitable for casual audiences, which can be easily proven by the sales numbers of FPS games. The more complex the genre is, the fewer people buy it. (Graph 1)

Graph 1: Best Selling Genres of 2016 by Units Sold



Source: “ESSENTIAL FACTS About the computer and video game industry”, ESA¹⁰

⁴ McWhertor, M. (2016)

⁵ Reparaz, M. (2016)

⁶ Osborn, G. (2017)

⁷ Polygon Staff (2017)

⁸ Makuch, E. (2013)

⁹ Szymański, D. (2015)

¹⁰ The Entertainment Software Association (2017).

Full-priced games cater to a broader audience to minimize the *risks* of not meeting target profits. In addition to that, some publishers, for example, Electronic Arts or Ubisoft, are public companies that have stakeholders beyond the company doors. That need to minimize risks frequently leads to recycling ideas and stagnation – “Do not fix what is not broken.” The epitome of “keeping it safe and profitable” is the concept of *annualized franchises* – when every year a new installment of a series comes out. The most prominent are “Call of Duty”, “Assassin’s Creed” (*until 2015*) and various sports games, like “FIFA” or “Madden NFL”. These profit from the popularity of the franchise, strive to be the best in terms of graphical fidelity and overall presentation.

Not all full-priced games, of course, are a product of corporate creed, driven by investors. A plethora of full-priced games come out as interesting and innovative products and like mentioned before, full-priced games, in the end, are considered to be the best games every year. The price of \$60 allows people who *want* to innovate and be creative to do so; it makes hiring a large number of artists, programmers, and actors possible, especially considering that the prices for development have been steadily increasing¹¹. An example of one such game is “The Witcher 3”, which I will be discussing in chapter 3.1.

Achievable graphical fidelity of games steadily increases every year and AAA games always want to utilize the latest tech to attract new consumers and be discussed by tech-savvy people. That urge or need to always be in the forefront makes the development more complex and expensive. Today’s technology allows for more detailed geometry of characters and

Image 1: A Scene from Deus Ex: Mankind Divided



Source: “Deus Ex: Mankind Divided”

¹¹ Koster, R. (2018)

surroundings, more realistic animations and greater size of in-game worlds. According to an anonymous insider who gave an interview to the Russian news website DTF.ru, the approximate cost of producing the scene from 2016's "Deus Ex: Mankind Divided", depicted on *Image 1*, was \$300 000.¹² Around 250 hours were spent on each of 15 character models present in the scene. Add the costs of programming, animation, modeling the scene, illuminating it and multiply by an average hourly rate of \$30 to get \$300 000.

However, those \$60 do not always provide the sufficient amount of revenue, whether for sustaining the life of a developer or fulfilling the promises made to investors. In addition to that, demand for better graphics, more immersive worlds, and new gameplay features increases, further inflating the costs. Not to mention the games with *online elements*, which require constant monitoring and maintenance of servers post-launch. Even the growing customer base, mentioned in the introduction, does not aid the developers and publishers enough. In order to fix that problem, developers and publishers have come up with several new monetization strategies, which are discussed in the following chapters.

Rundown:

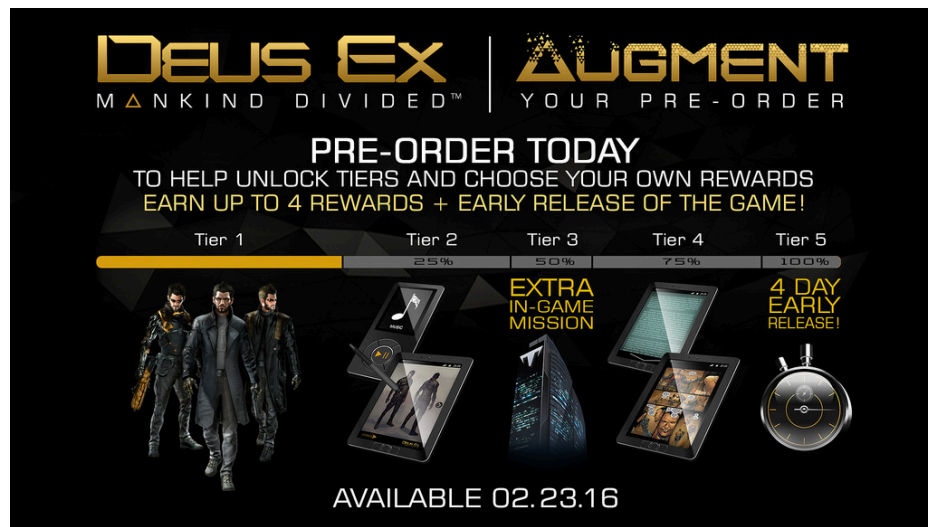
- \$60 US is the standard
- Nearly all AAA franchises are full-priced
- The price is backed by high development costs
- Usually graphically advanced
- Not experimental – playing it safe
- Often utilize additional monetization methods

1.1.1. Preordering

Preordering is a strategy not exclusive to video games. You can preorder music or tickets to a movie. Across all industries, the main idea stays the same – start generating profit before the release of a product, sometimes before the product is even finished. From the customer's point of view, that also makes sense most of the time – they might want to ensure that they are getting what they want: a specific seat in a cinema on the premiere day before

¹² Elistarov, V. (2018)

Image 2: Deus Ex: Mankind Divided Preorder Campaign



Source: PlayStation Blog¹³

they are sold out, a new CD in a store before it is sold out, a new book before it is sold out, the list goes on. Those were the things we buy physically but what about the digital distribution? There's where video games prevail. Of course, songs could be also preordered to get a sense of ownership of a future release or not to forget to buy it later, etc. You much more often hear about preordering video games though. The word "preorder" is in nearly every ad and trailer promoting a game. Often those preorders are opened months before the release of a game when the development has not even fully finished yet. And with every preorder must come some sort of a preorder bonus – usually an in-game item or extra level. Of course, there is always somebody who takes a certain idea to its extreme, and in case of video game preorder schemes, Square Enix, decided to turn the preorder period of "Deus Ex: Mankind Divided" into a game of its own. Named "Augment Your Preorder" the campaign was aimed at maximizing the number of preorders by having a tiered system – the more people pre-order it, the more bonuses they get. The final reward was releasing the game early, only for people who preordered it. It instantly became an object of controversies¹⁴. The reason being that digital preorders, do not really benefit customers in any way but they essentially serve as "free loans" to developers and publishers. Creating a small preorder bonus does not pose any difficulties for them or require large investments. By marketing the idea of preorders, publishers are selling something that does not exist yet and

¹³ Eidos Montreal (2015)

¹⁴ Tassi, P. (2015)

have a lesser motivation to make the final product as great as they possibly can. Preorders might also be used to cash in on misleading marketing. Consumers are becoming more aware of publishers' misuse of preorder schemes and simply searching for "preordering video games" yields the results depicted on *Image 3*.

Nevertheless, not that long ago, the idea of preorders and extracting profit from an unfinished product was pushed further and the concept of "early access" games was born. That concept is fully described later in chapter 1.6.

Rundown:

- "Free loans"
- In the digital age serve little to no practical purpose for the customers
- Many customers are advocating for avoidance of preorders
- Might me tempting developers to underdeliver.

1.1.2. Downloadable Content

Downloadable content or simply DLC is an evolution of an idea of *expansion packs*. In the late 90s and early 2000s, expansion packs were separately bought chunks of games, that added new content to those games. Adding new content to an existing game is beneficial for a developer since they skip early stages of production, such as game engine development, early concepts, pitches and planning and they also may reuse the existing content, further simplifying the development process and extending the life cycle of their game. The players, on the other hand, get a fresh dose of a game they already like, so both developers and gamers are benefiting. Usually expansion packs required players to have a copy of the

Image 3: Articles Criticizing Preorders

[Hey, Here's an Idea: Maybe Stop Preordering Videogames | WIRED](https://www.wired.com/2016/08/stop-preordering-games/)

<https://www.wired.com/2016/08/stop-preordering-games/> ▼
Aug 31, 2016 - If you've ever preordered a videogame and felt disappointed by your purchase later, let me suggest a great thing to try: Stop preordering videogames. It must be difficult to ponder such a thing when the entire blockbuster videogame industry seems intent on getting you to preorder every game, every time.

[Stop Preordering Video Games - Kotaku](https://kotaku.com/stop-preordering-video-games-1713802537)

<https://kotaku.com/stop-preordering-video-games-1713802537> ▼
Jun 25, 2015 - This isn't the first time I've said this. It won't be the last. More than anything else—the advertising, the budgets, the DLC—it's the culture surrounding preorders that is most responsible for the trail of broken and unfinished games that clutter the sales charts, and for the anger and angst that follow in its wake.

[Stop Preordering Video Games - Kotaku](https://kotaku.com/5909105/stop-preordering-video-games-please)

<https://kotaku.com/5909105/stop-preordering-video-games-please> ▼
May 10, 2012 - It's not hard finding things that are wrong with the video game industry these days. From rip-off DLC to paid-for cheats to games that are sold essentially incomplete, consumers are increasingly getting short shrift. ... Stop buying games?

[You should never, ever, preorder a video game - CNET](https://www.cnet.com/news/you-should-never-ever-preorder-a-video-game/)

<https://www.cnet.com/news/you-should-never-ever-preorder-a-video-game/> ▼
Jun 13, 2012 - While it might be tempting, you should almost never preorder an upcoming video game.

Source: Author's own screenshot

original game, however, some of them were *standalone*, meaning they could be played without the original game, like “Half-Life: Blue Shift”.

With the developments of the internet the idea of DLC was born. Additional content that could be distributed digitally. What it meant for the developers is that they can do two things: create content more frequently without having to think about ways of physical distribution and releasing additional content of smaller sizes. Expansion packs were created as a meaningful expansion of the game, whereas DLCs sometimes were mere cosmetic additions. The most infamous example of it is the “Horse Armor Pack” that came out in 2006 for \$2,50 for “The Elder Scrolls IV: Oblivion”, that literary just added two pieces of in-game horse armor.¹⁵ Not only it was considered to be a lazy attempt to produce ‘content’ for the game but it was also one of the precedents for *microtransactions*, which are to be discussed later. Nowadays the amount of content included in DLCs still varies. You may get simple items, like character skins or armor (“*Monster Hunter World*” – *Alloy DLC*), new game modes (“*Assassin’s Creed Origins*” – “*Trials of the Gods*”) new levels to play (“*Wolfenstein: The Old Blood*”), new mechanics (“*Sims 4: Cats & Dogs*”) or massive portions of various new content which could rival the quality of the original content present in the game (“*The Witcher 3: Blood And Wine*”). The prices of DLCs also vary. Some of them are free (*New Cars for “Gran Turismo Sport*”), some cost \$5 (“*Episode Ignis*” for “*Final Fantasy XV*”), some \$20 (“*Dying Light: The Following*” for “*Dying Light*”), some even \$40 (“*XCOM: War of the Chosen*” for “*XCOM 2*”).

Exactly why developers release DLCs for their game is not an was thing to say, however, some assumptions could be made:

- Capitalize on created assets: it is already established in this work that development of a AAA game is a very difficultly process, involving a plethora of artistic and technical processes. A release of a DLC, however, even a big one, does not require nearly as much effort as the creation of a new game from scratch. Its production does not usually require the development of new frameworks and development tools, base story and visual concepts and world-building, to name a few. That indicates that DLC might include some form of reused assets that a developer had already invested in before, either technical, like the game engine, or intellectual, like the basic gameplay concepts or game’s plot. Consequently, instead of leaving all that behind and moving onto the next project, a developer may opt to use what it already has, add some more to that and release an exten-

¹⁵ Williams, M. (2017)

sion to its game for additional profits. Those profits also are made within a short time-frame, usually, up to a year. Compare it to around three to five years¹⁶ needed to complete the development of a AAA game, and it is easy to understand why short-term income from DLC might be vital for a developer.

- Prolong the relevance phase of a game: a release of a AAA is often accompanied by an extensive marketing campaign, that increases awareness about that game. Logically, a release of a substantial DLC puts that game back on the map. It reminds the existing player base that the game exists, pushing them to get back into it and potentially buy the DLC. Alternatively, potential customers hear about it yet again post-release and may also be attracted to not only buy the DLC but the game itself. Very often together with the release of a substantial DLC or sometime later, an edition of the game that already includes that DLC comes out. The most recent example is “Horizon Zero Dawn: Complete Edition” that includes the base game and the “Frozen Wilds” DLC and was released along with it. Simply changing the price of the game obviously does not garner as much attention as a marketed release of a new edition of a game. In conclusion, a release of a DLC may reignite the discussion about a game and lead to increase of sales of a game long after release, when normally, that wouldn’t happen.
- Provide an incentive for an initial purchase: DLC may also serve as an incentive for the players to buy the game. That *especially* concerns free DLC. By telling the players that your game will be supported with new content you make your players think that their experience playing your game would only get better and that they would not be bored. A good example of that strategy is the racing simulator “Gran Turismo Sport”. The developer Polyphony Digital has released several updates to their game that had introduced a new game mode and 15 new cars. They have also promised to release 50 more cars until March 2018¹⁷. The same can be said about “Monster Hunter World”¹⁸. In both cases, DLC creates a feeling for the player that he is buying a good game that will only get better with time. For players who value the amount of content on the game and care about its length, it might be very important. DLCs like these, on the other hand, are usually not big, as it would be unreasonable for a developer to spend a lot of resources on a free DLC.

¹⁶ Prinke, M. (2016)

¹⁷ Polyphony Digital (2017)

¹⁸ Devore, J. (2018)

In the end, I can state that nearly always DLC provides additional revenue, additional exposure in the media, additional incentives for a purchase of a game or even can help to boost sales of the base game. It can be free or paid, cheap or cost nearly as much as a new game and add various amounts of content.

Rundown:

- Allows to extract more profit from existing tech/assets/artistic vision/world, etc
- Vary in price, no stated boundary – from \$0 to \$40 and higher
- Vary in content – from single models to tens of hours of new gameplay
- When released, make people to discuss the game once again
- Promises of future content may entice new audiences

1.1.3. “Season Pass”

The concept of a “season pass” is directly tied to DLCs. A season pass is an “electronic ticket” you buy to get access to any DLC that released post-launch. It is basically a preorder of DLC. Although, unlike preordering of games, season passes serve a purpose of buying in bulk – they are usually cheaper than all DLCs combined. A customer gets a price cut in return for buying content in advance. Often it has not even been properly announced yet and the publisher/developer gets the “free loan”, just like from preorders. The problem lies in the uncertainty usually associated with season passes. They promise you access to unspecified content, therefore customers have no idea what they are paying for. For example, recently a DLC for “Destiny 2” called “Curse of Osiris” was released, only to be highly criticized by gamers and media.¹⁹ From day one, the season pass for “Destiny 2” was advertised heavily and many people, including myself, have purchased it. And even though we have saved money on purchasing the season pass instead of the DLCs separately, we could have ignored it completely if we waited enough. There are also good examples, for instance – “Uncharted: Lost Legacy”. It was supposed to be a DLC for “Uncharted 4” but during the development of it, Naughty Dog decided to turn it into a separate \$40 game. “Un-

¹⁹ Houghton, D. (2017)

charted 4” season pass holders still received it for free,²⁰ as they were promised to have access to all future “Uncharted 4” content.

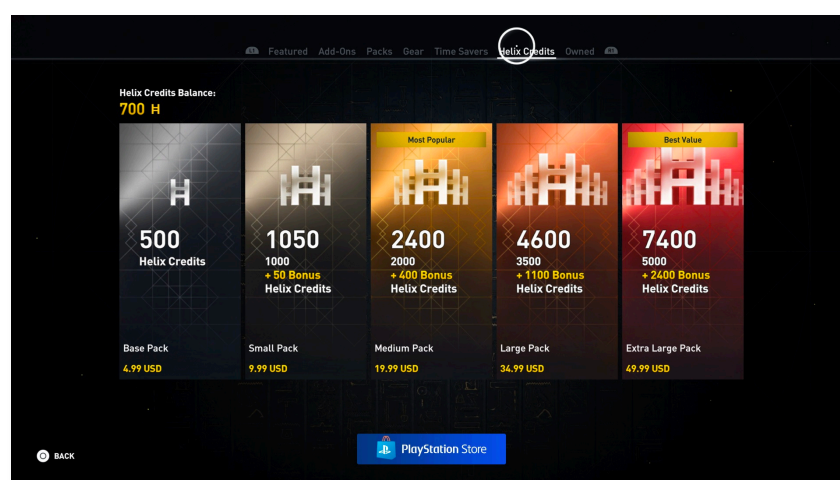
Rundown:

- DLC preorders, “free loans”
- Selling DLCs in bulk for less in return for not giving confidence in a product
- Just like preorders, take away and incentive to deliver the best possible product

1.1.4. Microtransactions

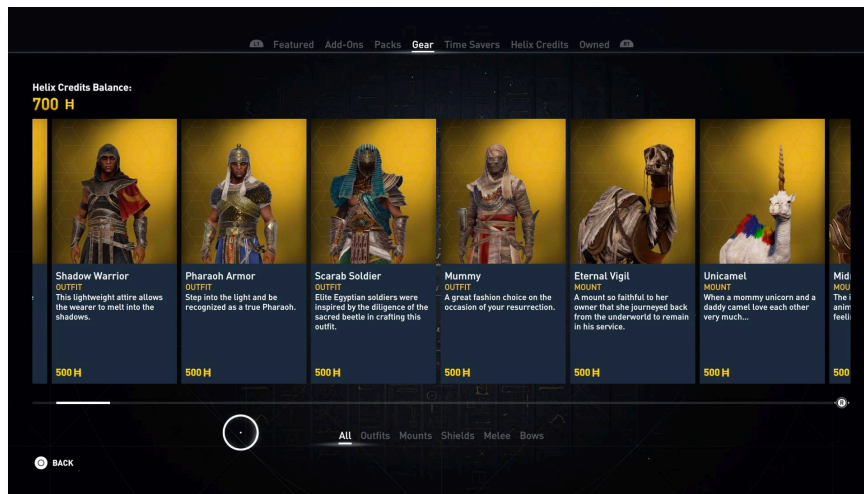
It is not that easy to determine who was the first to introduce microtransactions. Now though, microtransactions are not just everywhere – they stand as an integral part of the modern gaming market. So what exactly are “*microtransactions*”? They are purchases that could be made from inside the game. Let’s take the “Helix Store” from the 2017 “Assassin’s Creed Origins” as an example. On the *Image 4* we can see that the game offers so-called “helix credits” that a player can spend on items depicted on the *Image 5*. That is just one example of how microtransactions can be implemented. That model of including a virtual currency is far from being exclusive to the “Assassin’s Creed Origins”. Other games offer in-game items without a need to buy an intermediary commodity.

Image 4: The “Helix Store”



²⁰ Lozada, D. (2016)

Image 5: The “Helix Store”



Source: Author’s Own Screenshots

For example, a “horse DLC” that was mentioned in chapter 1.1.2 would have been counted as a "microtransaction item”, if it had released it released in the 2010s. These days “cosmetic items” like the horse or outfits from *Image 5* are a usual thing. These items often simply change the look or a character or a weapon and do not affect gameplay. They are not substantial enough to have a status of DLC and can be bought in-game, without a need to access external marketplaces. Around 2-3 years ago, microtransactions almost universally took a form of “loot boxes”. These are in-game items that provide a player with a bunch of randomized in-game items. These items vary from game to game and almost always are cosmetic. There are instances of gameplay-affecting items but these are not common. Currently, microtransactions make up fairly big parts of revenue for video game publishers and developers. Unlike DLCs, that take development time and are usually released on a quarterly basis, microtransactions can be purchased anytime, multiple times and always

Image 6: Activision Blizzard 2017 Earnings Report

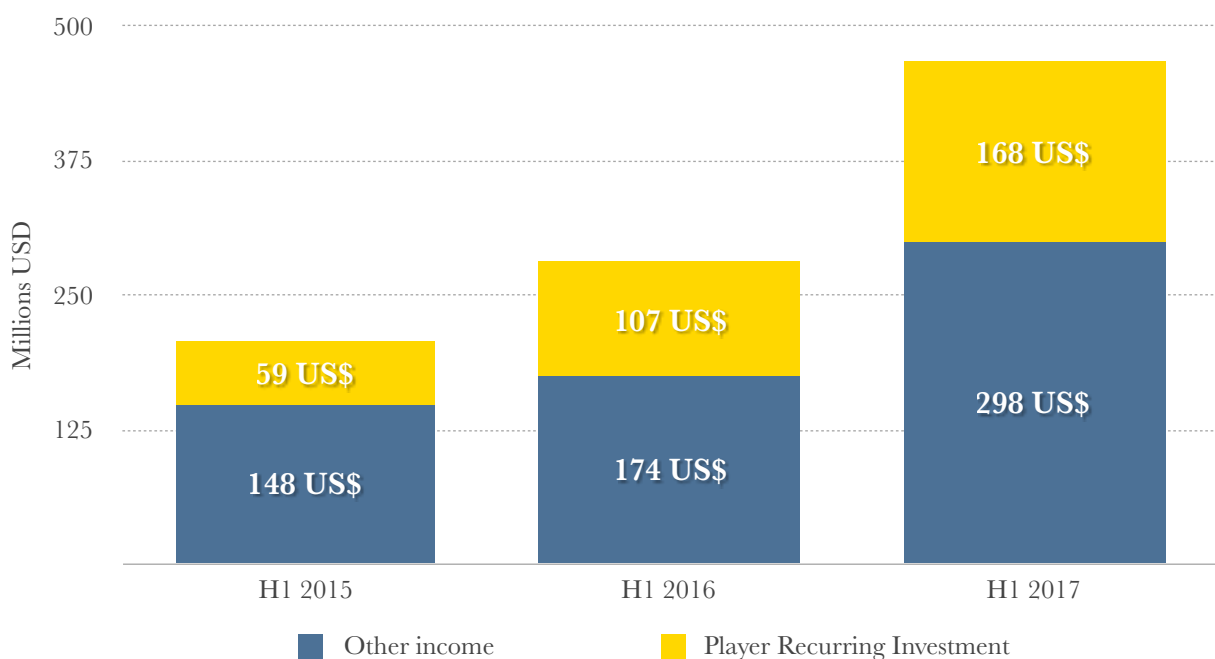
ACTIVISION BLIZZARD, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited) (Amounts in millions, except per share data)				
	Three Months Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016
Net revenues				
Product sales	\$ 737	\$ 696	\$ 2,110	\$ 2,196
Subscription, licensing, and other revenues ¹	1,306	1,318	4,907	4,412
Total net revenues	2,043	2,014	7,017	6,608

Source: investor.activision.com²¹

²¹ Activision Blizzard (2018)

provide players with content, albeit not substantial. That recurring spending model, if designed correctly, can deliver profits, on par with sales revenues, if not more. On the *Image 6* you can see an extract from Activision Blizzard’s 2017 annual financial report. It is visible that out of \$7 billion earned in 2017, only \$2,1 are attributed to product sales. The other \$4,9 billion are coming from “World of Warcraft” subscriptions, licensing royalties from their products and franchises, value-added services, downloadable content, microtransactions, and other miscellaneous revenues.” Not all of these things are related to microtransactions but they are related to continuous spending, which is about more than double of actual sales. It doesn’t show the precise microtransaction revenues but what it does show, is how important continuous consumer spending is. In the attempt to better illustrate the share of microtransactions, I extracted some data from Ubisoft’s reports for the first halves of 2015, 2016 and 2017, that is presented in *Graph 2*. It can be seen that in H1 2017, the player recurring investment income, which includes “in-game items, DLCs/season pass, subscription & advertising” takes up 35% of total revenue and is 57% higher than in 2016. In 2016, it took up 38%, however, it was 81% higher than in 2015, compared to other income rising 17,6%. And that is a good indicator of microtransactions’ importance because 2016 was the year when Ubisoft switch to the GaaS model and started betting more on microtransactions.²²

Graph 2: Ubisoft’s 2015-2017 Income



Source: https://www.ubisoft.com/en-US/company/investor_center/earnings_sales.aspx²³

²² Ubisoft (2016)

²³ Ubisoft (2018)

There is one glaring issue, however, – the microtransaction model has to be designed very carefully and with respect to the players, otherwise, the consequences might do more harm than good. This idea is expanded in chapter 2 Ethical Implications of Monetization Strategies.

Rundown:

- Allow players to receive in-game or bonuses items for real money
- Can take a slew of forms, like cosmetic items, “loot boxes”, “boosts”, in-game currency
- An integral part of the AAA market of today
- More efficient compared to DLC; require less, sometimes no effort, while yielding profits
- Have to be tailor-made for each game
- Can be overused, leading to decrease in game quality

1.1.5. Medium-Priced Games

Sometimes, games do not charge full price, which, as I established, is equal to \$60. There is a plethora of good games that cost between \$30 and \$50. These games do not have to come from independent low budget studios, they can be easily released by the leading publishers. The decision to sell a game at a lower price can be based on many factors. Perhaps, a game is small or has lower production values, and developers of a published do not feel that asking as much money as Ubisoft asks for their “Assassin’s Creed: Origins”, for example. That, however, does not mean that the budget of a certain game or its length is directly proportional to its price. Some games, for example, “Sonic Forces”, the latest installment in the long-running Sonic, The Hedgehog” franchise, cost \$40 on the day of release. That game was a part of a big franchise, had modern graphics, was fully dubbed and many other features of a contemporary full-price \$60 game, yet still had a \$40 price tag. The answer to “Why?” can only be deduced partly and we never will know the exact reasons. One of those reasons could have been “to attract a bigger audience to a game that was supposed to revitalize a struggling franchise”.

Another good example of medium-priced games is various VR games or VR experiences. VR market is a relatively new one and it still lacks solid platform sellers – games which

make people want to invest in VR. Instead, the VR market is dominated by medium-priced releases from both independent developers and major publishers. While I will be discussing independent games a bit later, in chapter 1.5, VR releases fit the “medium-priced” games category. These games are often short and not substantial, working mostly as “demos” for the VR platforms. Demos not only for the consumers, who are trying to test out their newly bought “Oculus Rift” or “PlayStation VR” headsets, or perhaps even try them in a store before buying, but also demos for the major publishers, who are testing the grounds in that new market before investing substantial amounts of money and resources to produce 20, 40 or 100 hour long games, full or deep mechanics and top-notch productions.

The point of all that is, that a developer or a publisher may intentionally decrease a price tag of their game, even when this game could be potentially sold, and most importantly bought, for full \$60.

Rundown:

- Smaller games with AAA-like quality
- Unlike AAA, have no traditional price standard
- Many reasons for going mid-priced

1.2. “Free-to-Play” Game

The Free-to-Play model has undergone some huge changes and developments in recent years. It can be argued, that it has become one of the leading monetization models. That model is not exclusive to games. Terms “shareware” and “freeware” were used to describe software, that was distributed for free or at least parts of which were free way back in the 80s. When it comes to games, it was first created by a Korean publisher,²⁴ and now the free-to-play model now can be found of mobile, console and PC markets.

The key concept of this model is quite simple: a game is provided to the customers free of charge; customers can freely play it; certain mechanics, allowing people to pay money and get rewarded are introduced to the game; the game is designed to extend play times and

²⁴ Kong and O’Connor (2009)

hence increase the chance of customer spending. That model usually heavily relies on microtransactions and more often than not, cannot actually exist without them. Free-to-play games are usually online games, meaning that players play with other players. In this environment, the purpose and intent of microtransactions become clearer. For example, players can purchase in-game costumes for their characters. If they were playing a single-player game, the purpose of that purchasable item is just to entertain the player, vary their experience with a new look of their character. However, in the multiplayer environment, another remarkable element is brought – interaction with other players and feeling of uniqueness. That is usually the main driving force for many free-to-play games, especially, free-to-play Role Playing Games and shooters. Some free-to-play games are able to introduce their own unique monetization mechanics due to their genre. For example, many digital Collectible Card Games, such as “Hearthstone” or “Shadowverse” are free-to-play but give a player an option to acquire randomized packs of virtual cards to boost progress. These cards are not simply cosmetic items, they fully affect the way people play these games. Digital card games are not the only ones having a unique way of stimulating players to spend money in a free game. Other games can also introduce ways to boost in-game progress, which can affect in-game balance. These games are called “pay-to-play”, and it is not too difficult to understand why. Paying players often get an edge in those games, making it difficult to play without investing. That approach to free-to-play is considered to be less beneficial for the game since it pushes away more customers that it attracts.

The free-to-play model also has some specifics of different platforms, so in the next two chapters, I am going to briefly describe those.

Rundown:

- Monetized mostly through microtransactions
- The implementation is flexible – varies from game to game
- Prevalent in online games
- The in-game economy must be balanced to avoid pay-to-play, lose quality and players

1.2.1. Mobile Market

The mobile market has been dominated by free-to-play titles ever since their immersion on that platform in the early 2010s. “Candy Crush”, “Clash Royale” and most recently “Pokémon GO” and “Fortnite”, have earned their developers billions of dollars.²⁵ These free games are generating revenue times larger than the revenue of games being sold for 60\$. Mobile games are the best example of how the non-existent entry barrier allows to attract a much larger audience. You do not need extensive research to realize that nearly everybody these days has a smartphone capable of running at least simple 2D games. That gives mobile free-to-play games a great advantage over console and PC free-to-play games. They are spreading faster and need a lesser percentage of players to spend money on in-game purchases for them to start generating profits. They are also easier to make, them being dominantly 2D games.

Another aspect, specific to mobile games, is in-game advertisement. Nearly in every free game that you download on your smartphone you would see ads. Maybe a banner at the bottom or top of the screen or perhaps an unstoppable video after every 5 minutes of playing. That is integral to mobile games. Ads make sure that even if a player does not make any in-game purchases, developers profit from them. Even if each ad viewed gives them one cent, it adds up to tens of thousands of dollars daily, without people actually investing into the game.

Rundown:

- Main model on mobile
- Have a massive audience
- Very profitable
- Ads could be used for monetization

²⁵ Pocket Gamer staff (2016)

1.2.2. PC/Console market

Free-to-play space on consoles is dominated by a handful of titles, such as “World of Tanks”, “Hearthstone”, “Dota 2”, “League of Legends”, “Heroes of the Storm”, “Warframe” and “Fortnite”. Three of those are one of the most prevalent games on the e-sports scene. Five of the most watched games on Twitch are free to play.²⁶ Free-to-play games on streaming platform have a benefit of being parts of the e-sports scene and attracting new customers with a potential to become a successful e-sportsman without significant monetary investments. Unlike mobile games, PC and console games are broadcasted on websites like Twitch and YouTube, receiving free marketing from independent content creators and having an ability to achieve viral success on those video streaming platforms. The fact of being free greatly helps them to achieve that viral status and capture a vast audience quickly, like “Fortnite”, discussed in chapter 3.8.

Rundown:

- Many games are highly competitive
- Advertising through e-sports
- Popularity on streaming platforms has the biggest impact on free-to-play games

1.3. Episodic Game

Episodic games in their essence are a bit similar to games with story-focused DLC. The name of this model speaks for itself: a game is divided into smaller chunks, which are sold separately and come out one after the other, just like episodes of a TV series. They usually can be purchased individually or all together in a form of an already familiar season pass. These games usually have one connected storyline and very similar, if not identical mechanics. By releasing them over a certain period of time, let's say half a year, a developer has a bit more development time and also an ability to react to feedback and make changes if needed in the future episodes. Consumers have a lower entry barrier since they can just buy the first episode or even sometimes get it for free, and see if they like the game or not,

²⁶ Newzoo (2018)

before purchasing the rest. On the other hand, purchasing episodes separately, instead of getting them in bulk can end up being more expensive for the consumer.

The episodic structure, however, limits the game design space. For example, it is impossible to simply take an open world game and cut it into pieces. Will every episode get its own small part of the world? Well, that goes against the idea. Will new episodes just add new content to the world introduced in the first episode? That would mean that they are unbalanced in terms of content. These days the episodic formula is heavily associated with Telltale Games, a developer that made their name entirely on story-centric episodic games. Their games benefit greatly from numerous licenses on popular IPs, such as “Batman”, “Game of Thrones” or back to the future. In fact, nearly all episodic games, that came out in the last five years are from Telltale Games. The other notable mentions are the “Hitman” games from IO interactive and “Life is Strange” from DONTNOD Entertainment. To sum it up, episodic games have a lower entry point for customers, give more development time for developers and enforce stricter game design. They are either heavily relying on story, like the Telltale games, forcing consumers to acquire all episodes in order to experience the game or provide standalone experiences, like in “Hitman”, allowing customers to pay for the game in parts.

Rundown:

- Niche model, dominated by a single developer
- A game is broken down into separate “episodes”
- Story-focused
- Often simple gameplay
- Hard to design cohesive gameplay
- More convenient to make, as provides additional dev time between episodes
- Easier to consume for casual players
- Heavily utilizes season passes

1.4. Subscription-Based Game

Just like episodic games, subscription-based games are very tightly related to a certain genre. In this case, it is MMORPGs. *Massively multiplayer online role-playing games* – the games that are all about progression, empowerment and social interactions. These games are usually massive in scale and extremely long lasting. Many of them are free-to-play now, simply because in the modern MMORPG market, being free-to-play is the norm and if you want to ask a monthly fee for your game, you better have really good reasons for that, or else players will simply go and play any other free-to-play MMORPG. The notable games that kept the subscription model are “Final Fantasy XIV” and “World of Warcraft”. The first being a part of a titanicly strong 30+ years old franchise, and the second – the forefather of all MMORPGs, period. Even “The Elder Scrolls Online”, while being a part of a successful “The Elder Scrolls” franchise, had to abolish its subscription model in favor of free-to-play.²⁷ They still left an option to pay a monthly fee and get premium perks for that, but it is no longer the core of the game.

So what is the deal with subscriptions? Are they even relevant anymore? To answer that, we have to look back around 10 years. Sustaining an always-online game with millions of players was not just a chore, it was an enormously difficult task. These days we have Amazon Web Services with 99.99% percent uptime and other similar services and many businesses are relying on cloud computing. Maintaining servers is a usual thing now and there are professionals who do it flawlessly and with much fewer problems than 10 years ago. Above all, it is cheaper now. And it actually can be argued, that the costs of server maintenance were a big factor for the emergence of the subscription model. Developers simply needed money in order to host all the people who want to play on their servers. The second factor is content. MMORPGs are often advertised as living, breathing worlds, people could inhabit. To make them so, they should be designed with longevity in mind and preferably supplied with a great number of things to do during the release and post release as well. All that requires money and selling that kind of a game once for \$60 and providing content for years just wouldn't cut it.

Now, on the other hand, server maintenance and content production are less costly, so the developers are dropping subscriptions in favor of free-to-play, which is much more likely to provide them with a quick and steady influx of players. As I have said, a small number of

²⁷ Chalk, A. (2015)

games were able to keep the subscription model. That is still possible, however, requires much bigger affords from the developers, as that investment from the players cannot be justified by high maintenance costs.

Another fact, that I already touched on is the genre restriction. The subscription must be justified, otherwise not that many people would pay you a monthly fee. Not every genre is about progression and deep mechanics; not every game can be continuously expanded. That is yet another reason why these days subscription is less relevant than it has ever been.

Rundown:

- Requires monthly or bi-monthly subscription
- Solely used in MMORPGs
- A mean to maintain servers and release new regular content
- Rapidly loses relevance in 2010s
- Hard to justify these days

1.5. “Indie” Game

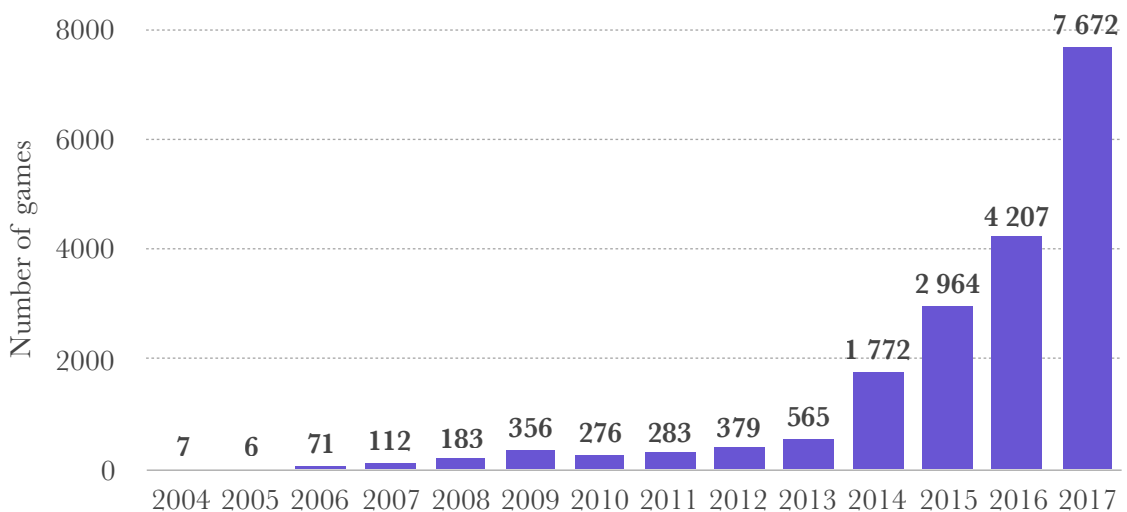
“*Indie*” is a casual, widely accepted version of the word “*independent*”. Indie games are just that – games from independent teams, teams without a publisher. These games can be absolutely anything, the term doesn’t clearly define what they are. Their genre, their distribution model, their quality and size – all these factors vary from game to game. In fact, the absence of a publisher signifies more freedom. Developers do not have to conform to norms, report to investors and can make more experimental games. However, with that freedom comes another thing – independent developers often lack market presence, reputation or any kind of brand recognition, unless they have a track record of releases. They also do not have big budgets for production or marketing. These games are not made with insane profits and amazing margins in mind. It is not an anomaly if a game is made by only a single person.

There is no special way to monetize indie games. You could go free-to-play, episodic, medium price or early access, which is a very common strategy for indie developers and it is discussed in the next chapter. There is only one problem for these developers is getting no-

ticed. These small teams, which make small games are competing with industry behemoths, making huge games with a help of huge teams with tens of millions of dollars-worth marketing budgets. Because of that, indie games are existing in a much lower price range. It doesn't mean that they simply undercut their competitors, as I said, the games are often actually smaller, sometimes a lot smaller compared to AAA games. A less substantial product is sold for a lesser amount of money in many industries and the game industry is not an exception. Nonetheless, if we compare medium price games with indie games, indie games are often cheaper, while having a similar size. That is where the absence of brand recognition really shows up.

Indie developers are mostly competing with each other. Nowadays, making games is simpler than ever and it is evident: every year the number of games released is growing, as the *Graph 3* shows.²⁸ And a lot of this growth is attributed to new and small developers, as the amount of major publishers stays the same. And many of them have to. Not every game released becomes a hit and if it does not, attracting a customer with its small price is one of the few options an indie developer without a marketing budget can do. It also means that indie developers cannot afford to have a good markup on their games.

Graph 3: Games released on Steam by year



Source: twitter.com/Steam_Spy/status/804072335997358084²⁹

²⁸ Kuchera, B. (2018)

²⁹ Steam Spy (2016)

Rundown:

- Have no clear price range but cheaper than AAA
- Allow customers to play on a budget
- Lets small developers to exist in a different price category and not compete with AAA
- Usually less content for less money
- Rarely graphically advanced

1.6. “Early Access” Game

Early access is arguably the most divisive model of all. The concept is quite self-explanatory: a game is released in an unfinished state, allowing people to play it earlier, albeit not having the best possible experience, and giving developers an opportunity to develop “together” with the community. It is somewhat like pre-ordering but you actually get to play a part of a game, or a version that is missing features. In a vacuum, that idea is very promising – everybody is getting what they want. It also can give developers a chance to develop something they otherwise could. They are often selling people a concept, rather than a finished, polished product. People get a chance to invest in a game they would like to play and developers are receiving money in order to fulfill the promises that they did not have any resources for in the first place. With the birth of the Steam Early Access platform in 2013³⁰, more and more games began to utilize the early access model. With 12 games in 2013, currently the number of early access games on Steam is equal to 2443.³¹

Before I start answering the question “But...?” I would like to reiterate that that model can truly be a game changer and it is not all bad. There is a big chance that you have heard about the game called “Minecraft”. Officially released in 2011, it has become the second most sold game of all time, standing behind 34-year-old “Tetris”. The total number of copies sold exceeded 144 million across all platforms in December 2017.³² The company that made “Minecraft” – Mojang, was sold to none other than Microsoft in 2015 for \$2,5 billion.³³ It all began in 2009 with a pre-alpha version of the game, that was sold on PC for

³⁰ Welch, C. (2013).

³¹ SteamSpy (2018)

³² Horti, S. (2018)

³³ Sheffield, H. (2015)

the fraction of its today's price.³⁴ Over the years the game became much greater in scale and the rest is history. Would it grow as quickly if it was not monetized since pre-alpha? We will never know. But it is safe to say that it definitely helped.

So is it always all positive and beneficial for all sides? It usually depends on the developer. Early access games require precise planning and resource management. Promises that are given to players must be realistic and the targets achievable. The early access process can make or break not only the reputation of a game but the reputation of the studio that made that game. With unachievable targets, false promises, which is basically false advertisement for these kinds of game, with bad resource management a game can fail dramatically and leave a stain on its developer's reputation forever. Nobody would want to give more money to people who promised a lot, sold a game that is a tiny fraction of what it was supposed to be, and ran away with the money.

Early access is a great opportunity for industry leaders and small independent developers to develop the game together with the community, receive feedback and money in advance, and for small studios, it is a chance to develop the game they want while not having enough resources. The development process has to be carefully planned and the expectations should be managed to avoid the effect of false advertisement and not damage reputation.

Rundown:

- Used to monetize an unfinished game to make its completion possible
- Essentially a testing phase, which brings you money
- Marketing is mostly based on promises
- Not that rarely promises are not getting fulfilled, causing public outrage
- Partly takes away the incentive to properly finish the game
- Requires closer customers
- Allows buyers to influence the future of the product

³⁴ Minecraft Wiki (2018)

1.7. “Game As A Service”

“Game as a service” (further –*GaaS*) has become a huge buzzword in the industry not long ago. Every major publisher dreams of making a successful *service* rather than a game. And there are good reasons for that.

GaaS in the last part of this chapter for a good reason. It encompasses many of the described strategies and manipulates them to create a living game. “*Living*” is probably the best term to describe the idea of *GaaS*. How can a developer make its game live and what do I actually mean by a “living game”? “A game that once released continues to earn money for an extended period of time” is what the developers and publishers imagine when they hear “living”. “A game I can play for a long time and not get bored, the one that gives me new reasons to play” is the vision of players. If a game is designed properly, it satisfies both visions, leaving the customers happy and the developers and publishers with more money on their account. And that is where the problem lies – *GaaS* is very hard to design. The gameplay mechanics, how the game treats and interacts the player, it all should be cost tailored to satisfy both sides. *GaaS* is a relatively new concept, and the games following it have been hit and miss. Striking the balance between making a good game and making a good money-making machine is what usually makes a game great.

As I have said, *GaaS* model includes many of the aforementioned monetization methods. Microtransactions, DLCs, Season Passes are all usually integrated. Moreover, it is possible to say that some *GaaS* games are even borrowing from the early access model. Firstly – the microtransactions. Their intent has always been “to bring extra revenue without much effort” and their importance from the standpoint of game mechanics is supposed to be minute. Cosmetics and progress boosters are not supposed to affect the game. That all is still true in the *GaaS* model. By introducing interesting but not intrusive microtransactions, developers and publishers extend the time during which their game would bring desirable incomes. The next step is DLCs. If you want a “living” game, no matter who you are, a developer or a customer, you want your game to have more content. These DLCs are extending the game’s relevancy period, pushing people to come back to the game, which would hopefully make them want to spend some spare money on microtransactions as well. As you have probably noticed, these models are not changing in any way, they are just coming together to ensure that the game is living for a longer period of time. Lastly there are season passes. Here is where we start seeing some differences. Previously, I

have described season passes as simply DLC bundles or preorders. These types of DLCs are relevant for GaaS as well, take “Destiny 2”, for example. However, the season passes for “Tom Clancy’s Rainbow Six Siege” are completely different. They are not just DLC bundles, they act more as actually passes and give players access to new content released throughout the year. So far, there have been 3 Passes. That model will later be analyzed in the chapter 3 of this work.

There is one more common element among, perhaps, all latest GaaS games – online. These games are often multiplayer-only or have some sort of activities that are related to online. “Tom Clancy’s Rainbow Six Siege” is, for example, a multiplayer only game and “Assassin’s Creed: Origins, on the other hand, is single-player only but with rotating daily and weekly activities that push players to come back to the game. More time spent playing – more chances that a player will invest in DLCs or microtransactions. Of course, that entirely depends on individual player’s psychology and views but the chances of additional player investment still increase.

Combining constant flow of content and rewards for player engagement with online elements and carefully designed gameplay is what turns a game into a service that people continuously come back to. That leads to longer lifespan, a longer period of substantial earnings and less need to invest in development of a new game.

There is a different rendition of GaaS, however. Cloud gaming and Netflix-like subscriptions are also often related to the GaaS term. Both cloud gaming services and various subscription services, most notable EA Access and Xbox Game Pass, allow a customer to access a library of games on demand for a monthly fee. GaaS, in this case, is not attributed to a way a specific game is designed and monetized but rather to how it is distributed.

Rundown:

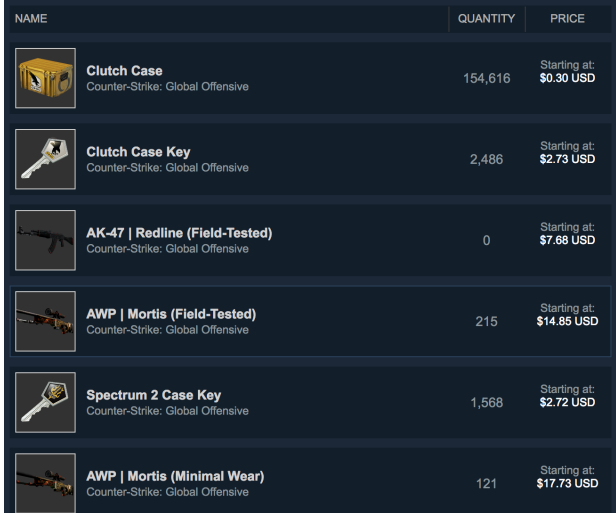
- A model that combines many other models to ensure maximum profitability
- Implies long-term support
- Removes the need to release many AAA projects for a publisher to remain profitable
- A service-game is hard to design and support with enough content
- The model is gaining popularity among publishers and is likely here to stay







1.8. In-Game Marketplaces

An in-game marketplace is probably the strangest model of all, at least for a person who is not familiar with games. This model is not strictly defined and can exist in many forms, in fact, the marketplace does not really have to be fully implemented in the software but can exist as a separate platform. The main idea is, that players are given the ability to sell the content they created or obtained in-game. For example, let's take "Counter-Strike: Global Offensive" as an example. This game is one of the most popular online First Person Shooters. During your playtime, you can obtain random weapons or so-called "cases" that you can unlock using virtual "keys". While the keys are falling into "microtransactions territory", what is inside the boxes is much more interesting. Both weapons obtained during your playtime and weapons that you have received from cases can be sold for real currency on the Steam marketplace; *Image 7* shows various items on sale. Steam is the platform where you can buy games, browse forums, upload your own creations, etc; it is also the platform you need to play games bought in the Steam store. That marketplace is implemented not only in "Counter-Strike: Global Offensive", other games like "DOTA" or "Playerunknown's Battlegrounds" utilize the Steam marketplace. Steam gets a share of every sale on their marketplace and when some items can cost up to several thousand dollars³⁵ the amount of commission they get becomes quite significant. And as the Steam platform is developed by Valve, the same company that made "CS: GO" and "DOTA 2", we can say that commission from sales is a way of monetization from them.

The other example is Minecraft Marketplace. It is a platform accessible in-game, that allows people to buy user committed content for virtual currency. Yes, that sounds like usual microtransactions that you can find in a plethora of other games, however, the fact that the content on sale is made by players, for players should not be overlooked. Mojang, the de-

Image 7: "CS:GO" Items in Steam Mar-



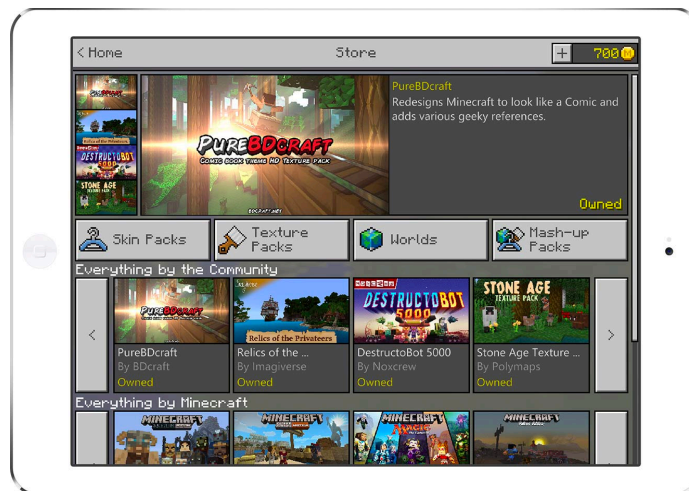
NAME	QUANTITY	PRICE
 Clutch Case Counter-Strike: Global Offensive	154,616	Starting at: \$0.30 USD
 Clutch Case Key Counter-Strike: Global Offensive	2,486	Starting at: \$2.73 USD
 AK-47 Redline (Field-Tested) Counter-Strike: Global Offensive	0	Starting at: \$7.68 USD
 AWP Mortis (Field-Tested) Counter-Strike: Global Offensive	215	Starting at: \$14.65 USD
 Spectrum 2 Case Key Counter-Strike: Global Offensive	1,588	Starting at: \$2.72 USD
 AWP Mortis (Minimal Wear) Counter-Strike: Global Offensive	121	Starting at: \$17.73 USD

Source: Author's own screenshot

³⁵ Knoop, J. (2017)

veloper, of course get a share from each sale, but the money goes to the creators. Similarly, the games “Second Life” and “Roblox” allow players to make and sell the content for other players to buy and enjoy. During the GamesBeat Summit 2018, Graig Donato - the CEO of Roblox Corporation said that some players are actually making up to \$300,000 a month selling content in “Roblox”.³⁶ And once again, a share of content creator’s revenue goes to Roblox Corporation.³⁷

Image 8: Minecraft Marketplace



Source: [Minecraft.net](https://minecraft.net)

That model is very much defined and shaped by the game it is related to. Not all games need to be able to built around marketplaces, Minecraft existed long before Mojang launched the Minecraft Marketplace. Every marketplace is different, the items being sold, the economy, everything is not strictly defined. That model creates appeal for types of players that would not be normally interested in your game and lets people who enjoy producing content to monetize it. Sometimes that chase for real money causes problems, that are going to be detailed in chapter 2 of this work.

Rundown:

- A marketplace for players to buy and sell in-game items for real currency
- Developers get a share from each trade
- Some games let players to produce and sell content, serving as a source of revenue

³⁶ Leonov, A. (2018)

³⁷ Mojang (2018)

2. Ethical Implications of Monetization Strategies

The previous chapter has already established, that some ways of monetizing could be abused. That could happen to the point of public outrage and universal criticism. It *must* be remembered at all times that video games are an interactive medium. Customers do not simply consume them, like books, movies, music, theatre, but are engaging with a variety of systems which act back. Games are also a dynamic medium: they can be changed or fixed post-release, unlike the others listed above. Monetization methods do not just change the way people pay for the product – they have the power to change the way people *interact* with the product. And considering that interactivity is a big part of games, meddling with it can drastically affect the DNA of your product: its quality, profitability and impact on the market. Video games are actually the *only* existing interactive form of entertainment, add the fact that the video game market and especially some of the monetization methods described in this work are relatively new, some developers and publishers lack experience or data to back up some of their actions or forecast the consequences of their actions correctly. Methods that sound safe on paper and can work out well with other forms or entertainment products just might not work well with games.

Business ethics is always important. Mistreating your customers may offend them and they might respond with telling all their friends about the product or the company in a negative way in addition to stopping buying your products. The unhappy minority is often the loudest. With video games specifically, mistreating your customers can actually lead not to just unhappy customers but to a bad product. The easiest way to explain this is by talking about microtransactions. As I have stated, the overuse of microtransactions can ruin the balance of game mechanics, mainly in free-to-play games. Let's say that the customers are allowed to make their character stronger by paying. That would mean that customers with spare money on their hands would be the strongest and dominate all the time. Players who decide not to spend money are much more likely to lose. That situation does not benefit anybody. Customers who do not pay extra are dissatisfied, new players are afraid of being constantly dominated by payers. It is, however, possible that a company might earn enough money from payers to compensate for the outflow of dissatisfied players. As a short-term solution for increasing revenue that model might work out great, especially if a developer has a loyal customer base, decent reputation and good market presence. But even then, the product ends up being not fun for most customers. That game is likely to be remembered

as not good and exploiting its customers. However, even that is possible only if you were an established company. Releasing a game like that while being a new unknown company would probably mean that players will have an even smaller incentive to play your game. The situation worsens if we are talking about paid games. It is quite evident since when a person is paying for the game, they always expect the best experience. No one is buying a product because they expect it to be bad. And unfortunately, there have been cases of microtransactions misuse in paid games, misuse that could lead do unbalance in games and loss of customer trust and loyalty. Any kind of paid extra content, *particularly* in paid games, should ideally not lead to an intense difference in customer experience. Whether it be a single-player or a multiplayer game, the experience of payers and non-payers should not deviate too much from the *intended* experience.

Of course microtransactions are not only about being more or less powerful, they are often cosmetic. People can get additional costumes and other in-game items to modify the look of their character. While in free-to-play games there is absolutely nothing wrong with asking money for things like that, the lines are somewhat blurry when it comes to paid games. Many players think that if they have paid for the game they are entitled to all content that is possible to be found in the game. If there are, for example, unlockable costumes in the game, they must not be paid, otherwise, these customers consider the product to be incomplete and that they are not getting all they paid for. Other customers are fine with some content being locked behind the paywall, as long as there are other ways of getting it for free or if that content is not in any way superior to the free content. On one hand, that kind of paid content in \$60 games is too much – if a customer pays money, they are in fact entitled to everything that can be found on the game disc. It is like buying a new sofa and finding out that it has spikes on one of the pillows that make it hard to sit on; pay \$10 and the spikes will go away. Sounds absurd but that is what sometimes happening with microtransactions in full-priced games. On the other hand, we have constantly rising development costs caused by rising customer expectations including. Balancing the need for extra revenue and not exploiting your customers is a challenging act for many developers. Recently, Ubisoft settled on making all purchasable items in their single player games cosmetic only, easily obtained in-game and making them non-obtrusive. I have already demonstrated on *Graph 2* that microtransaction revenue has increased in their games and it has done so without a significant hit on their reputation or any serious criticism towards their monetization model. One popular YouTube personality even said that he “...couldn’t even fathom

why” microtransactions in Ubisoft’s “Far Cry 5” exist since they are not affecting the game in any *meaningful* ways.³⁸ And that opinion about this game is not limited to him. Oddly enough, this confusion is debatably the best thing that a \$60 game with microtransactions can cause. There are definitely people who would be interested in what “Far Cry 5’s” microtransactions offer and these people will invest in them, bringing the desired extra revenue to Ubisoft, however, everybody else’s experience will not be ruined because of that. Ubisoft’s reputation will not be stained and positive reviews of their recent releases are going to play a major role in better sales of their next title.

There is even more to microtransactions. One extremely popular form of microtransactions is “loot boxes” – in-game packages containing a set of virtual items, usually of various rarities. The problem with them is that players are not that seldom pushed by developers to purchase more and more of them to get the item they want since “loot” in these boxes is randomized. “Loot boxes” are used in mobile, console and PC games; in online and single player games; shooters (“*Overwatch*”), racing games (“*Need for Speed Payback*”), fighting games (“*Injustice 2*”). In other words, it has spread to all kinds of games. They are usually relatively cheap, on average up to \$2, however, these \$2 are not at all guaranteed to bring you anything you want. They are sold in bundles for a discounted price, pushing players to spend more to get a discount and the prices of those bundles can reach and surpass prices of games themselves, as seen on *Image 9*. (“*Overwatch*” is \$40)

Image 9: “Loot box” Prices in “Overwatch”



Source: Author’s own screenshot

That seemingly intended push to purchase more and increasing popularity of that model has alarmed many people in 2017 after a couple of games, one of which is “Star Wars Bat-

²⁹ Cleanprincegaming (2018)

tlefront II”, caused major controversies. To the point that American, Belgian and Australian authorities have decided to investigate games that contain “loot boxes” and test them for signs of gambling, illegal in many parts of the world.³⁹ While that comparison is controversial since gambling usually involves a monetary reward, “loot boxes” can still be considered to be a “predatory” model that is cashing in on people with addiction. The situation takes on a completely different form when real money gets involved into “loot boxes”. Take “CS: GO” for example, which was discussed in chapter 1.8. “Loot boxes” earned in this game have to be unlocked with virtual keys, which are purchased separately. As a reward a player receives a random item that can be sold for *real money* on Steam Marketplace. Besides, players can also spend to buy more “loot boxes” without having to play the game and earn them naturally through gameplay. That model resembles gambling a lot more than the ones without real monetary rewards, and “CS: GO” is not the only game with that model. On 19th April 2018 the Dutch government has joined the movement and issued a statement that claimed, that as a result of their investigation, “Dota 2”, “FIFA 18”, “PlayerUnknown’s Battlegrounds”, “Rocket League” and perhaps some other games must change the way their “loot boxes” work in order to comply with the Dutch “Better Gaming Act”. These games offered paid “loot boxes” that provided players with items that could be traded for real money. It should be noted, that officially, Steam Marketplace, does not allow people to take money out of their account directly. Money earned through trades is supposed to only be spendable on games sold in the Steam Store or items in Marketplace. Despite that, players have found multiple ways to bypass that limitation and turn their “CS:GO” skins into money on their bank accounts, which only further demonizes “loot boxes”. It is hard to say confidently, that all “loot boxes” do not have a right to exist or that all “loot boxes” involve gambling. They are here to stay, thanks to how popular they are among developers currently, which hints at their profitability. In the near future we might see a couple of shifts and changes to how exactly “loot boxes” operate, not without the influence of new legislative measures.

With microtransactions explained, I would like to move to DLCs. The situation is much clearer here. DLCs these days are usually chunks of extra content games. They require extra resources and development time, so asking money for them is completely justified from the customer’s and publisher’s view. In spite of that, the quality of DLCs for different games varies significantly. For instance, the “Curse of Osiris” DLC for “Destiny 2” and the

³⁹Knaus, C. (2017)

“The Curse of the Pharaohs” DLC for “Assassin’s Creed: Origins” have the same price of \$20 but offer vastly different types of experiences. If, as a player, you measure the quality of a DLC by the amount of content it offers and time it takes to complete all new activities – “The Curse of the Pharaohs” beats “Curse of Osiris”. Developers claimed that full completions would take around 20 hours and my playtime was roughly 20 hours. “Curse of Osiris”, on the contrary, had a very short campaign, small map and a lot of content and ideas were reused. Personally, I had much more fun playing “The Curse of the Pharaohs” and the amount of work that went into that \$20 DLC was clearly evident. It offered a large new map willed with activities. The same cannot be said about “Curse of Osiris” and the press agrees.⁴⁰ It is hard to argue if a developer or a publisher is charging too much for a DLC or not, as different customers might have completely different opinions. The public obviously does not know how much work and resources exactly go to making a game or a DLC. Perhaps it was very easy for Ubisoft to create the new big open world of “The Curse of the Pharaohs”, thanks to handy technology, custom in-house tools and smart reuse of assets, while Bungie struggled to make the content for “Curse of Osiris” and spent more resources on it. As with the games themselves, it is all about the quality, not the size and the time required to complete a game. In general it is important not to overcharge for a DLC for better profit margins and not make the costumers think that they got ripped off and invested into something that is not following the standards set up by the game. It ends up being the story of reputation all over again. If a developer has a history of bad DLC it is harder to convince the public that the new one is going to be better in the age of social media when everybody has a platform to express their negativity. The worse case scenario is when a developer heavily markets a season pass without telling customers what is included while knowing that the quality of DLCs is subpar. Many customers buy it only to get disappointed later when DLCs are released and end up being mediocre at best. The same applies to preorders as well, however, it is much easier to fool customers (if that intention exists) with the season pass and get a smaller backlash as a result while not being under a spotlight like prior to the game release.

Lastly, there are early access games. It is also easy to understand how customers can be mistreated with that model. Making false promises and underdelivering is not uncommon with early access games. That is not always done with malicious intentions in mind. It is possible that some developers just encountered unforeseen problems or set unreachable targets

⁴⁰ Houghton, D. (2017)

without realizing it. There are still developers who knowingly try to mislead people into buying the game that will never be completed. Not much else can be said about early access games other than is that is the model you chose, you have to be careful if you do not want to offend your customers.

Transparency, in general, is a trait valued by consumers. With so many opportunities to mislead the customers, transparent and truthful publishers and developers immediately gain attention and trust, therefore a boost to their reputation. Every time a publisher or developer under-delivers and lets down season pass owners, every time a DLC looks like a cash grab and microtransactions are in excess, with every misleading ad or a deceptive campaign, the reputation of a publisher gets damaged, leading to consumers approaching their future products with caution. Being honest with your customers has never been more important than now, considering the number of monetization systems in place; systems, which if not properly explained could affect the players' experience.

The year 2017 was a big one for ethics in gaming and monetizing. It was full of controversies, huge fails and companies that stroke the right note with their models. Every time something big happened in relation to monetization, the media was there to spur heated debate. That shows how much players and media care about how they are supposed to spend on games and how other people earn from their games. Balancing a monetization model can earn you a lot of praise and revenue; trying to exploit your customers or even making a genuine mistake, however, can bring you bad press and loss of costumers, which again, might not have a short term impact but will definitely matter long term.

3. Case Studies

In this chapter, I am going through the selection of games, whose monetization models and stories I found interesting in one way or another. Some of them demonstrate successful choices and implementations of a certain model(s), the others are examples of problematic products.

3.1. “The Witcher 3: Wild Hunt”

I would like to start this chapter with a game that has a moderately straightforward model, yet a game that proves that sometimes you, as a developer, do not need to reinvent the wheel to have a critically acclaimed and profitable product. “The Witcher 3” was released in 2015 and became an instant hit, getting praise from all corners of the internet and traditional media.⁴¹ During the 2017 investor report, CD Projekt Red announced that The Witcher 3 had earned them around \$415 million since its 2015 release with a total budget of only \$80 million excluding DLCs.⁹ As seen on *Graph 4*, these revenue figures exceed the previous installments of the franchise by a lot. The number of sold copies is also close to 30 million.⁴² The game was able to be very profitable because of two main factors, in my opinion. The quality of the game and relatively low costs of labor in Poland. While the second factor is out of the scope of this project, the first one demonstrates us that in order

Graph 4: The Witcher Franchise Revenues in Zloty



Source: YouTube⁴¹

⁴¹ Metacritic (2015)

⁴² CD PROJEKT RED (2018)

to have a successful and most importantly *profitable* product these days you are not required to implement microtransactions, “loot boxes” or turning your game into a service. Without a doubt, DLCs for “The Witcher 3” also played their role, accounting for around a quarter of total revenue. Even when it comes to the DLCs, quality played the major role. “The Witcher 3’s” second expansion, “Blood and Wine”, is often regarded as one of the best expansions ever made, and many other big story-focused DLCs, such as “The Curse of the Pharaohs” are often compared to “Blood and Wine”. The amount of praise combined with excellent financial results show that it is still possible to avoid questionable strategies and produce successful games.

3.2. “Grand Theft Auto V”

“Grand Theft Auto V” (further – “GTA V”) is one of the best examples of “doing the right thing at the right time”. After coming out on PlayStation 3 and Xbox 360 in 2013, it arrived to PlayStation 4 and Xbox One in late 2014 and then on PCs in early 2015. Being on two generations of consoles definitely helped it to become one of the most successful pieces of entertainment in history. At the beginning of 2018, Take-Two, the publisher of “GTA” franchise, announced that the game sold over 90 million units.⁴³ Besides that the game sold over 15 million units in 2017 alone, meaning that it outsold a lot of other new game releases in 2017, landing on the 6th spot in top sellers chart in the US.⁴⁴ So why exactly the game that came out years ago still sells better than many of its competitors, whose sales usually die out a year or so after release? Is it also because “GTA V” is *just* an outstanding game, like “The Witcher 3”?

To begin my analysis of the game’s monetization model, which unarguably led to its success, I would like to point out, that the “Grand Theft Auto” series is far from being new on the market. This franchise has revolutionized gaming more than once. “GTA III” was definitely not the first open-world game but it was the first that provided players with an unprecedented mix of freedom, story and realism back in 2001. In “GTA: San Andreas” the formula was refined to the state of near perfection, helping the game to become the best selling PlayStation 2 game with its 17.33 million copies sold, even putting it into the Guin-

⁴³ Tassi, P. (2018)

⁴⁴ Kain, E. (2018)

ness Book of World Records. Counting 11 titles, many of which have become iconic, the “GTA” franchise could be easily awarded the title of one of the most beloved and influential franchises in the gaming world. That was, of course, still true at the moment of “GTA V’s” release. This game was critically praised by everybody, earning Take-Two \$815.7 million in the first 24 hours after release. Moreover, the sales reached \$1 billion mere 3 days after launch. So, returning to the question asked in the previous paragraph, yes – “GTA V” reached its success by being *just* an outstanding game... at the time.

“GTA V” is not just continuing to sell well in 2017 and onwards, it is selling *extremely* well, evident by its positions in charts mentioned previously. The key to “GTA V’s” longevity is its multiplayer mode – “GTA Online”. It was released several weeks after the game’s launch in a form of an update. It is seamlessly integrated into the game and players do not even have to exit single player mode to switch to “GTA Online”. That was the first time Rockstar developed such an extensive game mode tailored specifically to online play. When released, “GTA Online” was full of missions to complete with friends and had the vast living world that defined the “GTA” franchise. It goes without saying, that “GTA V’s” world was the most advanced “GTA” world or arguably the most advanced in gaming at the time. That was what started drawing people to “GTA Online” at first, I reckon. Although, that was only the beginning of “GTA Online’s” 5-year adventure. Even now, Rockstar shows no signs of retardation. As of April 2018, Rockstar has released 30 free DLCs, 21 of which are for current-generation only. Some of them introduced new items to the game while others drastically changed the gameplay experience. That amount of support for what was mainly a single player game is unprecedented. While “GTA V’s” single player campaign is still relevant now, perhaps even surpassing many open world games of today in quality, the focus has shifted to “GTA Online”. The game has mutated from a great single player game to a good multiplayer game that retains the soul of “GTA”.

Now, let me proceed to the game’s monetization model. “GTA Online” was never a separate purchase and is free for everyone who owns “GTA V”. The reason why I opened this chapter with talking about “doing the right thing at the right time” and why “GTA V” reportedly is the most grossing entertainment product in history⁴⁵, is how Rockstar managed to do the microtransactions right before microtransactions were of everybody’s watch lists. “GTA Online” has its own economy. Your in-game progression is centered around acquiring luxurious cars, offices, and flats, creating your own organizations. All that requires in-

⁴⁵ Cherney, M. (2018)

game money, which is not really that easy to earn, unless you invest a lot of time. Even then, buying every single thing you want, that comes out with a new update, can take tens of hours. Considering that updates come out bi-monthly, that is a lot of time to spend if you want to get everything you want. At the same time, players have an option to purchase in-game currency for real money. For example, if you want to buy a plane or a supercar for 1 million in-game dollars, you need to spend \$20. If you want to be the “richest” person in your team and have the latest transport and weapons – prepare to spend a lot of time or a lot of dollar bills. These days that scheme is far from being uncommon but in 2013 it was fresh. That model has also reportedly earned TakeTwo nearly \$1.1 billion.⁴⁶

The game has been criticized for its constant desire to take money from the players but the levels of criticism have always been moderate. “GTA V” and “GTA Online” are both critically acclaimed games and you cannot take it away from them. The argument that the game wants you to pay is countered by the unprecedented number of updates delivering new content and alternative ways to earn what you want. “GTA Online” finds the middle ground between microtransactions and free new content unlike any other game. Gaming press rarely criticized how “GTA Online” manages the microtransactions and players and even the ones who don’t pay, continue to enjoy the game. The fact that the game keeps selling 5 years after release is overwhelming by all accounts. This game singlehandedly freed Rockstar from the need to release any new games. Their next game, “Red Dead Redemption 2”, at the time of writing, is scheduled to come out on October 26, 2018. From the early footage and disclosed information, Rockstar are going to take the gaming industry by storm once again. Will that game have online elements and the same monetization strategy as “GTA V” is yet unknown but it is possible, that whatever it does will once again affect the direction the gaming industry will go in the next couple of years.

⁴⁶ Strickland, D. (2017).

3.3. “Star Wars Battlefront II”

In 2013 Electronic Arts decided to reboot the “Star Wars Battlefront” series of games. They entrusted the development to DICE, the studio behind a very successful “Battlefield” franchise. It was decided that the reboot of “Battlefront” will be a multiplayer-focused game to cater to the latest industry trends at the time. With probably the most valuable license in the world in their pocket – the license to make “Star Wars”-related content, DICE created a game that caters to a broad audience. The game would also correlate with the release of the new “Star Wars” movie – a great marketing opportunity for EA. However, as a result of those 2 decisions, “Star Wars Battlefront” was met with mediocre scores from the press and even lower scores from the players.⁴⁷ The game was deemed too easy, casual, shallow and considerably lacking content. In standard DICE fashion, the game was followed by a series of DLCs, adding new maps and game modes. Players met the DLCs that followed the game with good feedback, however, that was not enough to save or popularize the game. All DLCs were even given out for free at one point. That debacle caused EA to do a complete 180 and re-think their approach for the sequel.

In 2016, EA announced that the sequel is incoming. In November 2017, “Star Wars Battlefront II” was released. This time the game was striving to be better in every way. Prior to the release it was announced that the game will have a single player story mode, containing an original Star Wars story, which would be considered canon; more variety in multiplayer, including starship battles; and most importantly – that all post-launch content is going to be free for all players. This time, three big studios were working on the project, each having their own focus: DICE, Criterion Games (*also worked on the first game*) and Motive Studios. The game was shaping up to be massive and very costly for EA. With the rejection of paid DLCs, EA had to find a new way to cover the costs. They decided to do so by doubling down on microtransactions. While EA used to proudly say that the first “Battlefront” did not have microtransactions,⁴⁸ many EA games, especially sports games like “FIFA” or “UFC” utilized microtransactions in the past. Another well known EA shooter “Battlefield 4” also had microtransactions back in 2013, so having microtransactions in “Star Wars Battlefront II” would not be the first time when EA monetized a shooter that way. However, even during the open beta of “Battlefront II” players noticed that microtransactions are

⁴⁷ Metacritic (2018)

⁴⁸ Tassi, P. (2015)

looking suspicious. Later, even EA acknowledged that in their press release.⁴⁹ The problem with microtransactions, and more precisely “loot boxes”, in “Battlefront II” is in their influence on gameplay. In the second chapter of this work, I have explained that players do not like when a full-priced game they bought forces them to spend even more money. The word “forces” is fitting “Battlefront II” unlike any other. Progression in the game before the release was tied directly to “loot boxes” and “star cards” that a player can get from those “loot boxes”. A big portion of content like playable characters, upgrades, special abilities and weapons was hidden behind the randomness of those crates. No matter if you are a good or bad player, you are going to be rewarded similarly, making the progression equally tedious for all players. And here is why: as I mentioned, content like upgrades and characters is earned via purchasing “loot boxes” or spending credits that players earn for playing the multiplayer matches. Many iconic “Star Wars” characters are locked from the start and players have to spend credits to unlock them. According to one Reddit user’s calculations, it would have taken a player around 40 hours to unlock a single character in the open beta version of the game.⁵⁰ Spending that much time on unlocking Darth Vader, for example, which is expected to be playable from the start, was unanimously deemed unacceptable. The gaming community’s backlash was so strong, that a comment made by one of the EA employees became the most down-voted comment in the history of Reddit.⁵¹ After reviews going public and seeing the storm they caused, EA removed all microtransactions from the game hours before the official release,⁵² putting them back in a different form 5 months later in March 2018.

EA crossed the line with their approach to microtransactions in “Battlefront II” – “loot boxes” were a substantial part of in-game progression, making the game “pay-to-win” if one desires to boost his progress with purchasing “loot boxes” for real money. Considering that “Battlefront II” was still a multiplayer-first game, albeit with a single player campaign, that approach was absolutely against players. The decision to make all DLCs free was great – it attracted a lot of attention to the game and made many people more interested in “Battlefront II”, as players like games that offer a lot. But the decision to center in-game progression around loot boxes was far from being a smart move, especially counting that they had to remove it even before the game was released for everybody. Attracting too

⁴⁹ Electronic Arts (2018)

⁵⁰ TheHotterPotato (2017)

⁵¹ Schreier, J. (2017)

⁵² Schreier, J. (2017)

much negativity to the “Star Wars” brand is even more dangerous since theoretically, there is always the danger of Disney revoking the “Star Wars” license based on damaging the brand’s reputation.

There are plenty of reasons why “Star Wars Battlefront II” failed and “GTA Online” succeeded but the most important one is the attitude to players. “Battlefront II” used them as a resource, making them pay for more fun in return, whereas “GTA Online” just keeps giving more and more content, patiently waiting for the player to give money if they *want* to do it *themselves*.

3.4. “Metal Gear Solid V: Ground Zeroes”

Metal Gear Solid V: Ground Zeroes (further – “Ground Zeroes”) is perhaps the most unusual case in this work. On one hand, it falls into the “medium-priced” category, however, on the other hand, there is so much more to this game. It is also a game that, I think, developers can learn from.

“Ground Zeroes” is a \$30 (\$20 digital and \$30 physical for PlayStation 3 and Xbox 360; \$30 digital and \$40 physical for PlayStation 4 and Xbox One) prologue to another game – “Metal Gear Solid V: The Phantom Pain” (further – “MGS V”). It came out a year and a half before “MGS V’s” September 2015 release. That is right, “Ground Zeroes” is not really what you expect from a game. It has the quality of a AAA game, with corresponding production standards and a hefty price but a very short length. It can be said, that “Ground Zeroes” works as an extended demo for “MGS V”. A demo because it has all the mechanics, interfaces, characters and plot “MGS V” has, you even can transfer your game save files to “MGS V” to receive exclusive in-game items. An extended one because it offers one approximately 2-hour long exclusive story mission and a handful of side-missions that take place on the same, relatively small location. The catch is that the demos are supposed to be free but “Ground Zeroes” cost \$30 on average. It created an interesting situation in my opinion, where both players and developers ended up being satisfied.

Let’s start with discussing how it satisfied players. The “Metal Gear” series originated in 1987, and since then many games from it have become iconic. The release of “MGS V” was an awaited one. The last console installment of the franchise came out in 2008 for the PlayStation 3, so not only “MGS V” was going to be first “MGS” game in a long time but

also first “MGS” game released for new-gen consoles. The fans and players, in general, were excited to dive into the world of “Metal Gear” once again. “Ground Zeroes” offered them that exact chance more than a year ahead of “MGS V’s” launch. Moreover, its plot was actually valuable for the lore of “MGS V”, which meant that it was not just a sandbox for testing out “MGS V’s” mechanics – it was an important part of “MGS V” experience. Nevertheless, the opinions of critics and players were not homogeneous. Ones were giving the game high scores,⁵³ others were calling it a “cash grab”.⁵⁴ For some players, especially the ones not emotionally invested into the “Metal Gear” franchise, even \$20 is a lot to ask for 2 hours of cinematic story and a couple of extra mission, all taking place on one small map. For others – it is an opportunity to satisfy an urge to get new “Metal Gear” experience while waiting for the next game to arrive.

Konami’s position is more clear. They were able to raise money while pretty much not trying too hard. Yes, the game turned out to be good but if you compare the amount of content in \$30 “Ground Zeroes” and \$60 “MGS V”, the latter is tens times bigger in terms of content, while having a price that is just twice as big. Also, it should be considered, that “Ground Zeroes” was built using the same tools, technology and assets as “MGS V”, meaning “Ground Zeros” was not build from scratch and required smaller investments. In a way, it was a “reverse DLC” – additional content for the game that is released before the game. It was able to earn Konami money, make everybody talk about “Metal Gear” ahead of the “MGS V’s” release, entertain fans and probably attract new audiences too.

In my opinion, that could be done with other games as well. Releasing a small game ahead of the main game’s release can do wonders. It promotes the main game and makes you money at the same time. Newcomers can buy that game to check out how it plays and see if they would want to invest in the main \$60 game, while still making you money. Making a small game like “Ground Zeros” can be really efficient if production is managed correctly. It can even be considered as a promotional campaign, where not all money goes into ads – some of it is spent on development. Not every game can afford th release such “paid demo” – it might not be compatible with the kind of that game. Maybe there is no brand power – people would care much less about a “paid demo” from an unknown studio. Big publishers, however, could do that trick more often. It is risky – yes, yet when done well, it could be quite rewarding.

⁵³ Robinson, M. (2014)

⁵⁴ Frushtick, R. (2014)

3.5. Telltale Games

In this chapter, I am not analyzing any specific game. Instead, I am looking at all the games from Telltale Games, released in the last 5 years or so. All their recent games are quite similar in gameplay and monetization model. Telltale is known for their episodic games. I have already mentioned that studio before in chapter 1.3 and that is because it is nearly impossible to talk about episodic games and not talk about Telltale. While I cannot say Telltale created that type of games, they unquestionably made it popular and in a way monopolized it.

What is so special about Telltale's games and does the episodic formula deliver? It really depends on who you ask. The "Telltale formula" is simple: every game is broken into episodes, the choices you make during the game matter and determine the outcome, decisions carry over from episode to episode, the gameplay is usually simple and the graphics are not sophisticated as well. All games have similar mechanics and visual style and that is why I have said that they are fairly similar. The main drivers for the games are the plot and various licenses like "Back to the Future", "Minecraft", "The Walking Dead", "Batman" and even "Game of Thrones". The games are usually released on mobile as well, likely without much troubles or costs since the games are not technologically complex and do not require drastic changes. Episodes are released every month or two and when all are out the physical copies of complete seasons are released. Telltale releases a lot of games by current standards. As of April 2018, they have 3 games in development. Telltale has become the go-to studio for casual games who want to enjoy interactive stories with their favorite characters and people who like story-based games, or point-and-click adventures, which are not really made by anyone today. They are catering to a massive audience of casual players who are not accustomed to complex mechanics and people who like very specific type of game at the same time.

So why are they keeping making episodic games and not switching to traditional release format? This question is not that easy to answer but I will try. To begin with, there is still that aspect of "simplified development" I have mentioned in chapter 1.3. Perhaps it is, in fact, easier for Telltale to have five release dates instead of one and work towards several goals, particularly taking the number of projects they are working on at once into account. Furthermore, the barrier of entry for each episode is low, which helps them to attract more casual players or even people who do not typically play but might be interested in spending

a couple of dollars on an interactive “Batman” story they could play on their phone while on the bus. Most importantly, it seems to me that the episodic format has become their trademark, their distinctive *feature*. Many people *expect* an episodic game from Telltale and that expectation is working out well for them. They are the biggest supplier of episodic games in the industry and that means something.

Unfortunately, there is also a problem with Telltale’s game and I have mentioned it several times – their games are bland and similar. To add to that, Telltale has a big problem with their engine – their tools do not allow them to make better optimized, better animated, better-looking games.⁵⁵ They have tangled in their complex release schedule and a variety of projects, which does not give them enough time to improve their technology. I can only assume that they have to push out many projects to stay profitable since their games are selling at a relatively low price (around \$25 per season for a digital copy). That release schedule and that model does not allow Telltale to take time innovate their formula and technologies. That is also related to one of the biggest issues of the episodic formula – it restricts game design.

Telltale’s demonstrates how well that model can work and at the same time it tells us how not to do episodic games. A better, more modern approach can still be found, and some developers are working to improve the episodic formula. Take “The Council”, for instance. It tries to implement more role-playing elements and deeper gameplay mechanics while costing just \$30 per season. Unfortunately, Telltale Games are yet to re-think the way they make games before the number of mediocre reviews and “All their games are the same!” comments takes a critical mass. After all, the biggest advantage of Telltale is their licenses to popular franchises, and these can be taken away if their products will continue to stagnate.

3.6. “Overwatch”

Just like the game discussed later in that section, “Tom Clancy’s Rainbow Six Siege”, “Overwatch” was born from the ashes of a different Blizzard game, codenamed “Project Titan”. Little is known about it but it was mentioned several times by people from Blizzard that several concepts and even characters made their way from “Titan” to “Overwatch”.

⁵⁵ Klepek, P. (2017)

It is impossible to say why the game was canceled. One of the ideas I have is that considering that the rumors about “Titan’s” development began way back in 2007, it was developed with different realities in mind. No streaming, no YouTube, no massively popular non-MMORPG multiplayer games, no microtransactions. Blizzard’s games are known to have exceptional quality standards. They are also not strangers to online games, actually, all their games since the emersion of “World of Warcraft” in 2004 were mainly multiplayer games. Out of all AAA publishers, they were perhaps the most experienced in online gaming. Knowing that it is possible to assume that “Titan” was either not meeting “Blizzard’s” high quality standards or the new realities and trends in online space made “Titan” obsolete in Blizzard’s eyes. “Titan” was canceled in 2014, after 7 years of development.⁵⁶ Cancellations like that are not so common for the industry. The game must have been in full production at least for a half of that period, was there a long pre-production period. That was a sign of big losses on Blizard’s side. Nonetheless, Blizzard made a decision to salvage whatever they could and left a small team of roughly 40 people to brainstorm and come up with a new project. That project was, of course, “Overwatch”, released in May 2016.

Table 2: Top 10 PC Games of 2017 In Terms of Revenue

Rank	Name	Publisher	Revenue
1	PlayerUnknown’s Battlegrounds	Bluehole	\$714M
2	Overwatch	Activision Blizzard	\$382M
3	Counter-Strike: Global Offensive	Valve Corporation	\$341M
4	Destiny 2	Activision Blizzard	\$218M
5	Grand Theft Auto V	Rockstar Games	\$118M
6	Battlefield 1	Electronic Arts	\$113M
7	Minecraft	Microsoft Studios	\$92M
8	Guild Wars 2	NCSOFT	\$87M
9	Divinity: Original Sin 2	Larian Studios	\$85M
10	Tom Clancy’s Rainbow Six Siege	Ubisoft	\$67M

Source: SuperData Research⁵⁹

⁵⁶ Kollar, P. (2014).

Even before it was officially released, “Overwatch” showed its ambitions to everybody when it accumulated 9,7 million players in one week of free open beta.⁵⁷ Today, “Overwatch” is one of the most popular games in the world. It is the second most-watched game on Twitch and YouTube at the time of writing.⁵⁸ It reportedly reached \$1 billion in sales in Q1 2017, making it the fastest growing Blizzard game.⁵⁹ In 2017 overall, as seen in *Table 2*, “Overwatch” was the second most successful PC game in terms of revenue, yielding the first place to the phenomenally successful “PlayeUnknown’s Battlegrounds”, earning \$382 million, and leaving even the ever-present champion “Counter-Strike: Global Offensive” behind.⁶⁰ Most recently, in October 2017, it was announced via the official “Overwatch” Twitter account that the total player base of “Overwatch” on all platforms reached 35 million.⁶¹ That success is clear of you break down what exactly “Overwatch” is.

First and foremost, “Overwatch” is a “Blizzard game”. I have already mentioned that Blizzard’s games have one of the highest quality standards in the industry. All of their major IPs, which include “Diablo”, “Warcraft”, “Hearthstone” and “Starcraft” are well-known and respected by critics and players alike. People expect certain levels of polish and support for all Blizzard games and they usually deliver. Next, “Overwatch” was a new IP for Blizzard since “Starcraft” in 1998. Those two factors made the industry very excited. Those two factors greatly affected the game’s popularity and I have not even started talking about the game itself. “Overwatch” is in its core an online-only 6v6 “hero shooter” with various game modes. It is not nearly as tactical as “PlayeUnknown’s Battlegrounds” or “Tom Clancy’s Rainbow Six Siege”, which are discussed in this work and occupy spots in *Table 2*. The gameplay is more casual-friendly, which opens the game to a much broader audience. “Hero shooter” is a genre popularized by “Team Fortress 2”, which came out in 2007. Every character in that type of game has their own set of weapons and abilities. Every team has to pick 6 heroes with different roles and find the best strategy to win. At launch, “Overwatch” had a diverse roster of 21 heroes. Those exact heroes, to my thinking, were the foundation of the game’s success.

⁵⁷ Blizzard Entertainment (2016)

⁵⁸ Newzoo (2018)

⁵⁹ Grubb, J. (2017)

⁶⁰ Rodriguez, V. (2018)

⁶¹ Crecente, B. (2017)

Image 10: Original “Overwatch” Heroes



Source: blizzard.gamespress.com⁶¹

Since the beginning, the heroes were a big part of the game. I am not talking about mechanics, weapons or abilities. Surely, the gameplay in a game matters a whole lot but “Overwatch” did something outstanding. At the first glance, it is noticeable that the roster, seen on the *Image 10*, is pretty diverse. It contains characters of many nationalities, skin colors, age and cultural backgrounds; some of them are not even humans. By delving deeper into the game’s lore, players can also find out that characters have very different personalities and sexualities which is important in the current political climate. The character Symmetra, an Indian scientist, is even officially autistic. In the era when not just games but many movies too fail to represent a large number of people, when video games are still associated with overly muscular killing machines by many people, “Overwatch” delivers something truly special. Before and after the release of the game Blizzard were giving out information about the game’s characters, they were trying to make them as relatable and “alive” as possible. They have released several short digital comics, which were later made into an anthology and released on paper, and were even planning a full-length graphic novel. The latter was, however, scrapped due to Blizzard changing the story of the “Overwatch” universe. It shows how devoted and careful they are with the world of “Overwatch”. The most eminent side products of “Overwatch” are definitely the animated shorts.⁶² These six-to-ten-minute-long animated short tell short stories about different “Overwatch” characters. They have an outstanding, almost Pixar-like, quality and feel.

⁶² Blizzard (2018)

Those shorts might have cost Blizzard hundreds of thousands of dollars each, perhaps even more, although it is hard to estimate the cost of something as variable as animation. They are even considering making a full-length animated picture about “Overwatch”,⁶³ which would not be a surprise since there is already a “Warcraft” movie. Blizzard were making impressive high-budget 3D animated shorts before, however, they were never as fitting for the cause as they are for “Overwatch”. As the game is so character-centric, gameplay and aesthetically-wise, these shorts provide even more substance to the characters. Blizzard’s efforts really paid off, considering how much the community loves and cherishes their favorite characters. Each important story reveal is highlighted by major gaming news outlets. The voice actors for the characters are frequent guests on different gaming conventions too, as they embody characters’ spirits, posing as real-life counterparts. “Overwatch’s” influence has even spread to one of the most unexpected places – the porn industry. In May 2016, Pornhub, a leading pornographic video sharing website, published an article, dedicated specifically to “Overwatch”-related content. They analyzed the search data and released several infographics, one of which illustrated a major increase in “Overwatch” searches – 817%.⁶⁴ That article was picked up by a plethora of news websites. Pornographic content related to games is in no way a new occurrence, yet “Overwatch” was able to take it to new heights. It became so popular and in many cases high-quality, that Blizzard had to fight with some producers of it, namely the people behind a Playboy-like digital magazine “Playwatch”. They sent them a copyright claim demanding to cease the issuing of the magazine.⁶⁵ That case proves my idea once again: Blizzard did an exceptional job designing “Overwatch” characters and making them feel alive. Creating a diverse cast a deliberate move to attract a broader audience, show that their game is truly for everybody. Was it done only for that, though? How is all that I have described related to monetization of the game? I strongly believe that the connection is very strong. And here is why.

The game itself is sold for \$40. That move is very clear – “Overwatch” is a multiplayer-only game, featuring a very specific type of experience and not a huge amount of content at launch, compared to some other games, like “GTA V” and “Witcher 3”. That decision also makes the game more accessible. From the very beginning, Blizzard treated “Overwatch” as a living product. For multiplayer games, continuous support is necessary to keep the environment fresh at all time. With “Overwatch”, it may be argued, that Blizzard took

⁶³ Tassi, P. (2017)

⁶⁴ Pornhub (2016)

⁶⁵ McKeand, K. (2017)

that idea to a new level. Thrice a year Blizzard was adding new characters to the game. Every three or so months, players were treated with seasonal events, related to holidays like Halloween or Chinese New Year, or events tied to the world of “Overwatch”, or even the 2016 Olympic Games. During these events, players were able to earn various limited-time items, and here is where we finally reach the connection between the game’s monetization and importance of characters. There is only one other thing you can buy besides the game itself – “loot boxes”. They can be earned for free by playing the game. Since the inclusion of Arcade mode in late 2016, players are able to get 3 boxes per week for every 3 wins and also a box for every level up, which happens roughly every hour. From my personal experience, that number of free “loot boxes” seems fair and I never felt that I am pushed to spend real money. I have not seen many players complaining online and on the internet as well. So what is inside those boxes and why Blizzard feel so confident in their product that they do not think they need to push you? Costumes, voice lines, emotes, victory poses, highlight intros, sprays, in other words – a lot of items designed to customize characters in many ways. How they look, how they move, what they say, how do they stand after a match ends, how you are presented if you get the play of the game. Blizzard provides many ways to make you feel that you are playing as *your* Tracer, *your* Zenyatta, *your* Winston. The comics and animated shorts also come to play. You want your character to say a voice line from them? Try to get it from the “loot box”. Where that model really shines is during those seasonal events I mentioned before. As you have limited time to earn that awesome Chinese dress for you favorite Mercy, icy Pharah armor or new cute Zarya emote, you either have to play a lot more during the event or start spending real money. Since “loot boxes” always award you with random items you never know how many you need to open to get what you want. The better a costume looks, the highest rarity it has. Naturally, items with higher rarities, show up less often. To add to this, all items could be bought with in-game credits, which also could be received from “loot boxes”, and it gives players an opportunity to buy what they want, not simply continuing to open “loot boxes” expecting their desired item to be dropped. Seasonal items cost more credits, giving them a more premium feel and making them harder to acquire. As I established, Blizzard makes sure that players are engaging with characters on a regular basis even when not playing the game. They developed a very intimate relationships between the characters and the community. For the community, a new dress for Mercy is not only a way to look cooler while playing. It is a way to make the character they like, the character whose emotions they felt when reading a

comic or watching shorts, their character they personally can relate to look cooler. That intimate connection was not cheap for Blizzard but all those comic and shorts definitely paid off. As the game continues to dominate the multiplayer scene, more and more events happen and characters added to the game. Every time players do not only get a set of new mechanics with a unique weapon and look – they get a new family member to care about, to discuss, to dress up or to include in their art; and Blizzard gets another opportunity to sell more “loot boxes”.

“Overwatch” demonstrates that “loot boxes” can be loved by the players, that the game can provide free content updates for years and yet be fully funded with the help of micro-transactions. Most importantly, “Overwatch” gives an example how a well thought out creative approach can work in tandem with cold-blooded business decisions.

3.7. “Final Fantasy XIV: A Realm Reborn”

“Final Fantasy XIV: A Realm Reborn” (further – “ARR”) is not only a game that showcases how to handle paid subscriptions in the 2010s, it is a great example of how a failed project can be revitalized when the publisher strongly desires so.

“FFXIV” was initially released for PC in 2010. This game was Square Enix’s second attempt to take the “Final Fantasy” universe to online space. The previous “Final Fantasy” MMORPG came out in 2002 for PC and PlayStation 2 and on Xbox in 2006 meaning that “FFXI” predates the king of MMOs – “World of Warcraft”, which saw the light of day in 2004. It was announced in 2012, that “FFXI” was the most profitable “Final Fantasy” game ever made at the time.⁶⁶ After receiving great reviews post-release and being supported with updates and new content expansions all the way until 2015, “FFXI” is regarded as one of the best MMORPGs ever made and is still alive and played to this day. As with any other project – “FFXI” is not eternal. Now it looks very old and feels very old. Square Enix knew that they need a successor and started the development of the next MMO Final Fantasy in 2005. In 2009, “FFXIV” was announced for PC and PlayStation 3. Just like its predecessor, “FFXIV” was going to utilize the subscription model. 2010 was, in my opinion, a pivotal year for MMOs and subscription-based games. That year marked the

⁶⁶ Moriarty, C. (2012)

beginning of a slow decline of “World of Warcraft’s” player base.⁶⁷ “FFXIV” was developed and released before the rise of mobile and free-to-play MMOs, which meant that at the time the subscription model was still very much relevant. The monetization role, however, had nothing to do with “FFXIV’s” massive flop. When the game was released it was unplayable. Full of bugs, graphical glitches, UI problems and shallow mechanics, “FFXIV” was a huge departure from what “FFXI” was able to achieve. One of the key problems of the original version of “FFXIV” was Square Enix’s obsession with graphics. They decided that incredible graphics would be a sufficient selling point, that would allow them to conquer the MMO market with the power of Final Fantasy brand and graphics alone. That was actually acknowledged by the director of the game Naoki Yoshida during his Game Developers Conference 2014 talk.⁶⁸ One of the slides of his presentation was named “Three Easy Steps to Failure” and it featured three key mistakes Square made during the development:

- “An unhealthy obsession with graphic quality”
- “A surprising lack of MMORPG knowledge amongst development team members”
- “The mindset that the solution to every problem could be patched in a future update”

Ironically, all three issues reflect the most common problems of the gaming industry of today. “FFXIV” in its original state was supported for a little over a year. In classic Japanese fashion, Square Enix did not want their reputation to take a massive hit, so they started working extra hard on fixing the game. What they ended up was one of the greatest comebacks in gaming and one of the best MMORPGs.

First released in 2013 on PC and PlayStation 3 and later on PlayStation 4 in 2014, “ARR” was basically a whole new game. All of the old problems were mostly gone, mechanics polished and graphical issues fixed. After 3 years of extra development time, “FFXIV” was indeed reborn. Since the release, the game got two major expansions, both of which were critically acclaimed as well. Currently, the game sits at 86 on Metacritic.

Let’s transition to the centerpiece of this case study – the subscription model of “ARR” and how the game was able to pull off growing in popularity while not getting rid of subscriptions in favor of trendy free-to-play. Back when it first launched, Square Enix wanted

⁶⁷ Vas, G. (2015)

⁶⁸ Yoshida, N. (2014)

to captivate the audience with the game's visuals. MMO games were never known to have great graphics nor did they ever need to. It was always a very specific genre for very specific types of players looking for a very specific type of experience. MMOs, despite their seemingly large multimillion audiences, never found mass appeal. It is a genre associated with repetitive gameplay, steep learning curve and a necessity to cooperate with others. Most likely blinded by "FFXI's" success, Square Enix aspired to make their next MMO more casual-friendly. With the initial release, Square chose to achieve that with the power of "Final Fantasy" brand and the best visuals on the MMO market. That, as I have explained, was not the best idea. Immediately after Square recognized their failure, they shifted priorities from graphics to two simple things: story and gameplay. It seems baffling why such fundamental concepts were largely ignored during the initial production. The story in the context of MMORPGs is especially interesting. While having engaging gameplay in a game is a no-brainer, having an engaging story is a much more specific need, dictated only by the direction a game wants to take. Square was on the crossroads: MMOs are not exactly the best storytellers, unlike the "Final Fantasy" games, whose stories are remembered for decades. "ARR" was from the beginning a way of restoring Square's reputation and cleansing the "Final Fantasy" name. As a result of a series of decisions it was decided that "ARR" should not try hard to be a great MMO – it should try to be a great "Final Fantasy" game first. That decision is directly related to the game's model and in a good way.

The game itself costs \$20 and includes a 30-day free trial. After that players have two options: renew their subscription or play for free until they reach level 35. That level cap is very specific since many of the game's most exciting features become available when level 30 is reached, meaning that players get a small taste of what is to come, without actually being given enough to continue enjoying the game for free. The 60-day subscription costs \$30. In addition to that, the latest expansion "Stormblood" can be bought for \$40 and it includes the previous expansion – "Heavensward". In other words, buying the game and the expansion for the best experience would cost you \$60, just like buying a AAA full-priced game. Then every four months you are spending \$60 total on subscription, making you essentially "buy" a new "Final Fantasy" game on a quarterly basis if you want to continue playing. Is that kind of investment worth it? Well, considering that in August 2017 Square Enix announced that the total amount of players hit the 10 million mark – many people think that it is.⁶⁹ I must note, that not all players out of those 10 million regularly

⁶⁹ Batchelor, J. (2017)

spend on the subscription or spend on the subscription at all but at least all of them must have purchased the \$20 starter pack. The biggest reason for players to return is the story of “ARR” and its expansion. Some even called it the “best story among all “Final Fantasy” games”.⁷⁰ The game managed to feel like a classic “Final Fantasy”, it does not even demand you to interact with other players. It could be played as a single player RPG, where real players just happen to sometimes run by. And that is the game’s main strength. By paying for subscription players get access to legitimately big amounts of high-quality content, vast living world and signature “Final Fantasy” story. “ARR” also features microtransactions but they are cosmetic-only and totally non-obtrusive. With the help of continuous revenue streams, Square is able to support the game, make sure it maintains its high quality and develop new massive expansions. Speaking of expansions, Naoki Yoshida compared them to seasons of a TV show.⁷¹ Each major expansion released marks the beginning of a new “season”, and content updates in between the expansions are the episodes. That approach is also beneficial and loved by the players, as they always get new content and are stimulated to return to the game.

Unlike many other games in this chapter, the creative decisions and the direction of the game dictate the model and not the other way around. Subscription model was already rare and more or less irrelevant in 2014, let alone in 2018, yet with the help of the new direction “FFXIV” took, Square was able to make a product that raises no questions regarding its price or model. They exemplified how story could be the best assistant in making the game long-playing. Modern gameplay trends of MMOs were combined with original ideas to create a game that is fun to play, but the quality world, where players exist is what forces them to come back. I feel like the importance of narrative is incredibly underestimated in living games. Later you will find how the “Destiny” series struggled with that aspect. Looking back at “ARR” lets you to truly appreciate its place in the gaming industry.

⁷⁰ Nelva, G. (2017)

⁷¹ Batchelor, J. (2017)

3.8. “PlayerUnknown’s Battlegrounds” & “Fortnite”

For this case study I am not picking one game but two. Both games are extremely similar in substance, having very alike gameplay and core ideas, nevertheless, managing to appeal to polar audiences, and most importantly for us – different monetization models. These games are “PlayerUnknown’s Battlegrounds” (further – “PUBG”) and “Fortnite”.

“PUBG” took over the gaming world not long after its release. “PUBG” is a game fully centered around one game mode – “battle royale”. 100 players are dropped on the map, forced to acquire gear, scattered all over the place, and battle each other on the ever-shrinking area; the last one standing wins the match. That game mode was not invented by “PUBG” but the lead designer of the game, Brendan Greene was directly involved in the genre development. Knowing how the game works, even superficially, is critical for understanding the game’s success and the “battle royale” phenomenon as a whole. It came out in March 2017 in Steam Early Access for \$30. While in beta, it lacked some features and was receiving regular content updates and fixes. The game preserved its price tag even after the final full release in December 2017. Along the way, Bluehole, the Korean studio behind “PUBG” has also added “loot boxes” to the game, triggering a lot of negative feedback.⁷² Those award to the players every now and then but require a digital \$2.50 key to unlock. The items from these loot boxes can be later sold on Steam Marketplace which was described in chapter 1.8. And now, the pivotal part – as of April 2018, “PUBG” has sold over 30 million copies on PC alone, likely making it the most sold PC game ever,⁷³ (only rivaled by “Minecraft” but its exact PC sales are unknown) and became the most played game on Steam with 3,236,027 concurrent players all-time peak, surpassing the previous champion, “Dota 2”, and tripling its 1,291,328 concurrent players record.⁷⁴ Since October 2017, “PUBG” hold the second spot in the top played PC games list.⁷⁵ It has to be noted, that the game is also available on Xbox One since December 2017.

With that information on the table let me attempt to figure out how that happened. First and foremost – the gameplay. In the beginning of this chapter I said that it is important to know what the game is about and reason for it is that “PUBG’s” core gameplay single-handedly earned it its crown. The game is simple and accessible at first, yet tremendously

⁷² Hall, C. (2017)

⁷³ Hall, C. (2018)

⁷⁴ Steamcharts (2018)

⁷⁵ Newzoo (2018)

challenging if you want to get really good at it. It offers enough variety and yet remains consistent and familiar. Another aspect that really aided it is how *watchable* the game is. The game does not require viewers to understand everything that is going on, unlike some other competitive games. Pick “Dota 2” or even “CS: GO” for example: the first one wants you to know what the characters do and does not offer any explanations; the second is highly tactical and fast-paced – there is not enough time to tell a viewer what the strategy is and how it is going to be executed. “PUBG”, on the contrary, doesn’t need you to know how it works and the main goal – survive – is self-explanatory. It is a multiplayer game, which means that all interactions with other characters are interactions with real people, making the game more exciting for both viewers and players. In the age of streaming, I highly doubt that Bluehole were not counting on that during development and not designing the game with streaming in mind. Just like with any other game – streaming is free advertisement. Popular streamers pick up the game they heard is good and start broadcasting it to their sometimes multimillion audience. That was especially important for “PUBG”, as the game, despite being developed by a renowned modification-maker, was still comparatively small in terms of its public awareness. Bluehole is also not a new studio, being founded in 2007, and certainly not very small, considering that previously they were working on two MMORPGs “Tera” and “Devilian” and this type of games is not easy to develop. Last but definitely not least is “PUBG’s” price. The game is multiplayer-only and offers one game mode and does not come from a major publisher, like Ubisoft or EA. Based on those three factors alone, the game cannot be sold for full \$60 as it would cause dissatisfaction and customers would consider it a ripoff. At \$30 the game is much more accessible and fairly priced and, I reckon, has it cost somewhere in the \$20 range, it would be perceived as a game of a lesser quality, according to some customer’s prejudices. Affordability is tightly related to how interesting it is to watch since every person that watches streams or videos with that game is a potential customer. Having an accessible price can win you a big number of people in that situation. It is likely, that “PUBG” has reached its critical mass; the sales have already started to flatline and player counts to fall.⁷⁶ I consider the introduction of microtransactions to be a way to make up for slowing revenue inflow. Bluehole could not rely on sales alone anymore since the majority of PC and Xbox players had already purchased “PUBG”, so additional ways of monetization must have really helped them. Not including “loot boxes” from day one is also a great reputational move since at the begin-

⁷⁶ Hall, C. (2018)

ning, when it was growing very quickly, “PUBG” was immune to any kind of criticism directed at microtransactions. In the end, the controversies surrounding “loot boxes” in “PUBG” died down, mostly because it was a false alarm. Bluehole did a smart move by including items that are actually disadvantageous for the players – the additional clothing items on offer often are too colorful or making your character look bigger, meaning you are easier to be spotted and killed by your enemies. As I said in chapter 2 – microtransactions which make you wonder about reasons for their existence are the best kind of microtransactions. They still find their audience and bring you income, at the same time not affecting your brand or company image in any way. Also, some of them are being bought on Steam Marketplace for hundreds of dollars, signifying the presence of demand even for something that makes your character more vulnerable.

Closer to the end of 2017, another game was released and blew up just like “PUBG”. That game was also a “battle royale” game under the name of “Fortnite Battle Royale”. However, the story of “Fortnite” is much more complex. Actually, “Fortnite Battle Royale” is not a separate game but a part of a game simply called “Fortnite”. Developed by Epic Games, an iconic development studio which is also responsible for the creation of one of the most commonly used game engines “Unreal Engine”, which even “PUBG” uses. Even without discussing the game itself, we are seeing stark differences between “PUBG” and “Fortnite”. Unlike “PUBG”, which was just released without long marketing campaigns, expo presence, announcements or many people knowing who Bluehole or Brendan Greene are, “Fortnite” was initially announced in 2011. Back then, I assume, it was Epic Games’ attempt to compete with ever-growing “Minecraft”, which was out of beta in 2011 and was turning the game industry and media platforms, like YouTube, upside down. The trailer was depicting people building using scavenged materials but nothing much was known until several years later. “Fortnite” was appearing here and there between 2011 and 2017, changing its form, finally being re-announced and released as an early access game in the summer of 2017. The reasons for such a long development are not publicly known. My theory is that they were bouncing from one idea to another, striving to find something relevant and significant, while working hard on the engine and some other projects, like “Unreal Tournament” and “Paragon”. It is very likely that Epic Games have a lot of passive income from licensing their engine to third parties in return for a share from sales, so they could financially afford not to rush the development of “Fortnite” and wait for the right moment.

Epic Games decided to make a bold move with the release of “Fortnite”: they announced that the game is coming out in 2018 but players can buy the early access version. There were four editions at first but correctly there are only two: “Standard” for \$40 and “Deluxe” for \$60; the only difference is that with “Deluxe” players get additional items. The interesting part is, that “Fortnite” is supposed to become free for everybody after its release in 2018. All that was happening before the emergence of “Fortnite Battle Royale”. Now, it is time to briefly mention “Fortnite’s” gameplay. The original game is an online cooperative experience. Players unite to complete missions together and fight monsters. The main focus of the game hasn’t changed since its 2011 reveal – it is all about scavenging for resources and building traps and various structures. That was the game on offer for \$40. Just two months have passed since “Fortnite’s” July release before Epic Games unleashed their answer to probably the most popular game at the time – “PUBG”. In September 2017 “Fortnite Battle Royale” was released as a part of “Fortnite” – both games used the same launcher, which is free to download. “Fortnite” still required people to buy one of the paid editions but “Fortnite Battle Royale” was free for everybody and that was a game changer. Coincidence or not, “Fortnite’s” core mechanics were a perfect fit for a “battle royale” game. It resembled “PUBG” a lot while having a third-person view only, no transport and building that is heavily utilized in the base game. It was also more casual than “PUBG” and in my opinion, bright colors and cartoony visual style make “Fortnite” more pleasant to watch for younger and more casual audiences. So, it was free-to-play, more casual in its mechanics while providing an ability to build, and more visually attractive to a broader audience. To make up for its cost of \$0, Epic Games included already familiar cosmetic microtransactions. On top of that, players can purchase a \$10 seasonal “Battle Pass”. A season is a 2-month long event during which players can unlock season-exclusive content, which is unlocked by playing the game. The “Battle Pass” offers many other perks, making playing the game more enjoyable. “Fortnite” is also available on PlayStation 4 in addition to PC and Xbox One, which “PUBG” is also released on. On top of that, both games have mobile versions, which are the exact copies of their console and PC counterparts, except for downgraded graphics, and both are free. “Fortnite” on mobile, which is in fact “Fortnite Battle Royale” without the cooperative mode, despite it being simply called “Fortnite” on that platform, even allows you to transfer your progress from other consoles. Immediately after its release on iOS on April 1, it became a massive hit and on April 19 it

was reported that the game has already earned \$25 million, making it the top-grossing mobile game at the time – all with the help of microtransactions.⁷⁷

Speaking of revenue, here is where free-to-play shown its potential. As of March 2018, “Fortnite Battle Royale” has surpassed “PUBG” in revenue, total player base, Twitch views and the number of concurrent players.^{78,79} “PUBG” is still played by a lot of people and the Chinese market prefers it over “Fortnite”, not without the help of Tencent, one, if not the biggest Chinese IT company and the biggest publisher in the world,⁸⁰ with which Bluehole has signed partnership. Currently, “Fortnite Battle Royale” has taken the lead and continuing its steady growth. It has also penetrated western pop culture: several American football players and other sportsmen were acting out various “Fortnite” moves and most notable, the rapper Drake has appeared on the live stream of a famous streamer under the nickname “Ninja” causing all kinds of non-gaming publications to write about “Fortnite”. The fact that “Fortnite Battle Royale” is a part of “Fortnite”, which still remains to be a \$40 game is also working as a tool to attract more people to “Fortnite” and spend those additional \$40. “Fortnite” has become such a hit that Epic Games decided to stop working on their another project – “Paragon” – the game that went through many stages and changed drastically since its release but was overshadowed by “Fortnite’s” success. Perhaps its further development did not make much sense for Epic Games.

So here we are: two immensely similar games made by different studios and two vastly different models. “PUBG” cannot be called a loser but now it is definitely not a winner. Free-to-play reigned supreme, propelling “Fortnite” to rarely seen before cultural status and microtransactions did their work as intended. “Fortnite Battle Royale” started as a “side project” and ended up surpassing the main game and obliterating the competition.

⁷⁷ Nelson, R. (2018)

⁷⁸ Brian, M. (2018)

⁷⁹ SuperData (2018)

⁸⁰ McWhertor, M. (2013)

3.9. “Ark: Survival Evolved”

“Ark: Survival Evolved” (further – “Ark”) is a controversial game. Nearly all of the controversies surrounding it stem from the fact that “Ark” used to be an early access game. It is not one anymore, as it was finally out of beta in August 2017, followed by the physical release. “Ark” is not simply an early access game. It is an example which depicts everything that is wrong with that model from the customers’ view yet poses as an example for various stakeholders of what this model can achieve.

To start with, why is “Ark” glorifying the early access model? “Ark” is to this day the most successful early access game ever released on Steam. Selling 1 million copies on PC in its first month after 2015 release, “Ark” brought its developers Studio Wildcard around \$10 million in the first week only.⁸¹ That sum of money is rarely mentioned in the context of first week sales of an indie game. Jesse Rapczak, one of the founders of Studio Wildcard, said that the development cost was \$1.5 million leading to the release, meaning that they made \$8.5 million in gross profit just one week after the release.⁸² For perspective, the other two very popular early access games of the same genre at the time, “DayZ” and “Rust”, reached 1 million copies sold month and two months respectively after their December 2014 release.⁸³ However, it has to be stated that “Rust” was selling for \$20, unlike “Ark” and “DayZ” which were selling for \$30. In addition to that, “Rust” was a game from the renowned developer behind the iconic “Half-Life 2” modification “Garry’s Mod”, whose total sales for 9 years were surpassed by “Rust” only 3 months after its release.⁸⁴ “DayZ” was also a game with a pre-existing audience, as the game used to be a successful modification for “Arma III” before becoming a standalone game. “Ark” had none of that. What made its rise to the top so quick?

Steam Early Access was crowded with “survival games” in 2014-2015. Games, where players are trying to find materials, craft new objects, build shelters, hunt and try not to die. They were also often supporting both single player and multiplayer, making people want their friends to get the game as well to play together. On top of that, those games were fun to watch, which as I have already established, can determine a game’s fate. Many of them have left Steam Early Access, like “Rust” or “Ark”, some of them are still in development

⁸¹ Handrahan, M. (2017)

⁸² Brightman, J. (2015)

⁸³ Grubb, J. (2014)

⁸⁴ Sarkar, S. (2014)

like “DayZ”, and many others were simply abandoned because of the lack of customer interest. I am not sure what was the biggest factor for emergence of survival games at that time and why many indie developers wanted to compete in that space. Most likely, they were inspired by “Minecraft’s” unprecedented success, which was described in chapter 1.6. Every survival game obviously tried to stand out, whether with the help of its unique mechanics, art style or setting. Studio Wildcard wanted to make a game that stands out too. “Ark” looked way better than many other early access games in terms of graphical fidelity. Studio Wildcard clearly wanted this game to be like a AAA product. Even from the first glance, its \$30 price tag seemed justified to an average consumer. Then there is setting: the game was combining dinosaurs with big uninhabited islands – “Jurassic Park” style, throwing futuristic technologies in the mix. When many other games were playing with zombies or forces of nature, dinosaurs were certainly fresh. Mechanics were the biggest pro and con of the game, however. “Ark” wanted to appeal to everybody – it was full of all kinds of systems and mechanics. Players had to invest a lot of time on learning the game and doing everything what the game demands you to do. The result of that complexity is actually not that obvious. “Ark” was full of all kinds of bugs and optimization issues, making the game a nightmare to play for some people. Studio Wildcard simply did not have enough people and desire to fix the game. They knew that the biggest drivers of sales, especially for an early access game which breathes with promises, are the content, the mechanics, the depth and the graphics. They believed in that rule so much so they have released the first ever major DLC for an early access game in gaming – “Scorched Earth” for \$20. On the surface, asking money for a new substantial portion of content is never unethical or greedy, after all money goes into making of that product. But that DLC was released for a game, still plagued with game-breaking bugs *one year* after its release. And once again, instead of fixing the foundation of a building, they decided to add more floors, hoping it wouldn’t collapse. Studio Wildcard valued short-term revenues over its reputation, exploiting the nature of early access. Of course, players kept receiving free updates for their game but the gameplay experience – the heart of every single game – was not getting significantly better.

Next, there was “Ark: Survival of the Fittest”. Initially, a modification which later became a separate free-to-play game, “Ark: Survival of the Fittest” was essentially a “battle royale” game a year before “battle royale” was the hottest trend in gaming. Studio Wildcard was even trying to create tournaments with cash prizes but the game didn’t take off. It was then reintegrated back in the game, making it impossible to play without having purchased a

copy of “Ark”. Yet again Studio Wildcard tried to release something that would attract new audiences, without making sure that the existing audience is satisfied with the product they have invested into.

In August 2017, “Ark” was finally released for PC and consoles (it was previously released in beta for Xbox One and PS4 in late 2015 and late 2016, Sony even had to compromise its “no early access” rule because it saw the potential of Ark). With that, came the price increase, and it was substantial – the game jumped from \$30 to \$60. And that doubling in price could be justified, especially counting that it was released on physical media. However, a “full release” is supposed to signify major changes. At least the game should be mostly bug-free after exiting the beta phase. Instead, once again, Studio Wildcard concentrated on delivering new content. Many players were displeased with their decision to double the price, however, it was said to be related to the physical retail release, which would not be possible was there a big price discrepancy between digital and retail copies. For “Ark” the transition to the full release was more of a formality and “food” for news outlets. In summer 2017, the player count for “Ark” was in the region of 9 million. As of April 26, 2018, “Ark” is the 11th most played game on steam.

“Ark” is nowhere a terrible game and it is evident by the players’ reviews on Steam.⁸⁵ It is unique and offers the amount of content some games could only dream of. It is made by a relatively new studio. However, their ways of marketing the game really make you think that they do not care enough about their existing customers. Even half a year after its “full” release and 2,5 years since the game’s launch, players continue to encounter bugs that ruin their experience completely.⁸⁶ With a paid DLC and a spin-off, the early access phase of “Ark” was too spastic. I was affected by this personally, as my decision not to buy the game was based precisely on the abundance of issues affecting the enjoyment of the game, regardless of its content; and I am not alone. Developing an early access game, more so a game the size of “Ark”, is challenging. Concentrating on your existing audience is also indirectly affecting potential customers, thanks to better feedback. In “Ark’s” case, potential customers might see the negative feedback floating around and not buy the game based on that. Studio Wildcard had many chances to redeem themselves and fix the game, however, it was either very hard to pull off technologically, or it was not on their list at all.

⁸⁵ Valve (2018)

⁸⁶ Spongehoe (2018)

3.10. “Destiny 2”

To understand the problems of “Destiny 2”, our analysis process should begin with the first part of the series. That context is crucial and it is making all the reasons for “Destiny 2’s” struggles more evident.

In 2010, Bungie, the studio behind the renowned First Person Shooter franchise “Halo”, began the development of a game known by a pseudonym “Project Tiger”. At the same time, they were no more under Microsoft’s control and were developing a multi-platform game, a very ambitious one for that time. They also signed a 10-year publishing agreement with Activision Blizzard. An agreement that implied the release of several games under the “Project Tiger” IP over the course of 10 years. An agreement, reportedly requiring a \$500 million investment from Activision Blizzard’s side.⁸⁷ “Project Tiger” later took shape of “Destiny” – a multiplayer-only RPG shooter and one of the first AAA service-games. The buzz surrounding “Destiny” before its 2014 release was massive. Just like “Overwatch” was a “Blizzard game”, which was a good reason to be interested in a game already, “Destiny” was a “Bungie shooter”. They have an impeccable track record of high-quality first-person shooters and the forthcoming release of a new one was thrilling. Then, there was the world of “Destiny”: an original universe, full of authentic characters, lore and locales. “Space magic” was the foundation of the “Destiny” universe. It combined sci-fi with floating alien wizards and the community loved that. Lastly, “Destiny” was supposed to be a shared-world game, meaning that players would be often accompanied or surrounded with other players even when they do not have an intention to play with others. It is very close to how MMORPGs work, only “Destiny” was a AAA shooter. Players would be given a chance to battle aliens alone or with their friends, earning new unique weapons and armor or play against each other. There were other reasons to be excited, like the fact that Paul McCartney was taking part in the creation of the game’s soundtrack. Then, the game was released in September 2014 for PS3, PS4, Xbox 360 and Xbox One.

The initial response was not bad at all. People liked the game. It was beautiful, new in concept, felt great like any other Bungie shooter. The only problem players pointed out immediately was the shallow story. “Destiny” was supposed to be cinematic and deep; players had a new universe to explore, after all. What they got was an unclear lackluster plot, close to no actual cinematic moments and a strange way of discovering the gamers story – it was

⁸⁷ Schreier, J. (2015)

locked in “grimoire cards”, accessible only via the bungie.com website and the “Destiny” companion mobile app. When the game was released, it was already known that Bungie would support the game with at least two \$20 DLCs, designed to prolong the “Destiny’s” lifespan. That intention sounded clear and justified since the multiplayer nature of “Destiny” required some sort of content updates to keep the players engaged or at the very least balance and technical support. Both DLC were deemed “good” when they were released, not perfect but there was no serious outrage from the player’s side. Continuous revenue streams allowed Bungie to introduce seasonal events to “Destiny”, similar to “Overwatch”. However, soon after both DLCs came out it was evident – “Destiny” is struggling.

Was it the remaining absence of cohesive story, which was turning the game into a series of bland uninspired tasks, completed without understanding of reasons behind your actions in the context of “Destiny” universe? Perhaps it was a repetitive gameplay loop, enforced by the mechanics of the game, making players do the same bland missions time and time again. Maybe the absence of true depth or sense of discovery, present in conventional MMORPGs? Probably, all of those combined. The consequence – Bungie decided to release a major \$40 expansion “The Taken King” which was hailed as the savior of “Destiny”. That expansion was indeed big in scope. It changed the core mechanics of the game, which applied to all “Destiny” players; added new locations to explore and rewards to earn; added more story content and made the game more alive. It did succeed at its mission. Or at least that what the public was thinking.

Not long after “The Taken King’s” release, in October 2015, it became known, with the efforts of Kotaku’s Jason Schreier, who interviewed several anonymous sources from Bungie, that “Destiny” was in development hell all along.⁸⁸ Bungie were struggling to meet deadlines and the direction of the game was constantly changing, jumping from one idea to another. In addition to difficulties with finalizing the concept, Bungie was continuously growing and the management structure was not keeping up. All of it under the pressure of half-billion dollar contract with Activision Blizzard. The story of the game was re-written just a year before its release. In his book “Blood Sweat and Pixels,” he further described how Bungie wanted a story of the same cultural impact as “Star Wars” yet it was being changed all the time, the characters were repurposed, their lines rewritten, leading to troubles during voice acting and mediocre quality of in-game voicing.⁸⁹ A change of that scale for a

⁸⁸ Schreier, J. (2015)

⁸⁹ Schreier, J. (2017)

game like “Destiny” implied a lot of additional work. Furthermore, several characters and locations were completely cut from the game. Two of these locations were the “Dreadnaught” starship and the “European Dead Zone” on Earth. Both of those being cut allow us to make two important discoveries. The first one is that “The Taken King” was mostly consisting of cut and repurposed content as the “Dreadnaught” is the main location of this DLC. The second discovery wouldn’t have been made until “Destiny 2’s” release. There was another crucial detail in Schreier’s book. The tools Bungie used to build “Destiny” were horrible. They had to leave computers working for the night just to load a map to edit and each change made would take around 20 minutes to be saved. To sum up, leading to 2016, “Destiny” had 3 paid DLCs, one of which was supposed to be in the game from the start, and it was known that Bungie had really hard time developing the game because of terrible management, doubtful creative decisions and unreliable tools.

In the same article, Schreier quoted people saying that Bungie wanted to introduced microtransactions and do more free events instead of releasing traditional \$20 or \$40 expansions. That was not surprising since microtransactions were spreading like wildfire in 2015. On paper, that idea sounded great from business view and from players’ view as well. Activision gets the revenues, players get free content. They decided to go with that plan and implemented the “Eververse store”, where players could buy loot boxes full of cosmetic items. Making cosmetic items in a game about getting new and more powerful items was a double-edged sword, as those items were not supposed to affect the power of the characters. Bungie managed to find that balance and were not heavily criticized. “Destiny” got several major free seasonal events, during which players could earn exclusive items. Their switch to microtransaction-based funding was a success. They did, in fact, not release a paid DLC up until the end of 2016. “Rise of Iron”, unlike all previous expansions, came out only on PlayStation 4 and Xbox One. With that decision it was said to include next-generation mechanics to the game in form of bigger locations and more technically complex gameplay scenarios. “Rise of Iron” mostly received 6’s and 7’s from critics and was called “uninspired” and “predictable”⁹⁰; community’s feedback didn’t divert much from those scores either, as seen on Metacritic. Bungie had already learnt at the time that because of how their game is designed, players go through the content very quickly. Nonetheless, “Rise of Iron” was not trying to fix problems of “Destiny”, nor innovate too much. It was a way to show players that the game still exists and try to keep them excited for longer until the in-

⁹⁰ Frushtick, R. (2016)..

evitable sequel arrives. After the revelation about “The Taken King” it is hard to be convinced that “Rise of Iron” was a truly original piece of content and not repurposed leftovers from “Destiny’s” troubled development.

In the spring of 2017, “Destiny 2” was announced. Just like any video game sequel, “Destiny 2” was supposed to refresh all concepts from the previous installment and introduce new ideas here and there. That is what was happening to “Destiny 2” initially. Being released in 2017 meant that the game had to have microtransactions, and “Destiny 2” came fully prepared. This time, Eververse was not simply in the game since launch – the game’s whole progression system and Eververse were closely entwined. Nearly all cosmetic items were obtainable only through Eververse “engrams”, the “Destiny’s” version of “loot boxes”. Those engrams were awarded with each level up, although leveling up was not nearly as fast as in, for example, “Overwatch”. In fact, there was a big controversy related to the leveling system that I will discuss later in this chapter. Besides the new Eververse, “Destiny 2” received a fair share of all kinds of graphical facelifts and small new features. Players were excited when the game came out and the game was warmly accepted by critics. However, with “Destiny 2” being a live game, the one that should be played for years, the drawbacks were only waiting to be discovered. Several months after the release, “Destiny 2’s” problems began to rear their heads.

Bungie took a different approach with “Destiny 2” altogether. They decided to make the game more rewarding and less demanding. They made it easier, removing difficulty levels in the process, simplified the progression and item systems – the very core of the series. With “Destiny 2” they wanted to finally fulfill the promise of a cinematic story campaign, so that advertised the improved story a lot. With the desire to appeal to everybody and have the largest player base possible, they decided to release the game on PC, outsourcing the development to Vicarious Visions. That desire went so far that “Destiny 2’s” great optimization allows to play the game even on weak PCs. The decision to make the game easier was not beneficial, as it turned out. Not long after the release, players began complaining that they simply have nothing more to do in the game. The player vs player multiplayer was also changed for worse. Many players complained that it was a clear downgrade from “Destiny”. With having played both “Destiny” and “Destiny 2”, I noticed the difference as well. Considering that the number of engaged players is directly tied to the number of Eververse engrams sold, Bungie had a problem.

Just like the first one “Destiny 2” had post launch DLCs. Two were announced alongside with the game, \$20 each. Now it is known that there is a third expansion in development, set to release in September 2018;⁹¹ perhaps it will do what “The Taken King” did for “Destiny” and will have a higher price tag. In October 2017 Bungie introduced a new feature “Destiny 2” will have – seasons. Unlike seasonal events I talked about, a season signifies a period of time between the release of DLCs. Season 1 ended with the release of “Rise of Osiris” and season 2 will end on May 8th, with the release of “Warmind” DLC. During each season Bungie promised to supply the game with new features, free for all players, and new season-exclusive Eververse items, replacing the previous assortment. Bungie expanded the idea they implemented during the “Destiny” days: supply players with new content in return for microtransaction revenue. Again, it sounds good on paper but how exactly Bungie decided to implement it was what brought them troubles.

“Destiny 2” was faulty from the start. Its gameplay design was not aimed at longevity, it was aimed at instant gratification in the name of attracting as many customers as possible. But what they needed was having great retention rates. Seasons was an interesting way to make players return back to the game but with the game itself being even more repetitive than “Destiny”, while being easier, hence less interesting to play over time, was making seasons nearly pointless. At the time of writing, it has been seven months since the game’s release and the many major problems have not been fixed. Yes, Bungie released several updates to the game’s progression systems but the further we are from the release, the less relevant these updates are.

Over the course of these seven months, Bungie was attracting mostly negative feedback, which makes it even more difficult to attract new players now. After all, they could be aware of what Bungie has done and not have enough trust to buy the game. I want to mention three events that damaged Bungie’s reputation and decreased customer trust. There was first the “XP throttling” debacle in November 2017, when Bungie without telling anybody were manipulating the rate at which the characters level up. As players are given Eververse engrams for leveling up, that means that they control how often players get those engrams. Most likely, to push players to buy them for real money when they get tired of doing repetitive tasks to get new engrams. Bungie responded soon after by fixing that system but they never announced what exactly they fixed. Several days later players found out that they

⁹¹ MoreConsole (2018)

needed even more time to level up and get an engram.⁹² Then there was the “Curse of Osiris” DLC. Drastically lacking in content it was struggling to justify its \$20 price. In addition to that, after the release of that DLC and start of a new season, some features were locked for people who do not own the DLC. Players were not warned about something yet again. It happened once more in January 2018, when Bungie secretly introduced mechanics, aimed at making new items artificially more difficult to get. The first big seasonal event “The Dawning” had the same exact issue with needless number of repetitive missions that players have to complete to get seasonal gear instead of actually enjoying the game and getting rewarded. In all those case there was little to no transparency from the Bungie’s side and they were purposefully misleading their player base.

Now, let me go back to the topic of cut content and development troubles for a moment. In January 2018, Jason Schreier reported that “Destiny 2” was actually rebooted mere 16 months before the release.⁹³ It was evident that it repeated the fate of “Destiny”. The locations “European Dead Zone” was cut from “Destiny”, as I said earlier, however, now it resides in “Destiny 2”. The “Curse of Osiris” DLC and its Mercury location was apparently going to appear in “Destiny”. The same can be said about the new location on Mars, featured in the next DLC “Warmind” since Schreier mentioned that some “Destiny” missions were supposed to take place on Mars and include the Warmind named Charlemagne. Reusing cut content is a great practice to save resources and be efficient, but releasing content from 2013, that was developed with last-generation consoles in mind, and releasing it in 2018 is showing how lost and confused Bungie really are. It begs the question: is it ethical to release bits that ended up on a cutting room floor and selling them as something new and fresh for the series?” Most likely – yes it is. Game development is a tough process, where nobody knows exactly what the final product is going to look like and what a team will end up using or throwing away. Reuse of assets signifies an efficient production. However, Bungie might have taken it too far, likely affecting the quality of the final product as a result. Instead of putting “Destiny 2” on the track to successful future, implementing truly new features, making it more long-living and exciting for the players, Bungie was and still is frantically trying to meet financial targets and deadlines it was bound to meet by the contract with Activision.

⁹² Scott-Jones, R. (2018)

⁹³ Scott-Jones, R. (2018)

This lengthy case study teaches us numerous lessons on how not to do Game as a Service. The fact that “Destiny 2’s” financial results are good, which was demonstrated in *Table 2*, that points out that it was the fourth highest-earning PC game in 2017, means that from the business view, Activision gets what it wants regardless of public opinion. That might not stay like that forever because of the rapid development of the GaaS space might get in the way of “Destiny’s” future. When the first “Destiny” came out it was one of its king and it pretty much had the power over the shared-world shooter games. Now, things are changing. Ubisoft released “Tom Clancy's The Division” in March 2016, which was always compared to destiny. “The Division” was criticized when released but Ubisoft poured a lot of time and resources into fixing the game and consequently its reputation. As a result of a lot of work from Ubisoft’s side, “The Division” is considered a great game in 2018 and “perfect” by some,⁹⁴ a game that is free of all problems that plagued it in the past. Early in 2018, “Tom Clancy's The Division 2” was announced and will likely surpass its already great predecessor. EA have announced their response to “Destiny” too – “Anthem” is currently in development by industry veterans and role playing pioneers Bioware. The niche once monopolized by Bungie is slowly becoming crowded with competing games. In that environment Bungie was 2 ways to go: continue being opaque with players, causing controversies, striving to swap creativity for most the profitable solutions and lose to the competition, or listen to the community and make great games, free of unnecessary things. Management and technologies caused a lot of troubles for Bungie as well. Service-games are more financially rewarding but also much more difficult to develop and designs. Credit where credit is due, Bungie were the first to bring that kind of game to life but with so much time, people and money in their hands, it seems to me they could do better. More and more service-games appear and the bar for expected quality only goes up. Companies developing service-games should attempt to come up with new creative ways of engaging players – through interesting gameplay or captivating story. Not through mechanics feeding on basic human psychology, like being rewarded for completing dull tasks. Doing so requires real creative talent and good tools, which there will be more of in the near future. As the game-service scene develops, individual developers lose agency over players, fighting each other for their most precious resource – time. And no matter what kind of monetization they decide to include in their game, if the game under-delivers, players will spend their time and money on something else.

⁹⁴ Tassi, P. (2018)

3.11. “Tom Clancy's Rainbow Six Siege”

“Tom Clancy's Rainbow Six Siege” is a game-service but it might not have been released with the intention of becoming one back in the end of 2015. Today “Siege” is something fairly different and something a lot of people likes.

The story of “Siege” began back in 2011 with an announcement of an entirely different game – “Tom Clancy’s Rainbow Six Patriots” (further – “Patriots”). “Tom Clancy’s Rainbow Six” is the Ubisoft’s tactical shooter franchise that began in 1998. “Patriots” was supposed to be the next game in the series after 2008’s “Rainbow Six: Vegas 2”. The First Person Shooter landscape has changed since 2008. When “Patriots” was announced, many shooters were trying to have a deeper story, be more dramatic and cinematic, largely due to “Call of Duty’s” massive success. Consequently, Ubisoft tried to follow the trends of the 2010s: “Patriots” was shown to be a cinematic, story-focused game, where shooting was not the only thing players could do. It was depicting a hostage-rescue operation and players having to make moral decisions. To everybody’s surprise, Ubisoft announced in 2014, that “Patriots” is canceled, and did so not long after the reveal of “Siege”. “Siege” is a multi-player-focused 6v6 game about hostage rescue and siege operations. It looked very innovative, as players were able to shoot through any surface, as well as demolish them – that aspect actually played a big role in “Siege’s” success. As you have probably noticed, “Siege” had the hostage mechanics presented in “Patriots”. It was explained the same year, that “Patriots” were canceled because of being a last generation game, when PS4 and XBO were on the horizon. In addition to that, “Patriots” also was supposed to have a multiplayer mode, it was even prioritized during development. With the release of PS4 and XBO, the gaming landscape has changed. More and more games were striving to become the leaders of the multiplayer scene and Ubisoft saw an opportunity. Too many factors pushed Ubisoft to cancel “Patriots” after 4 years of development.⁹⁵

However, despite the age of the “Rainbow Six” series, they have never released a skill-focused online game like “Siege”, which meant that that project was riskier than usual. And “Siege” was supposed to be just that – a competitive skill-intensive game, where it is all about strategy and reaction. Besides, they have just lost a lot of time and money by canceling “Patriots” and they needed a good comeback to recoup all the potential revenue “Patriots” could bring. While PC has “Counter-Strike: Global Offensive”, the most prevalent

⁹⁵ Grayson, N. (2014)

skill-heavy shooter in the world, consoles have nothing substantial in that genre and “Siege” was hoping to fix that. It was, however, met with middling reviews. Many people were feeling that the game is too small and shallow for its \$60 price. It had no single player campaign and not even that much content at launch. For many players it was hard and frustrating, for others, though – engaging and challenging. Sometime after release, Ubisoft had two choices: embrace the fact that the game turned out to be mediocre and move on or work on their mistakes and seek more long-term revenue. Ubisoft chose the latter and that choice paid off.

In this work I have already referenced Ubisoft’s late 2016 statement on shifting from games that provide short term revenue to service-games, which are supported for longer periods of time.⁹⁶ “Siege” was one the first Ubisoft games to welcome that direction. Unexpectedly, the game’s mechanics and overall structure were perfectly suited for long-term support. That change didn’t come quickly. Ubisoft made several steps that ensured that the game will go from being unpopular to being one of the leaders of the FPS scene.

Even before publicly announcing that they are switching to GaaS model, Ubisoft were doing their best to fix all the issues that the game had suffered from since release. As we learned in the “Ark: Survival Evolved” case study, making your game properly playable is one of the top priorities, so Ubisoft sought to fix the bugs and improve balance in the game. The next step was showing existing players that they are willing to support the game. During 2016 they released 4 new “operations”, each includes new maps and operators (character classes that players may play as). The also game had cosmetic microtransactions and various non-substantial boosts since release and their number and variety was only growing. The greatest part of “operations” for the players was that they were free. Everybody could enjoy the new maps and earn in-game currency to acquire new operatives. Although, doing that requires time, especially for inexperienced players. According to various forums and personal experience, it might take upwards 400 hours, depending on a player’s skill to unlock all Year 1 operators. The other option, as always, was to buy the season pass, which included all 4 2016 operations. In the summer of 2016, Ubisoft announced the \$15 Starter Edition of “Siege”. It was extremely cheap, comparing to the full version costing \$50 at the time. In return for being just \$15, the edition contains 2 random operatives from a pre-defined group and 2 operatives at the choice of the player out of 20 original operatives. It was clearly a way to attract more casual players, who do not desire to delve deep

⁹⁶ Ubisoft (2016)

into the strategy of “Siege”. Operatives, in general, are the core of the game. Each offers players different strategy and players who play competitively must know what all of them do and how to play against. That also means that if necessary to stay competitive they must purchase new operatives, either by playing the game a lot or spending real money. After a year of content, Ubisoft finally understood their audience and had a much better game to promote at the end of 2016. That led to their decision to continue the support of “Siege”. Currently, “Siege” is having its third year of new operations and judging by its growing 25 million player base,⁹⁷ the 4th year of content is very much possible. As of April 2018, “Siege” has 5 different editions of PC: \$15 Starter Edition, which I have discussed; \$40 Standard Edition – the base game; \$60 Advanced Edition – includes additional in-game currency and “loot boxes”; \$90 Gold Editions – includes additional in-game currency, “loot boxes” and the Year 3 Season Pass and finally the \$130 Complete Edition, which has everything the Gold Edition has plus Year 1&2 operators. Consoles have all editions besides the Starter Edition at a slightly higher price. That number of editions is a lot but it is very indicative of Ubisoft’s strategy to provide a universal game-service for many kinds of players. The Season Pass, actually called Year Pass is a somewhat unique one since players have no direct way of acquiring operators separately – they can do so only by purchasing the in-game currency first and *then* spending it on operators. With that, the Year Pass works much more as a premium subscription, than a typical Season Pass, which works as a pre-order for DLC or simply a DLC bundle. Players who do not have much time on their hands but want to always play the newest characters are encouraged to spend \$30 every year for the Year Passes. And that model is not annoying for the players at all. All of them get free maps and regular updates, the game changes, the competitive environment changes too. That way of supporting the game is also good for Ubisoft. Although it was not possible to find exact revenue figures, seeing how eagerly Ubisoft is continuing to support the game definitely tells us something. With the Year Passes, Ubisoft basically sells a new medium-priced game every year, without having to develop it from scratch, and that is happening in conjunction with the sales of the base game.

These days, “Siege” is regarded as a nearly impeccable tactical shooter, most importantly – with no alternatives on consoles. As of April 27, it is the 4th most played game on Steam with maximum 104 446 concurrent players. Its gameplay is punishing but very rewarding. This game’s mechanics are unique enough to differentiate the game from many others and

⁹⁷ Taylor, H. (2017)

the game has only one real competitor on PC – “CS: GO”. Instead of following existing trends to get the piece of the pie and be awarded with short-term revenues, Ubisoft created their own game and decided to keep it relevant for longer than many other AAA publishers do. It has been nearly 3 years since the game’s release and it is still supported. Besides, after countless bug fixes, balance updates, interface updates and other tweaks, the base game has never been better and many video game websites are even re-reviewing it. It shows that the GaaS approach can be beneficial for both players and publishers if done correctly and respectfully. All new Ubisoft’s games are having some kind of GaaS elements, even single player ones, like “Assassin’s Creed: Origins” and “Far Cry 5”. It is very unlikely that Ubisoft stops enjoying the money “Siege Brings” and tries to develop a sequel in the next year or even two.

3.12. “Dota 2”

“Dota 2” is a free-to-play game developed by Valve and released in 2013. It is a very skill intensive game in the genre which was basically invented by the original “Dota” mod for “Warcraft III”. Albeit being very inaccessible for an average consumer, “Dota 2” found its niche on the e-sports scene, attracting people who enjoy thinking strategically and take games they play seriously. These days “Dota 2” is one of the biggest PC games in terms of concurrent players and Twitch views.⁹⁸ This game generates revenue from various micro-transactions and every in-game item sold on Steam Marketplace earns Valve money, as they are the owners of Steam. The reason why I wanted to include this game is how Valve managed to basically monetize the e-sports nature of “Dota 2”. Needless to say, the e-sports tournaments themselves earn Valve a substantial amount money, as e-sports is projected to be a nearly \$1 billion industry in 2018 and “Dota 2 is in the lead.⁹⁹ The biggest ones, like The International and Majors are organized by directly by them, opening doors to additional income sources such as advertisement revenues or ticket revenues. Even when outsourcing tournaments I doubt Valve is not getting anything. It is hard to say that this is a way of monetizing “Dota 2”, as money is not coming from the game. Without the game, though, those tournaments would not take place and Valve would not acquire an additional

⁹⁸ Newzoo (2018)

⁹⁹ Pannekeet, J. (2018)

source of income. Following that logic, many publishers, whose games are prominent on the e-sports scene and who are involved into tournament organization are “monetizing” their games in that indirect way. That is not the only way how Valve tied their incomes to e-sports. Every year, starting with 2013, Valve was releasing “Compendiums”. Every “compendium” is tied to its year’s biggest “Dota 2” tournament – The International. Each “compendium” costs \$10, \$2.50 of which goes to The International prize pool. “Compendiums” offer a variety of cosmetic items or even new game modes to everyone who purchase it. It also offers a way to conveniently track the scores of teams, competing in The International as well as new quest and challenges for players to beat. For new players, “compendiums” offer in-depth guides on strategy and offering various kinds of assistance during the game, serving as a paid tutorial. Lastly, every year Valve presents a new set of stretch goals for the compendium: the more people buy it – the more money goes to The International prize pool, the bigger that it, the more new content players eventually get after getting themselves a “compendium”. Later, Valve renamed “compendiums” to “Battle Passes” and introduced new fall and winter “Battle Passes”, which work very similarly to “compendiums” but are tied to smaller tournaments.

With “compendiums” Valve was able to squeeze out more revenues from already profitable “Dota 2’s” position on the e-sports scene. Surely, they could release a product similar to “Battle Passes” and still yield the profits, however, doing so, while tying everything to the e-sports events – the heart and soul of “Dota 2” community, and implementing stretch goals, they were able to provide bigger incentives for players to acquire those “Battle Passes”.

4. Strategy Proposition

In the following chapters, I am going to describe the strategy I would suggest to developers and the strategy I see being used in the future. I will start by providing context for my decisions, both practical and technological and then outline the main features, advantages and disadvantages of the model.

4.1. Strategy Background

The previous chapter showcased 13 different games. Many of them had a unique twist to how they were monetized but mostly they were following the principles described in chapter 1 without coming up with something new. Several games had a few shortcomings, that were reflected in reviews and players' feedback. It seems like every game has settled on a model that was the best for it. "GTA V" was enjoying record-breaking sales just by being a great "GTA" game. "Dota 2's" free-to-play model allowed it to acquire a massive reach, ending up on computers of totally different gamers; and after the game was successful enough, Valve began hosting large tournaments and selling "compendiums". EA gave players of "Battlefront II" loads of free content, avoiding a segregated online community and implemented a somewhat predatory "loot box" system in return.

And while several games that I have analyzed had no problems at all, a couple of other ones struggled. The case that really caught my eye was "Destiny 2" – a great game creatively but the one drowning in total mismanagement and misunderstandings between the community and developers. The future will be filled with long-living AAA service-games like "Destiny 2", there is no doubt in that. In the last couple of years many publishers switched to that model: you make a game, sell it to as many people and then support it for as long as it stays profitable. Having a game like that requires large investments, sufficient technologies and a lot of creative time. Players may not like the fact that after the release of "GTA V" Rockstar disappeared from the radars for five years, whereas previously there was a great Rockstar game nearly every year. However, that they got in return is a product unlike any other. "GTA V" and "GTA Online" are still relevant 5 years post-release and are still better than many games released after them according to critics and players. "GTA V" gave Rockstar a chance to develop a game that otherwise would perhaps not be possible

to develop. That game is “Red Dead Redemption 2” and judging from the trailers it will be a revolutionary game. The GaaS model not only gives developers precious time for innovation, it gives them time to make the game released so much better post-launch, that critics would have to re-review it. That is what we saw with “Siege”. As the GaaS space gets more crowded and developers get more experienced and understand the model better, the service-games become significantly better in how they interact with the consumers.

Back to “Destiny 2”, how exactly can Bungie improve a game of that scale? What approach may they take with “Destiny 3”? One of the problems with a game like “Destiny 2” is the number of resources it requires to develop. I cannot say how “Destiny 2” compares to “GTA V” or “Battlefront II” in that matter but what I can say, having played all three games, is that the development of new content or simply supporting the games is very likely to be more expensive because of how the game plays. “Destiny 2” and many other games of the same genre want to provide epic *first-person* experience, which means developing large levels with a big number of details. Shared-world games require a lot more technical prowess. As video games are made by people, not robots, there is always a limit to how much new content a developer can make in a certain period of time. If there is an intention to develop something every four months, let’s say, the type of content and its amount will be designed in a way that would make their development fit the four months time-frame. In case of “Destiny 2”, after having played it for 140 hours, analyzing the game’s design and discussing my findings with other members of the community, I can say with confidence: “Destiny 2” could be designed in a way that allows it to have interesting content updates without extreme investments, at least from my view. Interestingly, I do not even have to explain intricacies of game design, player psychology or attempt to deeply analyze the process of game development to explain my opinion. There is already a chapter in this work, which outlines one of the best ways to develop and support service games – the story of “Final Fantasy XIV: A Realm Reborn”. Yes, that game is an MMO, not a shared-world shooter, but I have already discussed how Square Enix were able to make an MMO that feels like a single player RPG. “Destiny”, on the other hand, is a AAA game aspiring to be like an MMO. “ARR” biggest advantage over its competitors is its story. It keeps the game alive, it draws people back into the game. Stories are, in fact, the centre of any entertainment: books, TV, cinema, even lyrics in songs are a form of literature. Good stories are always hard to put down. Stories in video games have existed for decades but with the development of technology more and more unique exciting stories are becoming possible to tell.

Story is not what every game needs though, people come to games because they want to interact with them, there is a ton of games with no stories attached whatsoever. However, I spoke about “Destiny 2” for a reason. I have already said in the case study that the game was severely lacking story. Players want games to be immersive and it is easier to exist in a world for a long period of times if you are enjoying the world. More story saved “FFXIV” from a certain death and it would save the “Destiny” franchise as well. Give players more ways of exploring and learning the world during their playtime! “Anthem” and “Tom Clancy’s The Division 2” are on the horizon and it is safe to assume that mechanically both of them are in some way similar to “Destiny”. The biggest differentiation is the games’ worlds. Will players want to become “space wizards” from Earth, survivors stranded on the streets of America or exosuit-wearing humans on a distant planet? The point of this is that many future service-games are going to do it like “ARR” – deliver great stories and offering a rich world, which would be getting better each year.

The future of single player story-heavy games is not clear. There are not that many games like “The Witcher 3: Wild Hunt” or “GTA V” that are able to sell like hot cakes and bring massive profits. The money is in the microtransactions and GaaS. Single player games begin to become reputation projects for the publishers – they release them only to then go back to developing games with online elements – the ones that actually bring a lot of money. Gamers still really like single player games. They provide certain types of experience, empower players in a way multiplayer games simply can’t. In my opinion, it is possible to design a game that would combine the feel of single player games and openness of multiplayer games. Once again, “ARR” did that in the MMO space, “Destiny” tried hard to do that in the shooter space. Players need single player campaigns and they will complain if publishers exchange single player campaigns and games for more revenues. There have already been rumors of 2018’s “Call of Duty” game not including a single player campaign and the responses from players were not positive.¹⁰⁰

Players always want larger games with more content. GaaS games would benefit from being able to deliver more content like levels, missions or items with every update. Updates make people excited and the bigger an update is, the more it can be advertised without lies and more attention it can attract. Taking “Destiny 2” as an example once again, it would vastly benefit from more maps and weapons. But people are still people and there are still limits to how much they could do. That is changing.

¹⁰⁰ Plante, C. (2018)

4.2. Technological Background

There are currently two technologies, developing at a very fast pace, which could drastically streamline the development of games in addition to many other uses. Machine learning and procedural generation. Machine learning (further – ML) is a part of computer science that aims to develop ways of creating methods of self-learning for programs and Artificial Intelligence. With the help of recent technological developments, the field of ML was able to progress quicker in the past couple of years. In 2015 Google created a conversational agent that was able to interact with people and act like a real human; in 2016 DeepMind, a company specializing in AI research built QDN – a program able to surpass human performance in 49 Atari games; the following year, the best Go player in the world Ke Jie was beaten by AlphaGo, an AI also built by DeepMind; in August 2017, OpenAI’s creation was able to beat several “Dota 2” professionals in one-on-one matches.¹⁰¹ ML is not just a research matter, currently, every iPhone 8 Plus and X is employing ML “portrait lighting”, and iOS 11 includes Core ML API, designed to help developers to make apps with ML. How exactly can ML be used in games, however?

The first way of using was already implicitly mentioned – development of in-game AI. EA established a special subsidiary SEED for research in the prospective fields of AI and others. Recently SEED published a paper on imitation learning of AI for 3D games.¹⁰²

Projects like that will allow to avoid spending substantial time on coding AI for individual games. Instead, games would simply use the ML framework which will learn how to play the game itself and then basically “play” as in-game enemies. Taking it further, if AI can learn how to play a game, why not learn how to *make* a game? I am obviously talking about minor involvement of self-learning AI into the development process. We are decades away from AI seen in sci-fi movies but AI that is able to analyze the game for potential bugs is actually... a reality already. Ubisoft’s research division La Forge has developed a tool named “Commit Assistant”.¹⁰³ It analyzes the code and compares it to the massive amount of code from past projects, both good and bad. If it recognizes that the similar code was arguable in the past it points that out. It is a matter of time when ML would be used for more complex development tasks, removing a need for human involvement into dirty mo-

¹⁰¹ Maini, V. (2017)

¹⁰² Electronic Arts (2017)

¹⁰³ 80.lv (2018)

notone work. And that is not everything. ML might get very useful in the second field that lately attracted a fair share of attention.

Procedural generation is a term not only limited to video games. The term “procedural” means that something is happening according to a certain set of rules. Procedural generation (further – PCG) is a process of random content creation based on established rules and algorithms. In this context “random” does not mean “completely chaotic” but rather “very distinct”. In video games PCG has been used since the dawn of the industry. Over the years new technologies and algorithms allowed PCG to find its use in a slew of places. Darren Grey points out four main applications of PCG in games in the book “Procedural Generation in Game Design”¹⁰⁴:

- Integral – when a game revolves around procedurally generated elements like locations, enemies, weapons, etc.
- Modal – when a game contains an “infinite mode” or any other kind of game mode that revolves around non-repeating procedural content.
- Segmented – when a game is mostly hand-crafted but occasionally includes procedural elements both functional and gameplay-related or visual/aesthetic.
- Content Drafting – when PCG is used during the development process to quickly draft certain game elements, usually for testing out features or mechanics.

While modal PCG is too specific and does not affect the game as a whole, only its parts, the other kinds of PCG could be really useful simplifying development in one way or another. Integral PCG gives developers an opportunity to free themselves from a lot of work, like level design, environment design, item design, character design and others. At the same time PCG creates completely new jobs for workers, as they have to come up with new algorithms able to generate diverse organic content, which would be neatly put together and monitor the outputs of those algorithms. Both jobs are far from being easy and the outputs of integral PCG are usually miles away from hand-crafted assets in terms of quality. Nevertheless, as more and more people work on PCG algorithms, the content those algorithms produce gets better. “Minecraft” which appeared earlier in this work is in fact a game that can be counted as the biggest popularizer of integral PCG in gaming. From the beginning, the game’s ambitious randomized worlds were amazing people with their quality and diversity. I have also mentioned games that utilize segmented PCG in this work: “Diablo III”, “Ark: Survival Evolved”, “Rust”. PCG was on everyone’s mind in 2016, when “No Man’s

¹⁰⁴ Short, T. and Adams, T. (2017)

Sky” (further – NMS) arrived. The game can be a subject of case study by itself but what matters most now is how it handled PCG. The game features a procedural universe, which according the Hello Games, the small indie team from England, containing on average 6 members during “NMS’s” development, features 18 quintillion (2^{64}) different planets. Everything in that game is procedural: positions of solar systems in the universe, the solar system composition, planet terrain, animals’ and plants’ looks and positioning, object placement on the planets, weapons, starships, space stations, characters, music, names and most likely a lot of other things. Smart mathematical formulas and artists working together make it possible to generate billions of vistas similar to the one seen of *Image 11*, which could be easily perceived as hand-made by an uninformed observer. NMS is far from being an ideal game, struggling from an inability to wisely tie its procedural nature and its game-play. It displeased many critics and fans alike when it was first launched. However, NMS is a testament to what well-designed PCG algorithms are able to achieve. The game is not done and two years after the release Hello Games still continues to deliver massive updates.

Image 11: Procedural Scenery Of “No Man’s Sky”



Source: Author’s Own Screenshot

I have strong confidence that with the evolution of PCG technologies more games will be confident with including them. They can not only help to make the game more diverse with less time but also deliver new content to the game – something that “Destiny 2” would greatly benefit from. PCG has to be approached carefully, as it requires a lot of creative thinking to make procedural generated parts not only look different and organic but also fit the gameplay and not be just a visual backdrop.

If it is possible to teach AI to recognize faces and objects, learn how to play and study behavioral patterns, it may be possible in the future to teach it to monitor outputs of PCG and perhaps even make changes to the algorithms. While that is simply my speculation, I cannot deny the possibility that SEED or La Forge are already working on a similar AI tool. Considering how rapidly both fields develop, that cooperation between AI and PCG is not out of the realm of possibility. That union would save a whole lot of money and development time, which could be reassigned to making sure the team delivers best story possible, most original architecture, stellar graphical features. Furthermore, that would simplify the creation of new content, which means that service-games could be supported with more substantial expansions for the same cost of development.

4.3. Subscription 2.0

That finally brings us to the model, which I predict, video game publishers are likely to arrive to in the near future. That model is suited for service-games, as they are one of the biggest money makers of today. Games that are made to be continuously played, games that include all sorts of DLCs and microtransactions. That model is designed to answer the needs of customers and publishers. I have showed proves that story-content and world building play a big part in a game's longevity. If a game wants to seem ethical and respectful in the eyes of players, having some sort of a single-player campaign is a big plus. Even if the game is designed for multiplayer only, the feel of the single player story can still be achieved, exemplified by "FFXIV: ARR" and to some extent "Destiny 2". Multiplayer is still the way of the future, as it allows to implement new microtransactions and pushing players to invite their friends to the game. The service-games of the future are likely to attempt to increase the number of exciting and unique moments found in single player games to avoid forcing players to do a lot of repetitive activities and that requires more time and resources. Thankfully, as I established in the previous chapter, developers are likely to get a lot of help from self-learning AI and sophisticated PCG algorithms. The main ingredient to the success of service-games of the future is very likely the post release support and how good the developers will be at retaining their player base. With the increasing number of service-games on the horizon, the biggest fight will not be the fight for customers' money – it will most likely be the fight for customers' time. Hence, the increased

efforts for keeping the players playing, made possible by new technologies. No longer will Bungie be able to enjoy the privilege of being the market leader and not try hard enough. Even counting the rise of ML and PCG, the publishers would still need reliable sources of money to make long term investments. Microtransactions are here to stay for certain but DLCs might change shape. Many service-games, notable the “Destiny” series are selling DLCs which are not really optional if players are expecting to play for a long period of time. Bungie created an illusion of DLCs – players have to make two \$20 investments a year to fully enjoy the game but those investments are an absolute must. “Battlefront II” tried to do a good thing by making all DLCs free – it makes it so all players are even and can play with each other. But microtransaction revenue is definitely not enough to produce high quality content that meets standards of single player games. Instead of selling DLCs one by one when all players are required to buy them anyway or selling season passes long before revealing the content of DLCs, why not unify the post-launch content delivering model? I am of course talking about introducing subscriptions.

“FFXIV: ARR” is a great example of an expensive game that people pay for anyway.

“Subscription 2.0” does not even have to cost as much as it does for “ARR”. In my opinion subscription has several crucial advantages over the current DLC model:

- It has a lower entry cost. Whereas DLCs cost \$20 on average, having a \$7-10 subscription would mean that more players are likely to try it at least for a month. Instead of expressing their dissatisfaction in case of DLC being bad – they simply cancel the subscription. It is also riskier for publishers as they are pressured to consistently release good content, which is not an impossible task though. If a customer likes a product – they will continue paying. Releasing new content on monthly basis would further push people to stay subscribed to see what’s next. Particularly, when you game has a story that unravels like a TV series, just like “ARR’s”
- It supplies the publisher with stable revenues. DLCs earn more but do so every 3-5 months. It means that publishers have to plan their expenses in advance and in case of DLC’s failure, they do not fulfill the plan and have to seek resources elsewhere. Monthly revenue streams make them more flexible in what they can do and simplify forecasting. Combining that with microtransaction revenue is likely to make publishers more confident in their actions.
- It enables a quicker response. This one is arguable. In the age of the internet it is easy to receive feedback from anybody. However, it is not always possible to change things deep

in a production cycle. Having smaller monthly or bi-monthly updates would signify shorter and agiler development schedules. In addition, the number of subscribers can be easily tracked and it can be feedback by itself. If their numbers decreased, you have to do something. If not – you are on track. With DLCs you have to wait longer to receive that kind of feedback.

- It spares the customers of the need to be aware of what is going on. Imagine a customer buying your game a year down the line and wants to play with his friends. With the DLC model they ought to be told which DLCs to buy; all of them or maybe just a specific one. With the subscription model, players simply start paying for it and get all previously released content. It seems like the downside of this might be the loss of revenue, which takes us to the next point.
- It might end up being more profitable. At the first glance, instead of getting the \$35 season pass with “The Dark Below” and “House of Wolves”, and “The Taken King” for \$40, a new customer would just pay the monthly \$7-10 fee; on top of this, there is a chance that they decide to unsubscribe the following month, which would lead to publisher earning \$7-10 instead of \$75. In reality, there are already mechanisms of drawing new customers, which discount older DLCs and season passes. Taking the first “Destiny” as an example yet again, when “The Taken King” arrived, there were two ways of getting it: paying \$40 for the DLC alone or purchasing The Taken King – Legendary Edition” for \$60. For those extra \$20 players were getting the base game and the first two expansions, which if bought separately would end up costing \$85 (\$60 for the game + \$35 for the season pass). When “Rise of Iron” arrived, “Destiny: The Collection” was released. For the same \$60, players were getting the base game, first two \$20 expansions, \$40 “The Taken King” and \$30 “Rise of Iron”, basically getting \$150 worth of content for \$60. With each new DLC released, the older content was severely discounted to allow new players to get into the game without paying \$150, which is a very large amount of money for a single game. Players who were with “Destiny” since release still paid full \$150, however. With the subscription, there is no need to discount content that ways. Players who play for a long time would naturally pay more. If “Destiny” had a \$7 monthly fee, let’s say, the most dedicated players, who play to this day would end up spending \$300, not \$150. The additional revenue would make up for players who decide to quit but as I explained earlier, the subscription might end up being more attractive than traditional DLC releases. Besides, publishers would be less compelled to discount the base

game, as they would not need to keep the entry barrier for the new players small and keep the game at \$60. Taking that idea further, I reckon it would be beneficial for the publisher to decrease the price of the base game to \$40-50 range. That would eliminate the need to discount the game year or two down the line, as it would already be cheaper than a traditional AAA game. At the time of release that would be a nice gesture for the customers too. Making the game cheaper would likely make many customers feel that they are getting a good deal and ‘saving’ \$10-20 by buying our AAA game, and think: “Ok, I can spend that ‘saved’ money on a month or two of subscription and take a look at what they have to offer”. It is nearly impossible for me to correctly model customer behavior and calculate exactly how much more or less revenue a subscription model would make over the DLC model including because there is usually no detailed data on DLC sales. Everything I outlined before is my theory, which would require more analysis and more data, that only publishers and developers possess.

- It always ensures that the customer is getting the best experience possible. This point is closely tied with “sparing the customers of the need to be aware of what is going on.” Indeed, a subscription model would always take the customer to the heart of the action. No matter if you are a new or returning player, if you play a month after release or two years – by becoming a subscriber you get all the content releases up to the date of purchase. That fact further boosts customer satisfaction and confidence in the service offered by the game.
- Subscription bundles for 3, 6 or 12 months could be sold with slight discount. That would give customers a slight push towards making long-term plans regarding their investments, giving the publishers more money to work with. Confident and loyal customers would end up paying more than what DLCs released in that span of time (3, 6 or 12 months) ask for.

In addition to content delivered to subscribers, it would also be possible to release paid substantial updates in the manner of “FFXIV: ARR”. Once more it is good to bring up the words of Naoki Yoshida – paid expansions are the seasons and smaller content expansions are the episodes.

You perhaps wonder, how is that model different from an MMO’s? The irony is that it is not really that different. I was mentioning “FFXIV: ARR” several times for a reason – its model really works. The biggest difference is the genre of a game. MMORPGs are games

that exist on their own market, a market outside of the mainstream. The casual gamers are afraid of MMOs and they are not as flashy and exciting as “Destiny”, “Assassin’s Creed” or “Call of Duty” games. Those AAA franchises are the ones in the forefront of the gaming industry, they are the games bought by parents as a present, they are the games making hundreds of millions annually, they are the games that constantly utilize the latest technologies, there are the games people talk about all the time. Not MMOs. Yet with the inception of GaaS model, an increasing number of *those* games take elements from MMOs, strive to be long-playing and continuously change. The expected next step is borrowing the traditional MMO model – the subscription. It does not mean, though, that those games will change genres and all become one thing, far from it. Even I can draft a couple of ideas for long playing, constantly evolving games in several genres and there are people more experienced than me, who could come up with even better plans. There are two biggest differentiators between the MMOs and the service-games, employing the proposed subscription model. One, the production quality of service-games, like “Destiny” or “Tom Clancy’s The Division”, which are offering polished gameplay and great visual features, such as animations, effects, textures, geometry, and design. And two, those games should be stand-alone. What I mean by that is that the base game should have enough content by itself to justify its price. Players do not have to be obliged to subscribe to enjoy the game they bought. The game might have a story campaign or any other kind of content that could be enjoyed without a subscription. You cannot really play an MMO without a subscription at all, everything in them is designed with subscription in mind. And free trial period is often bland, being, well, just a demo of what to come if you chose to subscribe. The service-games of the future should not try to mimic MMOs completely. Existing franchises should retain their identities to stand out from the rest and compete for player’s time. The new ones In my opinion are also free to come up with their own ways of play and stories to tell and not borrow everything from MMOs.

In order to test some of my hypotheses, I decided to make a survey. It is possible to find the full results in the Appendix A. In total 183 people were surveyed. 111 of them, or 60,7% were not strongly opposing the idea of subscriptions in AAA games, even without further explanation of what the subscription might offer. 50,8% of them are open for dialogue and a bit suspicious, while the other 9,8% are not critical at all. What we can elicit from that result is that more than the half of responders are not going to dislike and criticize the model right away, which is good, considering how much backlash some existing models get

today just for the fact of being in a game. The other 39,3% of responders disagree mainly because they prefer the traditional DLC model (63,9%), dislike subscriptions (33,3%) and feel that if they buy a \$60 game, they are *entitled* to all content released for it. Several of them used an opportunity to enter their own answer. Some of them expressed distrust towards AAA publishers and feeling that a subscriptions might not worth it, with proves my point that the “subscription 2.0” model requires a lot of effort to for successful execution. The biggest surprise comes from the second question, which was asking how much money responders are willing to pay monthly for a subscription. Before answering it, responders were given a detailed description of the subscription model in question. With that in mind, the results turned out to be very polarizing. 32,4% of responders said that they are willing to pay \$10-11, while the second most chosen answer was also the one with the least amount of money – \$4-5; 27,9% of responders said that they are willing to pay that much. 18% went to \$6-7, 15,3% to \$8-9 and 6,3% to \$12-13. I picked the \$4-13 overall range because it seemed to be the most reasonable range for the US and EU markets. Going below \$4 is not feasible for such model and going above \$13 is unreasonable. The fact that a third of responders are willing to pay \$10-11 shows how people are ready to pay if there is a good product on offer. The fact that the second most chosen option included the smallest fee can be explained by two things: customers are critical and suspicious or they simply do not feel like paying. There is also the factor of country of origin of the responders. More than a half of Reddit users come from the United States¹⁰⁵, so it is safe to assume that a least a half of responders were operating with their domestic prices. EU video game prices are similar or exceeding the US prices, however, in some countries games and other products are sold for much less. It is possible that some people who opted for \$4-5 range did so because to them it was already expensive. More than a half of responders were not affected by the fact that the game with subscription might be sold for less – they were willing to pay the same amount of money for a subscription, as the one they chose in the previous question. The next most picked choose was \$4-5, which I wound surprising at first. My guess is that many people got an impression that the game is of a lower quality, considering its reduced price, something that has to be considered when advertising such a game. 82,9% or responders have played “Destiny”, “Destiny 2” or “Tom Clancy’s The Division” and 73,9% of the, own *all* released DLCs, while 19,3% own some of them. That shows how important DLCs are for these games, that they are an integral part of their life cycle, and

¹⁰⁵ Reddit (2017)

that many players are either pressured or choose to buy them all. I have to note, however, that there exist special editions of games like these, containing some or all DLCs at a discounted price alongside with the game. While some responders might have paid for each of the DLCs separately and paid above \$100, the others might have bought one such edition for just \$60. The biggest complaints of these players were DLCs not worth the money, repetitive, unenviable gameplay, and lack of content in the best game. These are the issues I have said need to be addressed with service-games of the future, especially if a publisher wants to have high retention rates – the crucial factor for the financial and critical success of a long-playing service-game. Finally, players think that these games having more content, such as maps, missions, weapons, etc, better story in the game and DLCs, and new fresh mechanics, would significantly improve said games. Overall, the survey results support all statements and assumptions I have made earlier.

To summarize, here are the key features I see being present in games monetized through “subscription 2.0”:

- Cheaper base game – \$40-50 range instead of \$60
- Affordable subscription – up to \$10 a month, could be canceled at any time, subscription bundles are available, giving the power of choice for the customers.
- The base game should be its own thing – players should not be required to subscribe to play the base game. It should be a standalone product fulfilling demands for contemporary AAA video games. Subscription would essentially unlock the other side of the game, allowing players to enjoy extra content. If players chose to cancel their subscription, they are left with the content from the base game and any other content a developer lets the players keep; their progress in the part of the game requiring subscription must be saved.
- The game should involve some sort of online elements – that is already becoming the standard today. It makes people want to invite friends, hence boost sales, enables more microtransaction options and even in single player games, creates a feeling that there is always something new to come back to and check out every week.
- The developers should use the latest technological trends, such as PCG and ML for building new tools and making the development process more efficient. The union between AI and humans can lead to faster and cheaper development, allowing developers to keep up with the player’s need for new content.

- The game should be carefully designed, avoiding mechanics that make the game too long artificially since those have a negative impact on player's enjoyment and retention rates.
- If fitting the concept of a game, story should be handled with care and made interesting and engaging, as it is one of the main drivers for high retention rate.

The “subscription 2.0” is in no way an ultimate answer to monetization of the future. It requires a lot to be feasible. The game design should be innovative, diverse and adapted for the long life cycle. The technologies should be good enough to enable faster and more efficient development and at the same time the assets should be smartly reused and managed if possible, not to bloat the budget too much. The world building and story should be entertaining if a game opts to rely on those. All of these things are achievable albeit require a lot of work and time. Moreover, many people may already have subscriptions for other things, and I am not talking about games or PlayStation Plus and others. The video streaming services like Netflix and Hulu; the music streaming platforms such as Spotify and Apple Music; Amazon Prime; many news websites have switched to the subscription model not long ago too. For some people having yet another subscription could be problematic. That is a problem of any subscription. The lack of experience might also be a great difficulty. The first to implement such model in their game could either dramatically fail or be regarded as a trailblazer. The absence of games with a model similar to “subscription 2.0” denotes that there is no one to look for guidance, no data to support your forecasts. It poses a great risk for the first wave of publishers and developers. Just like Bungie struggled to make a transition to GaaS model; just like Square Enix made a Buch of mistakes in early 2010, when gaming industry was morphing; just like Blizzard who had to throw away tens of millions worth of work because they couldn't crack the code with “Project Titan”; just like Ubisoft only gradually realized how to make “Tom Clancy's Rainbow Six Siege” great, that first wave would expectedly make mistakes and adapt to the new industry landscape over time.

Conclusion

Video games are the most flexible when it comes to monetization. You can alter their price, split them into several smaller parts, design them in a way that allows to have an in-game economy with real money involved, give it away for free and sell individual items, release expansions. It is hard to imagine that kind of flexibility and creative relationship between a product and its monetization in any other entertainment industry. With that kind of flexibility comes the need to balance income and customer satisfaction. Push your customers towards certain purchases too much and you get “Battlefront II”, leaving stains on your reputations that are hard to wash off. Monetization is not something determined by a series of business meetings alone. It affects the design of the game and often involves a lot of creative and artistic thinking to be done right. The interactive nature of video games allows for monetization methods very specific to games and it opens up new monetization opportunities, many of which are probably yet to become noticed. Several years back, when microtransactions began to grow in popularity, publishers started to realize that instead of developing many games every year, spending hundreds of millions of dollars in the process, they could develop games that do not burn out as fast, stay relevant for longer and yield more revenue over time. The idea of service-games was born and it is chased by many publishers of today. Gaming community struggles to adapt to new realities and very often takes things personally, feeling that in the chase for revenues publishers are taking the soul out of games and turning them into dull money-making machines. In an environment like that, creative and original games, such as “The Witcher 3: Wild Hunt”, stand out even more and stay profitable without microtransactions. However, it does not mean that service-games are not capable of being respected by the players. For every “Destiny” and “Battlefront II”, there is “GTA Online”, “Rainbow Six Siege”, “Far Cry 5” and many others. Now the transitional period to GaaS model still continues and publishers and developers are still figuring out what they are and not allowed to do.

With the new technologies, namely procedural generation and machine learning, the development process gets more efficient. Artists, programmers, animators and others are gaining an ability to produce content of a greater quality and for less time. Several years down the line, I predict that they will be able to streamline the development process even further, utilizing the union of human creativity and AI efficiency. That increase in efficiency will promote further growth of the GaaS space. More content will get preceded quicker,

making possible to support games with far more engaging, deep and long-playing content post-release, without a need to invest into new games right away, which still requires more time and effort than building up an existing game. The rise of post-release content quality will allow publishers to introduce subscriptions often seen in MMORPGs into their games. Rarely do players complain if they feel that their investment is proportional to the fun they had.

Games are becoming increasingly expensive to make. Video game market is growing every year as well, however, it is in publishers' and developers' interest to find new ways of maximizing profit yielded from each game. Currently, the GaaS model seems like the one to dominate and evolve in the next couple of years but if the gaming industry keeps growing and evolving with the same pace, it is hard to predict what is next. It can be said with certainty, however, that monetizations will always follow game design and game design will morph to accommodate a certain monetization model.

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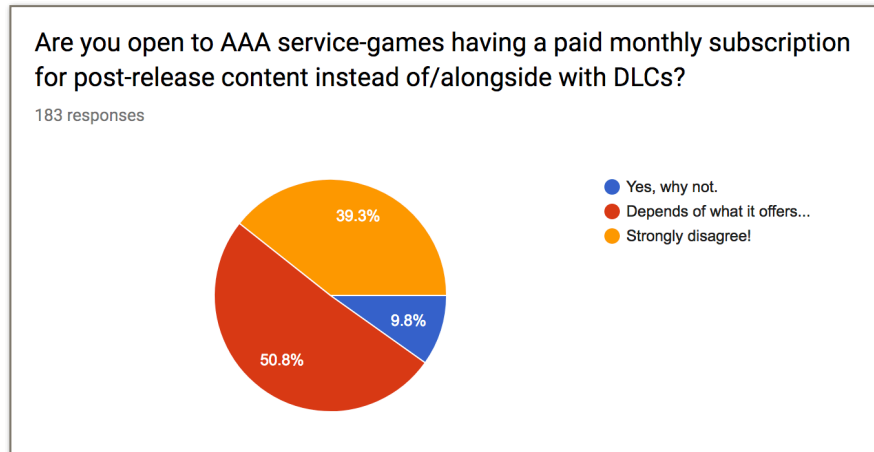
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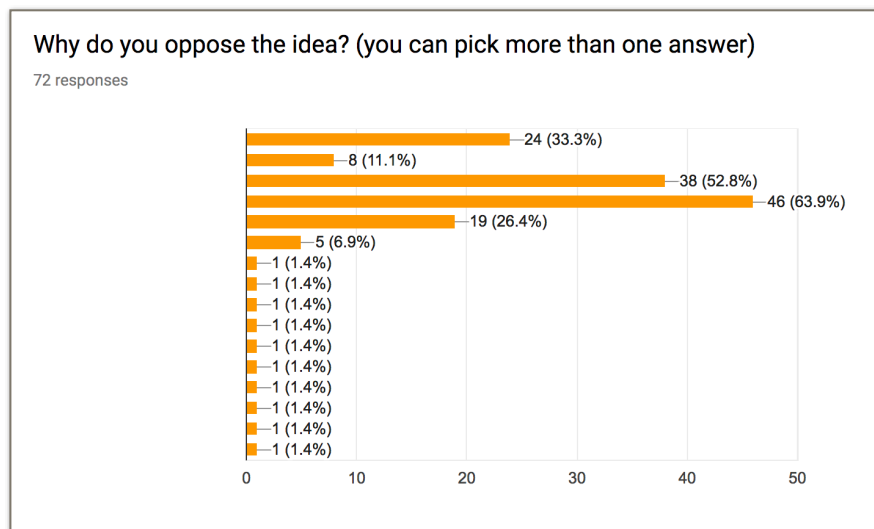
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Appendix A – Survey Results

Question 1



Question 1.1



Answer options:

1. I do not want to pay for future content. If I buy a game, I am entitled to all content released for it.
2. I do not want to pay for future content. I would rather let others to spend their money on microtransactions and that will provide funds for free content for me.
3. I dislike subscriptions.

4. I prefer the conventional DLC model.
5. I already have Netflix/Amazon Prime/Spotify/etc so extra subscriptions are unwanted.
6. I feel like I won't afford even a cheap one...

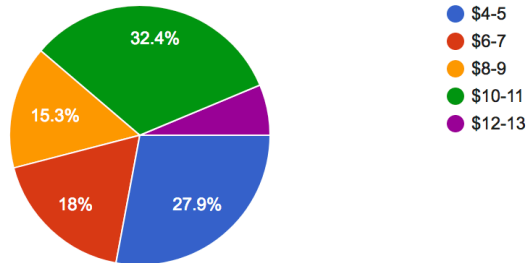
Responders' own answers:

7. "See Fortnite: free updates. Paid skins/emotes or extra game modes (not pay-to-win)"
8. "Don't like dlc either"
9. "A monthly subscription fee makes it uninteresting to casual players - which could be done as a purposeful design choicee."
10. "I think it makes the content deliverers complacent"
11. "i have no trust into developers/publisher delivering quality game content with pre paid subs or season pass models. i want full games with mod support with full quality addons without cut content(pre-order) or any payment model. if a publishers offers that, ill pay the full game price. if not i dont care about the game or buy in sale after all content was released"
12. "I don't want to pay for something that others don't have unless it's purely cosmetic"
13. "This process leads to developers releasing unfinished games and "fixing" them as they go along. That is honestly and unacceptable business practice. If a studio such as cd project red put this out, i would consider buying it given their history. But a AAA developer? not a chance."
14. "There is a possibility that the subscription content is seriously flawed or otherwise bad. Paying a monthly, non-refundable fee would make it feel very underwhelming and almost betraying."
15. "I do not buy anything without knowing what it is and strongly oppose an infinite price for anything"
16. " I will not pay for any subscription unless I know exactly what it offers. Games aren't transparent enough for me to feel comfortable with that purchase."

Question 2

How much are you willing to pay for such subscription? (Read the explanation above!) Please, try to be reasonable :)

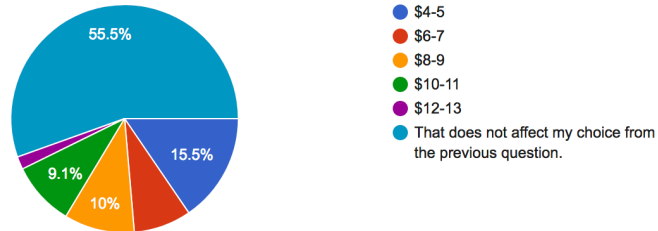
111 responses



Question 3

Knowing that the base game would cost \$40-50 instead of \$60 associated with AAA games in addition to what was described, how much are you willing to pay for such subscription?

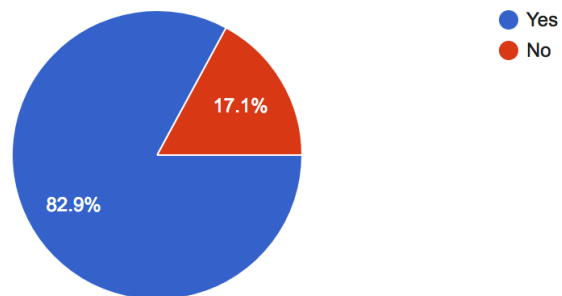
110 responses



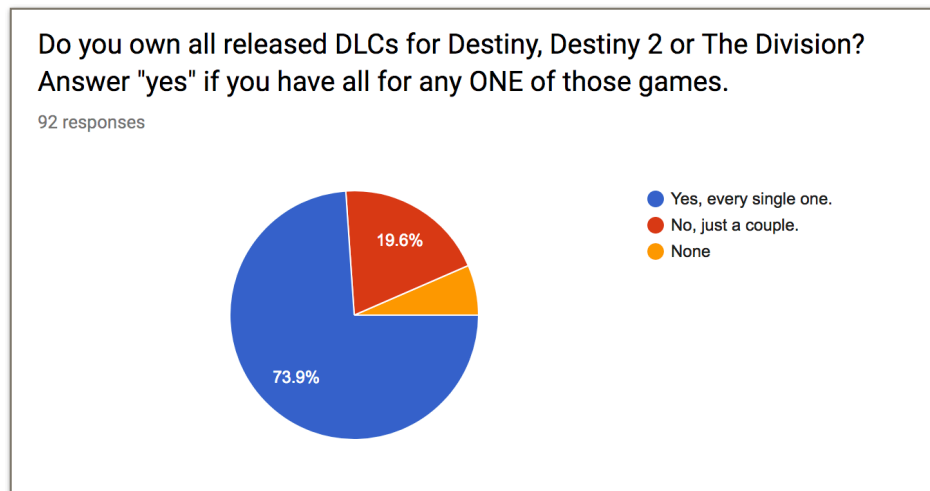
Question 4

Have you ever played Destiny, Destiny 2 or The Division?

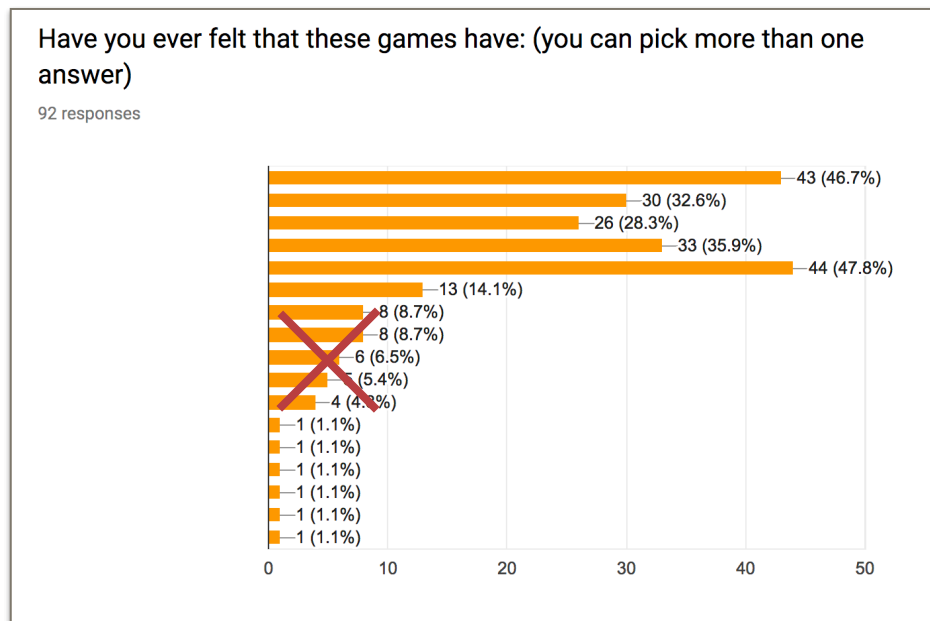
111 responses



Question 5



Question 6



(Note: some data was for some reason split and duplicated. Edited values are below.)

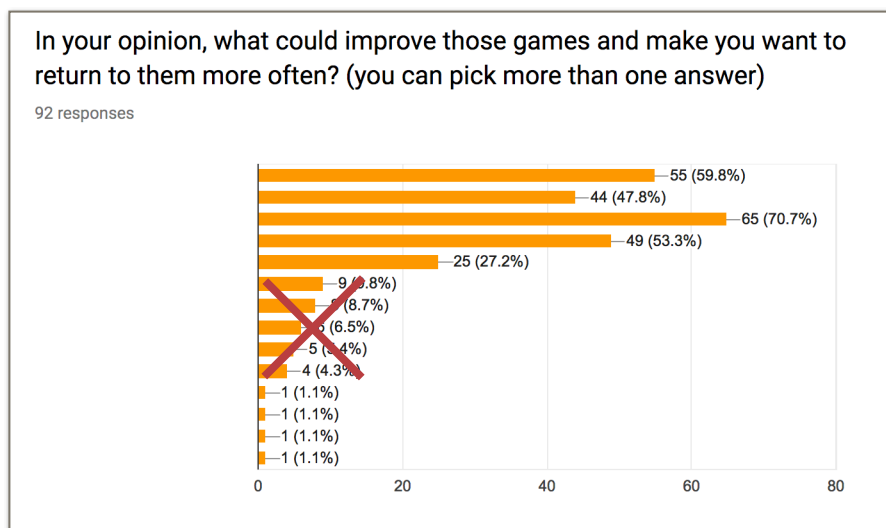
Answer options::

1. Repetitive unenjoyable gameplay (*edit: 47*)
2. Lack of story and world-building (*edit: 38*)
3. Lack of post-release support (*edit: 31*)
4. Lack of content in the base game (*edit: 41*)
5. lackluster DLCs not worth the money (*edit: 50*)
6. None of the above.

Responders' own answers:

7. "Division had unenjoyable gameplay till further patches, same story with Destiny 1. Destiny 2 in current state is unenjoyable"
8. "Inexcusably inept development and complete disconnect between plan and implementation"
9. "Easy content"
10. "Lack of post-release major story expansion."
11. "The Division - Enjoyable singleplayer, difficult transition to multiplayer, but enjoyable enough to then buy season pass"
12. "Division: It was repetitive at first (1.2) but now it's absolutely fine (1.8)"

Question 7



(Note: some data was for some reason split and duplicated. Edited values are below.)

Answer options:

1. Better story or presence thereof in post-release updates and DLCs (*edit: 63*)
2. More engaging gameplay (*edit: 49*)
3. More new maps/missions/weapons/enemies (*edit: 74*)
4. New gameplay mechanics added in DLCs or updates (*edit: 55*)
5. Great PvP environment (*edit: 29*)

Responders' own answers:

6. "A coherent design plan throughout the lifespan of the game, with additions actually building on previous content (separate added modes are nice, but insufficient on their own)"
7. "Deeper gameplay and builds"
8. "Warframe like content updates, constant item/combat rebalancing to keep it new."
9. "Feeling of impact. When I return frequently, I want to see that persistence reflected in the game. When I go away for a while, the world should deteriorate and be reflected in the game."

Additional Information

The data was gathered between 3.05.18 and 5.05.18. Surveyed people are assumed to be players and familiar with discussed topics. The survey was posted on several gaming-related sub-forums of Reddit (www.reddit.com):

<https://www.reddit.com/r/thedivision/>

<https://www.reddit.com/r/assassinscreed/>

<https://www.reddit.com/r/NoMansSkyTheGame/>

<https://www.reddit.com/r/destiny2/>

<https://www.reddit.com/r/DestinyTheGame/>

I have also surveyed friends of mine, who are familiar with the gaming industry.

Full source can be found in the Google Drive spreadsheet at www.drive.google.com/open?id=1Xl-VN00SMKqI9WFq-70zyaLqnaczf0Djw0h0vueE6XMA