LIVE SERVICE GAMES

Changes in videogame production

Abstract

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Abstract

The purpose of this thesis was to describe the lifecycle of videogames and how it has evolved. As video games have risen to be a prominent entertainment medium, new products are developed constantly, and most game's lifecycle also continues after their release as a live game. The changing world and developing technologies create the need for innovations.

The primary objective of this thesis was to find what makes games stay successful. It introduced two major videogame franchises: World of Warcraft and the Sims. These games have been able to last the test of time by reinventing themselves through new expansions and features.

The thesis theory includes the history of videogames, monetization, marketing, customer management, esports, and what makes a game successful. These will be followed by the life cycles of the two games, highlighting their major features. The end of the thesis includes discussions and possible trends for the future of gaming. The games have stayed successful by communicating with their player bases, innovating with new technologies, stealing the best ideas from other games, and creating content consistently.

The research methods of the thesis were document analysis and qualitative research. The gaming community continues to share its thoughts and direct observations of the game's development online, and it gives a unique insight into the community's perception.

Keywords

The game industry, video game, life cycle, brand, monetization

CONTENTS

1   INTRODUCTION

Over the last few years, the gaming industry has been exploding, and so has the number of consumers using the ever-growing selection of games. In 2021 those three billion gamers spent over $175.8 billion on games. The gaming industry has passed both film and music industries combined. Mobile gaming has made gaming more accessible, but traditional gaming has not lost its edge. Mobile gaming took 36% of the market and is estimated to grow a few percentages each year, but the whole industry is growing even faster, estimating $200 billion in 2024. The amount of players is growing consistently over 5% a year, as seen in figure 1. Electronic sports competitions grow with the industry, providing a platform for the best to compete. (Drachen, Mirza-Babaaei & Nacke 2018, 3; Wijman 2021.)
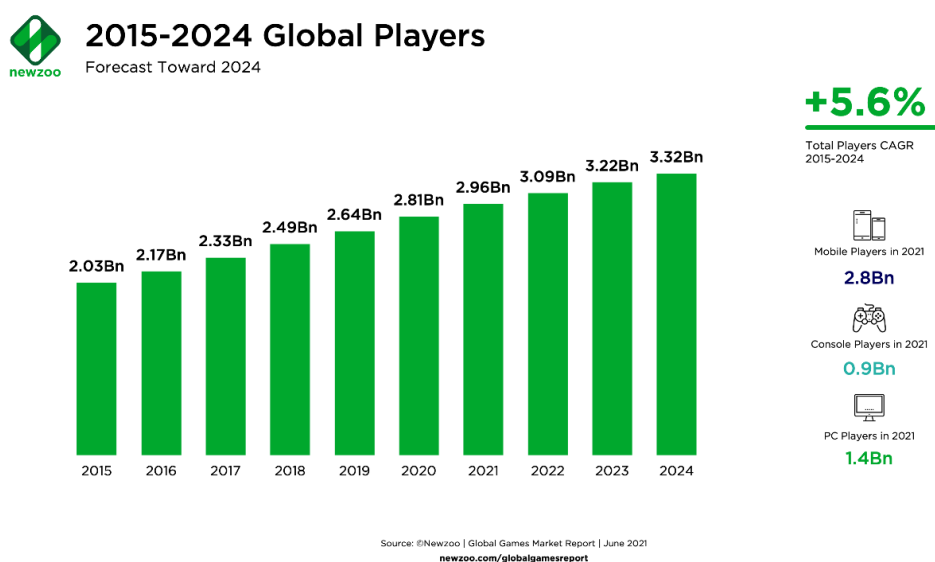

Figure 1. 2015-2024 Global Players Forecast (Wijman 2021)

As the industry is growing, companies are announcing more and more games. To survive, a game studio needs to approach game development from a fresh angle, as nobody can play all upcoming games. Gamers are loyal customers that will return to their favorite games, talk about them, and share their experiences online. It can often be worth updating a game that already has a stable player base over creating a new one. The companies use data to identify customer behaviors and see what they genuinely enjoy and what challenges them. As gaming has become a part of our work life, education methodologies, and free time, we all encounter this phenomenon one way or another.

The Finnish game industry is known all over the world and is well-known for its mobile games. The companies are mostly small, but others like Supercell, Rovio, and Remedy

Entertainment are world-known. Supercell's Clash of Clans is one of the world's highest-profiting videogames. With increasingly more people having access to a mobile phone, quick and easy gaming has risen in popularity. Finland has time and time again shown talent and potential, and rumors say it has something to do with Finland's dark, long winters when the youth had nothing else to do but start coding with Commodore 64 in 1982. (Lappalainen 2015, 7-9, 29.)

I have played games for the past decade, starting with Nintendo games on my Nintendo handheld console. I have dived into different game genres and seen the highs and lows of many. Gaming conventions became a second home, at least in the normal state of the world. At home, esports is on the TV every night. I saw the development process of a new expansion during my internship and had a chance to see how all the production teams worked together and how the game has been able to reinvent itself. I hope to display the change of the industry and show its relevance to our future.

1.1 Goal and research questions

This thesis covers live service video games and their development. Videogames are games played on an electronic system and can vary from arcade games to handheld consoles and phones. They are interactive experiences simulating real-world experiences through sports, adventures, fighting, and life. (Esposito 2005.) Live service games (live games) are a more recent way to view the life cycle and monetization of games by creating new content to capture the players' attention after the release of the game. This affects the monetization of the game through the popularity of subscription models and microtransactions. (Arifianto 2020.)

This thesis aims to understand and describe the changes in videogame development, especially in live games, and how the game's lifecycle has adapted over time. It seeks to find the features and philosophies that have moved the game forward, keeping the players intrigued over decades. It creates a description of companies that have been able to reinvent their products to stay successful. The main research question for the thesis is: "What efforts in the production keep a videogame stay successful?" The research seeks to find the answer to the research question through the secondary research questions:

- What efforts are made to refresh the take of a game?

- How has World of Warcraft and the Sims franchise stayed successful?

These questions are set in place to find examples of successful games, then identify how they have been able to reinvent themselves, and then pull together to see what efforts create a successful title.

1.2   Research methodology and data collection

Research methods are the rules and procedures used to answer the research questions (Ghauri & Grønhaug 2010, 37). The primary data collection method used in this research is document analysis. Document analysis is the systematic procedure of reviewing documents, which requires the data to be examined and interpreted to understand and develop empirical knowledge. This is a fast way to gather large amounts of data, as the knowledge of a game's lifecycle is scattered in advertisements, journals, newspapers, television programs, and other public records. Old events, such as the launch of these games and the issues experienced during these times, can only be observed through the documentation done during that time. (Bowen 2009.) The stories and experiences may carry emotion of the person experiencing these events giving unique data. The stories of the games require interpretation. Analytical procedures are applied to manipulate the acquired data to find the patterns that have taken part in the games' success.

The experience of video games is personal; thus, the thesis focuses on qualitative data. The data focuses on the social aspects and the experiences of the people working with the topic. It gives a better understanding from the companies' point of view than quantitative data in many places, as it is more process-oriented. Qualitative data emphasizes understanding the history, and many decisions have been made over the decades that have shaped the products. Qualitative data can be found from the documents, as well as other secondary sources. (Ghauri & Grønhaug 2010, 90-105.) John Staats (2018) shared in detail in his journal about the development process of the videogame World of Warcraft. His experiences are heavily used to display the development process before the game's release.

Secondary data gives concepts and definitions to explain problems and to specify relations. (Ghauri & Grønhaug 2010, 37.) Videogame production is an intersection of brand building, game design, marketing, and customer management. Theories about business and marketing from external sources can be applied in many places, also to videogames. The secondary data explores studies and articles on these topics and helps understand and explain the research problem and videogames as a phenomenon.

Validity and limitations

Validity measures what the research tries to capture and how it considers errors affecting the measurements. Validity also looks at how well the study can be applied. In qualitative research, there is the question of descriptive validity, of how much the statements hold true. Due to the research methods, external actors create articles, online materials, and videos used as references, and they can be biased. Opinions are emphasized to be opinions through the thesis to differentiate the community perception from quantified data. Generalizable validity is the question of if the research can be applied. Each videogame has its unique features, and each game has its unique path to success. Even though the main findings would hold true throughout the industry, they can be applied in different ways in smaller companies. (Ghauri & Grønhaug 2010, 79, 210.)

1.3   Thesis structure

This thesis is shared into three main parts, introduction, literature survey, and the research. The introduction states the research questions and the basis for the study. The literature survey covers the history of video games and the videogame production and life cycle, including monetization, marketing, customer management, and how the success of a videogame can be defined.

The research part, chapter three, dives deeper into why specific games have been successful over time. The chapter covers the games from a need until the release of the game and the changes the companies made to the games to keep them relevant and exciting. To conclude, the thesis finishes with a discussion and thoughts on the future of gaming.

2   LITERATURE SURVEY

Videogames have been taking over the world since the 1970s. Videogames are a unique take on entertainment, as the game gives the consumer a chance to try again and learn by gaining experience. It creates small examples of the world and problems to solve, balancing on being challenging but possible. (Chatfield 2010, 17-18.) In a way, games give a perfect chance to save the world in story-based games or a chance to create a farm in a mobile game and collaborate with other players to get the prettiest farm. The best players want to compete against each other in competitions and this has created a genre of electronic sports.

The game industry's target audience grows. Latin America, the Middle East, and Africa are the world's fastest-growing regions in terms of players, with Asia-Pacific players holding a 55% share of all players. As smartphones are more available and the internet infrastructure is improved, we have seen a 10% yearly increase in players in the Middle East and Africa and a 6% increase in Latin America. Of the 3 billion gamers, 2.8 billion play on mobile devices, compared to 1.4 billion on PC. (Wijman 2021.)
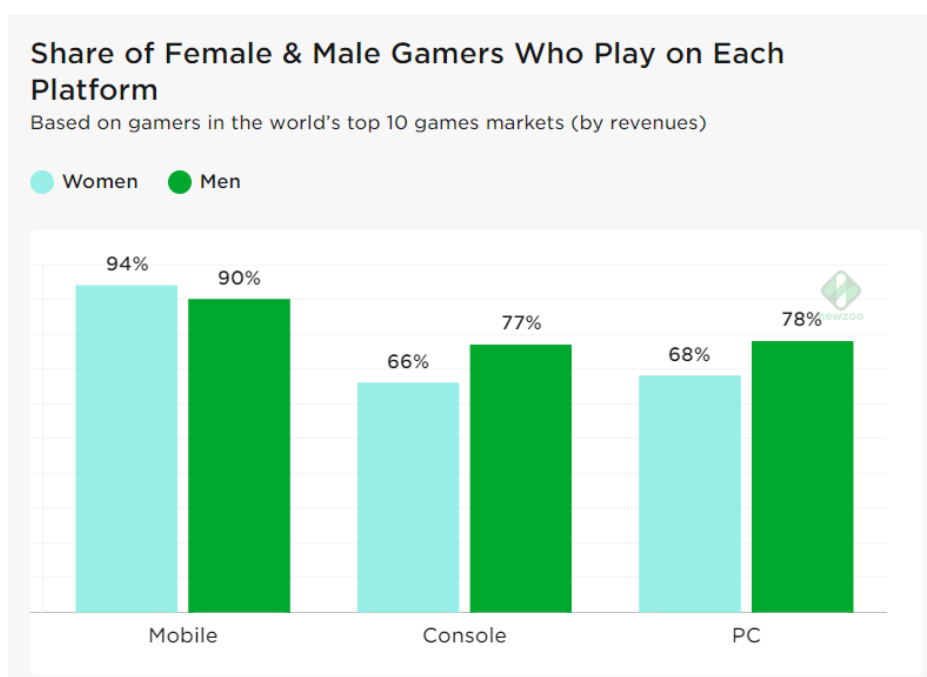
Figure 2. Share of Female & Male Gamers Who Play on Each Platform (Brune 2021)

In 2021, half of all gamers are women. Figure 2 shows the differences in different platforms, having women lead in mobile gaming. Especially puzzle games and games with creative choices appeal to the female audience, while males are more likely to enjoy an open-world setting. (Brune 2021.) Not all female players are mobile gamers. In the group of the most passionate players, almost half are women (Bosman 2020).

There has also been a shift in the age of the players. Most gaming enthusiasts are grown up. Almost half of the most passionate gamers are aged 30 or above, with most in medium-to-high earning full-time jobs. (Bosman 2021.) This data shows the importance of diversity and accessibility in games in the future and how the publishers need to consider the broad audience.

Technology evolves fast. New upcoming cloud gaming services, virtual reality, and the player's expectations are moving forward rapidly. The hardware developments create the basis of game engines and graphics. It is rarer to buy a game box from a store, and new monetization methods are needed to fund games. Netflix has announced their move into streaming games in the same format they stream series and movies. The service will be included in the regular subscription. (Shawn & Gurman 2021.) Players spend money on in-game microtransactions, expansions, and they also might get a small gift for watching an advertisement in a mobile game.

2.1   Videogame history

Videogames are a part of the broader category of games; the first competitive games been found dating back to 2600 BC. The researchers suspect that people have played games as long or even longer than they have been able to read and write. One definition of a game is that there are simple rules, and the players are following them. (Chatfield 2010, 13.)

The common understanding was that the first videogame is in 1972 released Pong by Atari, an arcade game resembling tennis. Looking in more detail, Pong was not even Atari's first videogame, but the sales were too small for the earlier games to gain enough attraction. One of the first games was called Spacewar! developed in 1962 in the Massachusetts Institute of Technology as the first interactive game. It was running in one of the most developed computers in the world and therefore was never meant to be released. (Ahoy 2019, Chatfield 2010.) The developer, Steve Russell, never profited from the game. Russel later transferred to Stanford University, where he showed videogame programming to a student, Nolan Bushnell. (Bellis 2019.)

Picture 1. Spacewar! on the Computer History Museum's PDP-1 (Bellis 2019)

Nolan Bushnell founded the game company called Atari. He was later known as the person writing the code for the first coin-operated arcade game (Bellis 2019.) Atari re-released Pong in 1975 for home use and sold 150000 units. With Atari's commercial success during the 1970s, many companies gained interest in the booming videogame industry. As the field was developing and learning, many games were published unfinished, giving the industry a bad reputation. During the 1980s, Nintendo and Sega rose from Japan. With the Japanese careful approach and attitude, they produced professional-quality games, such as Nintendo's Super Mario Bros and Sega's Mega Man. The next giant leap in the gaming industry was in 1995 when Sony released the PlayStation, and it brought video games to every home. The first PlayStation sold over 102 million pieces. (Bellis 2020; Chatfield 2010.)

The 1980s were known for the development of hardware and computers and the birth of Ultima, Mario Bros, and Tetris. The 1990s brought the era of three-dimensional games, Tomb Raider, and historical games such as Age of Empires. The 2000s were about online gaming, first in the same network and physically in the same place, and later over the internet.

A popular game was Counter-Strike, released in 2000, where ten players would play on a map in two teams, trying to eliminate the other team and win rounds. World of Warcraft in 2004 was mainly played online, pushing the gaming technology to its limits. Sandbox games gave players more freedom in the Sims, Grand Theft Auto: San Andreas, and Minecraft. 2010 was the breakpoint when video games passed the film and music industry. Smartphones had games from day one. Increasingly gaming has moved as a shared experience through YouTube gameplay videos and later live streaming. (Rechsteiner 2021.)

The development of the gaming industry has been steadily growing. In 1970 the industry passed a billion dollars. Eighty billion dollars was passed in 2000, and 175 billion in 2021. (Chatfield 2010.) Gaming has been successful, and it is not showing signs of slowing

down. While traditional media struggles with digitalization, while games are hard to copy and possible to distribute without physical stores. Games are increasingly viewed as active consumption better than just watching television.

A whole premium gaming experience can take up to 5 years to develop and is a massive investment. The company needs to have a successful game to be able to fund its future projects. (Chatfield 2010.) If a game title is supposed to last for 50 hours, or often significantly longer, everything needs to be tested, every cave in the world made to look alive and make the game fun, not forgetting to integrate the game into multiple languages and platforms. The games are also maintained over the next few years, with new content pushed out regularly.

Star Citizen is a game of the largest scale. It was supposed to give an immersive open-world experience of space and to be released in 2014. As of 2021, the game is still in development. What makes this process unique and possible is the crowdfunding done to fund it. In 2019 the game had collected 242 million dollars, and excluding cryptocurrencies, it is the biggest crowdfunded project ever. This money has been used to fund 537 employees in five offices around the world. Forty-five dollars will give an introductory ship and access to the current game version. It remains to be seen if the game will ever be released and deliver the promised one hundred star systems. (Perez & Valdi 2019.)

2.2 Videogame production and life cycle

Videogames have a unique development process, which has also changed over time. Figure 3 shows the three main parts: pre-production phase, where the ideas are tested in a small team, before having a more extensive group working in the production phase with level designers, artists, and gameplay developers. Post-production includes the localization process, advertisement, expansions, and monetization. Marketing is traditionally focused on the post-production phase, but increasingly marketing is included from the first steps. Monetization, marketing, and customer care will be covered in more detail in the following chapters. (McCarthy, Curran & Byron, 2005.)

Preproduction → Production → Postproduction

Figure 3. Main production phases (McCarthy, Curran & Byron 2005, modified by Elisa Rissanen)

Preproduction, production, and post-production is a simple way to describe the process, but there can still be more steps when looking at the development and marketing efforts. Figure 4 shows an example of this, starting with the initiation process. In this step, a rough concept of the game idea is created and possibly a prototype. The stage is finished with a concept shared in the studio to make the first playable prototype (FPP). The FPP shows all the game's central concepts, even though they can look rough and be full of bugs. It only needs to prove the game is fun to play and worth the investment. In the alpha stage, the primary gameplay functionalities are implemented. When moving from alpha to beta version of the game, no more features are added, and the game is polished.
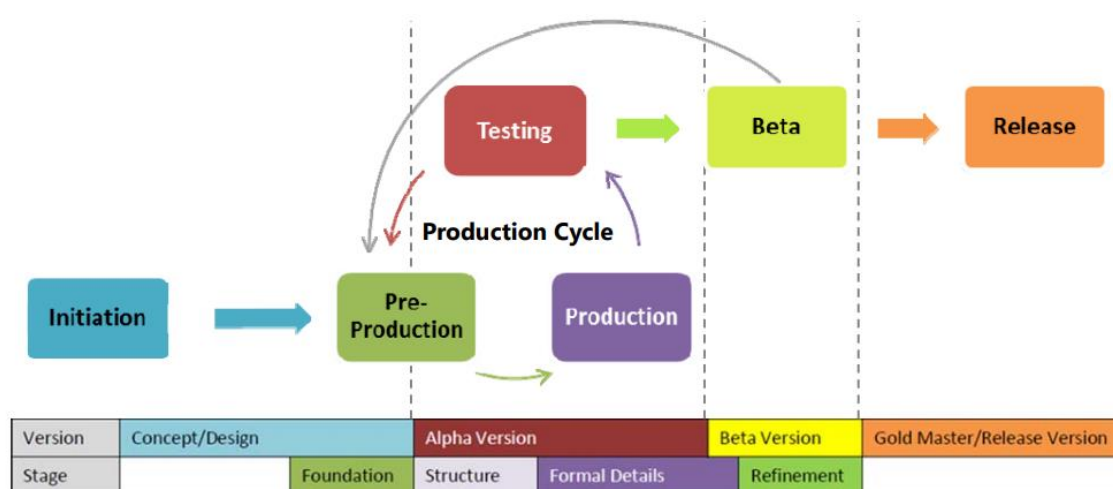

Figure 4. Videogame production model (Ramadan & Widyani 2013, 98)

Game testing is done to secure all the elements of the game work as intended. During the alpha phase of the production, testing is done mostly internally and sometimes by outsiders in controlled environments. Beta testing can be done by a third-party or external tester - eventually, be even entirely open for anyone interested to try the game. Public testing is done to gain more feedback, as there are still possibilities to affect the final game. The testers are intended to break the game, to discover bugs and loopholes, each documented and analyzed. Fun, functionality, balance, and accessibility are possible categories different tests focus on. (Widyani 2013.)

Early access is a release strategy where the developers let the consumers purchase an unfinished version of a game and give the customer a chance to affect the final game. Especially in Steam, an online game distribution platform, this has become increasingly popular. For a company, a strategy like this can be good if they are still looking for investors. The process has been questioned as unethical, as the company is selling an unfinished product that might never be finished. (Lin, Bezemar & Hassan 2018.)

Quality Assurance (QA) is a part of the development process and is in charge of testing. QA identifies bugs and gives feedback on the game design, story, and immersion. Outside of the team testing the game themselves, they experiment with group testing. The consumer is faced with two options of graphics, game mechanics, or a piece of the marketing campaign, trying to find out which works better. Testing is also done for all hardware the game supports. (McCarthy, Curran & Byron, 2005.)

After the game's release, the project still needs to be documented, post-mortems created, and the maintenance of a live game continued. The cycle can continue with expansions and new content drops. Expansions are more significant post-launch content releases refining the game and bringing players back from the original launch. (Ramadan & Widyani 2013, 98-99.)

Games as a Service (GaaS) or a live-service game is a system set in place for the post-release of a game that has gained more popularity, primarily through mobile games. It is mainly about bringing new content, often through subscription-based methods such as a battle pass, giving the player more rewards for the same effort for some time, or through microtransactions, which are small purchases made in-game to progress faster or for cosmetic items. The system aims to keep players in the game and continue to pay for it by keeping the game fresh with new heroes, events, and balance changes. (Arifianto 2020.)

Videogame genre lifecycle

Outside of the actual videogame production, also game genres have life cycles. Game genre defines games based on categories, usually based on major game mechanics, such as driving, puzzles, and first-person shooter games. An example of a recently developed game genre is Battle Royale, which was created first as a modification for another game. It had the genre's base idea of spawning to a circle area and finding loot, killing other players, and as the circle grows smaller, the last remaining player or team wins. This introduction of a genre is the first step in figure 5, which describes the stages of a game genre lifecycle.

Steam, an online game distributor, also shares games still in development. H1Z1 was one of the first Battle Royale games to be released. It interested many players due to the psychological ways to play the game, as when one player met another, they would not always try to kill each other. In the growth phase, the developers experiment with new ideas and try to release follow-up titles. (Hornshaw 2019; Cook 2021.)
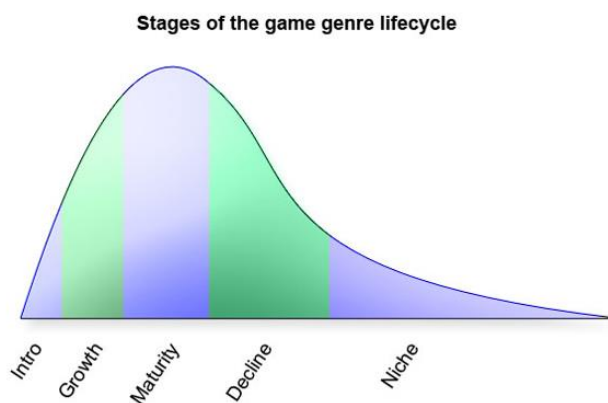
Stages of the game genre lifecycle

Figure 5. Stages of the game genre lifecycle (Cook 2021)

The games that brought the genre to its maturity were Player Unknown's Battlegrounds in early 2017 and Fortnite: Battle Royale a year later. These games were more polished and Fortnite, a free-to-play game, gained a large following. One game will likely pull the mass appeal and continue as the major esports game for the genre. Moving towards one main game is possible as the players gain skills in the game mechanics, making switching possible. (Hornshaw 2019.)

When a game goes to decline, other genres rise and pull players to them. Fewer titles are released, and the largest game gives the perception of the genre's health. A niche genre is avoided in game development, as the audience is too small to release large-scale games. Some games get remastered versions of the original versions. (Cook 2021.)

2.2.1 Monetization

The videogame industry, like any other, is trying to create profit. Monetization means the ways the customer will pay to the company (Fields 2014, 21). The videogame industry tries to make as much money over a game's lifecycle from customers as possible, and many companies are taking different approaches.

Figure 6 compares the traditional purchase funnel to the adapted version in the monetization of a game. It describes the lifecycle of a customer and the steps they take before spending any money. It relies heavily on word of mouth and the general perception of the game. (Fields 2014, 111-114.) It is also to be considered why the customers stop using the service and why they come back. Games also have passive consumers who follow the game without playing it themselves. They might watch other people playing the game or waiting for a better time to play. Social media has a significant effect on creating a viral game and bringing more players in.
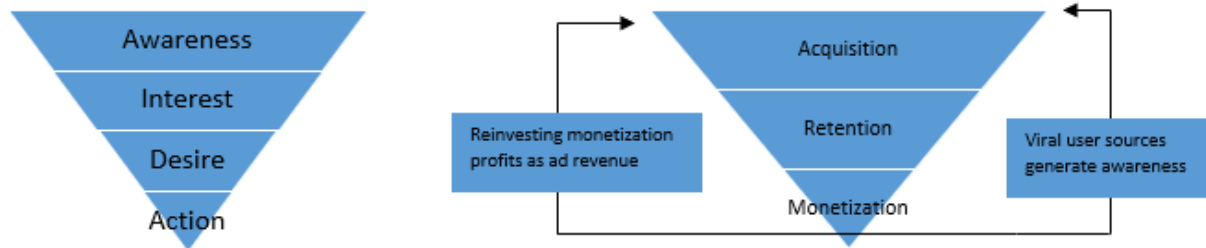
Figure 6. Purchase funnel and adapted version for games (Fields 2014, 112-114, modified by Elisa Rissanen)

Traditionally games were single-player one-time purchases, and monetization was simple. More recently, the industry has moved into free-to-play games with micro-transactions and expansions, monetization methods have broadened. Some main ways are introduced here:

- Retail purchase is a direct transaction and is keeping hold of the game market. Digital downloads offer online platforms that sell digital keys to games. The percentage of digital downloads has risen from 20% to 83% from 2009 to 2018 (Gough 2020b). Owning a digital copy of a game instead of a physical item changes the understanding of owning a game, especially as the developers can make changes to it online at any time.

- The subscription model is mainly known for massively multiplayer online games, MMOs. Players purchase game-time hourly or monthly. This model is relatively rare, but there has been a rise in extensive subscription models, like Xbox Game Pass and PlayStation Plus, giving console players many new games to play each month. (Kooistra 2020.)

- In-game microtransactions offer unique equipment, cosmetics, or ways to speed up the game. Especially any purchasable products giving a player advantage is considered questionable, and often they are used in single-player focused games.

- Free-to-play games popularized indirect monetization methods. The game publisher is not directly charging anything from the players but sells add space in their game.

Esports is an essential part of monetization in games that have a competitive aspect. Organizations acquire teams and keep the cycle of money moving. Figure 7 shows the distribution of the esports income. As in traditional sports, anything that attracts customer focus can be sold to sponsors, and therefore is the primary source of income. From the first

days, a gaming-related brand sponsor was essential to get prize money. Also, players have signed deals with brands, some representing brands directly. As gaming has become a jackpot, many players and influencers have been used as marketing assets. Both official competitions and content creators can stream to entertain their fans, show competitive gameplay, and create a platform for conversation.

Esports Revenue Streams
Global | 2021

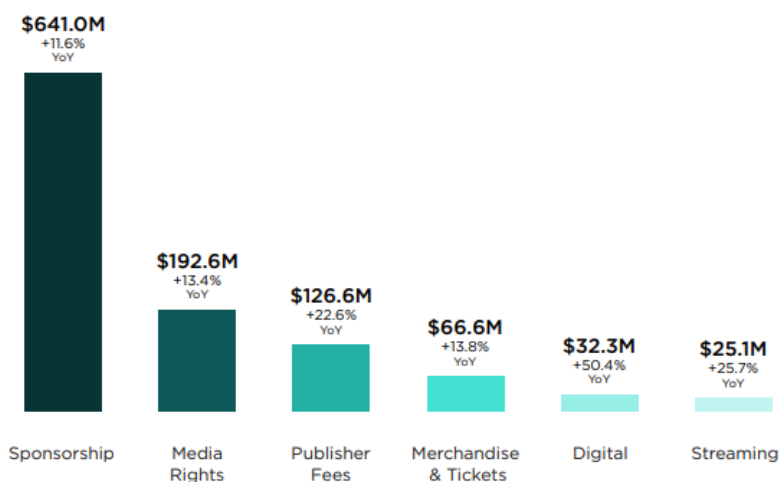|					
$641.0M +11.6% YoY	**$192.6M** +13.4% YoY	**$126.6M** +22.6% YoY	**$66.6M** +13.8% YoY	**$32.3M** +50.4% YoY	**$25.1M** +25.7% YoY
Sponsorship	Media Rights	Publisher Fees	Merchandise & Tickets	Digital	Streaming

Figure 7. Esports Revenue Streams 2021 (Newzoo 2021, 30)

Live streaming is when a creator broadcasts content to a live audience through social platforms. The platforms allow live discussions with the creator through a chat. Streaming services such as Twitch have no barrier to entry, and streaming can be connected to sponsorships, subscriptions, and revenue share models. An example of a unique revenue share model in games is from Counter-Strike. The developers created loot boxes to get in-game items, and they were given to viewers if they watched the game tournaments online. (Sillis 2020, 178-183; Newzoo 2021, 34)

2.2.2 Marketing

Videogames are part of the entertainment industry and work with a lot of the fundamental laws found in product marketing. Marketing is the process of creating, communicating, delivering, and exchanging offerings that have value for customers (Zackariasson & Dymek 2017). Videogames are often on the edge of new marketing methods. The industry is snowballing, and more games are produced than anyone can keep up. Brands and communities are formed, and companies are fighting for their customers. It is increasingly relevant to create loyal customers who return to the game titles of the same franchise, get excited about new updates, and support the studio's other games. In the end, a videogame

and the studio producing it is a brand. The world recognizes companies and games such as Nintendo, Angry Birds, Blizzard, the Sims, and Minecraft.

The first televised videogame was from 1972, after the gaming platform Odyssey was released. Odyssey was one of the first game consoles, where the games were built to the console, and each disc selected the mode from tennis, roulette, hockey, or other games. An external screen was then overlayed to the regular television screen, as seen in picture 2, and the television's input was the lit-up boxes. During this time, Pong was not released yet, and most people did not know the word videogame. The advertisement was essential to explain how the technology worked. (Willaert 2018.)
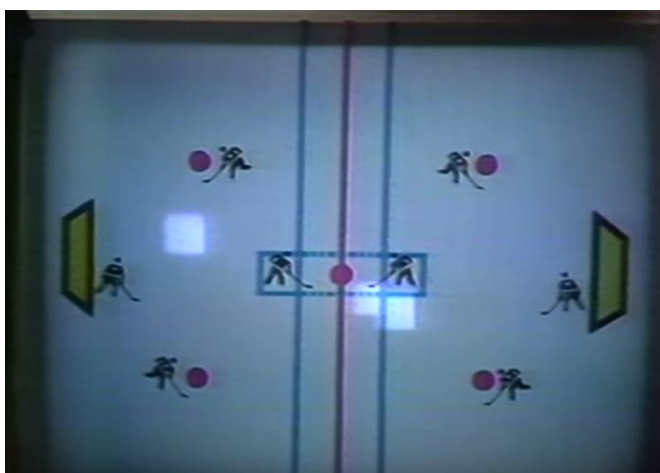
Picture 2. NHL on Odyssey (Willaert 2018)

A more recent example of videogame marketing being a success, maybe even as an accident, was with the game Among Us. The game is an indie game developed with a small team and was first launched in 2018, but it had to wait until the gold rush in 2020. The game is focused on communication as the team is trying to find out who the imposter is trying to kill the other players.

In September 2020, the game was downloaded 125 million times and had 3 million concurrent players. The game was fun, easy to learn, and intriguing to streamers, as the game was social and different content creators could also collaborate by playing together. Some of the world's most popular streamers Sodapoppin, xQc, Pokimane, and DisguisedToast, were examples of this. One of the most significant events was when United States congresswoman Alexandria Ocasio-Cortez played the game with popular streamers, and the stream went viral with 430000 viewers. This was done mainly to encourage players to vote in the 2020 election. (Aoki 2020.)

Based on the Endorsement guidelines of the Federal Trade Commission, streamers and content creators are required to disclose if they are being sponsored. In any situation, the

relationship between the company and the influencer is not inherently obvious; the type of relationship needs to be stated. Even though these rules are widely known, Warner Bros was charged by the FTC for deceiving the customers with their marketing campaign for the game Middle Earth: Shadow of Mordor. The campaign reached over 5.5 million views, including the biggest YouTuber in the world, PewDiePie. The charges were later settled. (Federal Trade Commission 2016.) These types of actions have created more distrust and uncertainty around the heavily sponsored games.

Even though the ways of marketing are changing rapidly, here are named the most appropriate marketing methods for the videogame industry and how they are most often used:

- YouTube for announcing games, cinematic trailers, tips, and tutorial videos. Studios collaborate with content creators to get the game to new audiences.

- Twitch and other online streaming platforms function similarly to YouTube but in real-time. Announcements can first be shared in Twitch and then be uploaded to YouTube. Streaming services give a possibility for direct conversation with the community, creating a closer relationship. Giving streamers access to the beta version of the game will likely gain excitement around the launch.

- Facebook and Twitter are the fastest forms to share the news with the community, such as updates and maintenance details. They are also great for community activations.

- Reddit is a collection of forums often used by gamers. It has game-specific subreddits and a more general r/gaming, which can reach 27 million members (r/gaming 2020). A game company can answer questions about their game, request feedback, and follow how players feel about the game's state at any given time.

- Digital videogame distribution platforms, like Steam and Uplay, are necessary places to share news, updates, patch notes, and guides (Jenn 2019).

- Companies take part in real-world conventions, like the yearly held Gamescom. Many game developers announce their games and let people play the first public demos, gaining feedback from the visitors, other developers, and media.

Most consumers are familiar with advertisements before YouTube videos and ads between television shows. This is a marketing method also used in video games, primarily on mobile. The issue with this approach is that consumers can get tired and annoyed by their playing experience being bombarded with advertisements. Videogames have a unique take on this, in a similar way to product placement in television shows. One way is

to directly reward the player in-game when they choose to watch advertisements. The first sponsored game was Pirate Adventure in 1978, where the levels were Chupa Chups candy inspired. This has developed to a more subtle way, where games such as driving games can advertise on billboards that are part of the gaming world and not strictly directed at the customer. (Yerukhimovich 2020.)

A trend is going through many industries, such as makeup, which relies more heavily on influencer marketing. Humans have been influenced as long as there have been societies, and often the influence is focused on a person or a small group. Around 2010 the term was used for the first time in social media for bloggers and later YouTube content creators. The term influencer focuses on how a person has a higher than average possibility to influence other people, in these cases, the people consuming their content through videos, pictures, and blog texts. Esport players in Twitch have become a potential marketing channel targeting young men, and TikTok, a service for short videos, has gained popularity in the younger audience. (Halonen 2019, 13-15, 29.)

In the current digitalized world, it can be hard to get a customer's attention. In marketing, influencers have consistently been more trustworthy than traditional celebrities, as they are often viewed as more relatable and consumed when relaxed. (Halonen 2019, 16, 61.) Influencer marketing is essential in video games, and the value of an honest review is high. Studies have shown that consumers who watch esports and review game-related video content are more likely to play the game themselves and make game-related purchases. (Törhönen, Sjöblom, Vahlo, & Hamari 2020.) Already in 2019, streamers that have 15000 or more viewers earn 25000-50000$ when playing a game sponsored by the publisher. Rumors were told that the streamer Ninja was paid by the game company EA a million dollars for playing the game Apex Legends for a few days. The payout is massive, but they give hours of quality gameplay content to the most core audience by a person the viewers admire and trust. (Tassi 2019.)

The 2020 phenomenon of Raid: Shadow legends as a sponsor for Twitch streamers is hard to understand due to the sheer number of streamers playing the game. Hundreds of streamers play the free-to-play mobile game and push it to their audiences, and the game is often in advertisements targeted to players, which adds up to millions of dollars each month. The game is heavily monetized, and progression is challenging without using money, which raises the customer's lifetime value, making it worth spending a lot of money to gain the customers in the first place. (Mckenty 2020.)

2.2.3   Customers

The target audience for video games has changed and become broader as games have become more mainstream. Retaining players is more complicated, and the customers are making more decisions based on their expectations. (Cook 2011, 7). In the end, the fundamental interactions with customers have not changed much. Branding, company processes, and culture have the same if not a more significant effect on customer decisions. Videogames are unique for having their own communication channels, always available customer service, and the ability to measure and track customer actions and decisions. (Gerd

t & Eskelinen 2018, 14.)

Research by Yap (2019, 33-34, 37) indicated that the most crucial factor in selling successful games is brand loyalty over the game's quality. They stated that the strongest indicator of brand loyalty is customer involvement. Involving players in the development process can secure continuous feedback to identify what players enjoy. The developers can find potential problems, promote the game, and reduce risks in developing games that do not meet customer expectations. (Alam 2019, 56-58.)

No Man's Sky is a prime example of the gaming community's power and high expectations. The developers promised an endless universe to explore, so big the player might never run into anyone, with limitless gameplay possibilities. In the launch, the customer expectations were not met. A Reddit thread detailed problems with the game and got thousands of upvotes, rising to the community's awareness. (Klepek 2016.) Over the years, the game has been updated, and the most recent reviews on Steam are primarily favorable. (Locke 2019.) Regardless of the current state, the game still carries the reputation of the game that just did not make it.

Feedback is essential for any product developer. In video games, feedback is constantly available. Data can be collected of how many players are playing the game, what they are doing, and how they speak online. Feedback is an essential tool, but looking at numbers can be misleading. On average, just a tiny percentage of customers complain about their issues, and even fewer give positive feedback from their experiences. For each bad experience, the customer will tell ten other people. In social networks, these figures are even more prominent. Companies need to remember that customers complaining want a relationship with the company to continue, and they want to give the company a chance to fix the issue. (Cook 2011, 92-93.) As giving feedback online has become a part of the gaming experience, a study by Livingston, Nacke, and Mandryk (2011) showed that the

players who read a negative text about a game rated the game lower themselves. It was also revealed it did not matter who wrote the original negative-toned text.

Customer segmentation

Segmentation creates smaller markets within markets and makes it possible to target specific segments more precisely through marketing efforts. Segments are traditionally based on location, gender, and age. Segmenting can also be done based on personality traits like emotional stability and openness. (Khaleghi & Lugmayr 2012, 283-285.) Behavior-based marketing segmentation is often used in games, as the location, gender, and age can be unknown or less relevant. Newzoo created one possible way to segment players: ultimate gamers, all-around enthusiasts, conventional players, subscribers, lapsed gamers, backseat viewers, popcorn gamers, hardware enthusiasts, and time fillers. This segmentation acknowledges all kinds of gamers and those who prefer watching gaming content passively. (Bosman 2020.)

In a study, Fu, Chen, Shi, Bose, and Cai (2017) suggested a metric, stickiness, as a way to turn player behavior into statistics that combined the player's game engagement, performance, and social interactions. They suggested that the importance of socializing is underestimated in current research, and making friends, joining guilds, and sharing resources are the heart of multiplayer online games. A model was developed, where players would be divided based on their behavior into leaders, aggressive gamers, churners, socializers, explorers, and achievers. A clustering-based retention management model helps to target the correct groups within games.

Game user research is research ensuring the usability and user experience in games. It focuses on everything the player will encounter in their gaming experience and is tightly connected to other production pipelines. (Drachen, Mirza-Babei & Nacke 2018, 1.) Games user research is usually conducted by Quality Assurance (QA). User research has become a core part of modern game development, even though Atari already implemented the first applications in the early 1970s. User research connects the development process to scientific and user experience design principles. The best-known method is playtesting, but the research is also conducted through analytics, long-term engagement diaries, and biometrics.

2.2.4 Esports

Esports, professional or semi-professional gaming in organized formats with prizes, is growing with the game industry. As more people play games, they want to view the competitions of the best players in the world. Esports is used as an umbrella term for any

electronic game competition, in the same form as sports is used for football, basketball, and tennis. (Sillis 2020, 15.) Global esports revenue for 2021 has been estimated to be a million dollars, with year-on-year growth of 14.5%, three-quarters of this from media rights and sponsorships. (Newzoo 2021)

The tale of esports goes as far as video games, as already Spacewar! was a part of esports. In 1972, just ten years after the creation of the game, the first Intergalactic Spacewar! Olympics were held. The Atari championships in 1981 had a $20000 prize to the overall winner, but the events suffered from poor organization. The next big step was done in the Nintendo World Championships in 1990, which took esports to a new level. The arena was the size of two football fields; it had 130 NES stations and 200 Game Boys. Their tour lasted nine months, through 29 cities, and over 8000 players competed. The press brought gaming to mainstream media and everyday recognition. (Sillis 2020, 24-27, 33-38.)

Esports grew through the 1990s, and the first-person shooter (FPS) genre was flourishing through the megahit Counter-Strike. The game's emphasis on teamwork and rapid rounds, but a simple idea, made it intriguing to watch. The teams formed clans, started to play in leagues, and battle each other in online and offline events. Counter-Strike players were the first ones to earn a salary. Counter-Strike had competitions since its release in 2000, but from 2013 Valve, the developer of Counter-Strike started to hold the game's major tournaments. (Sillis 2020, 44-47)

Today, the esports industry is worth over a billion dollars, and it lures mainstream brands like Audi, Coca-Cola, and DHL. League of Legends World Championship tournament in 2018 brought 76 million unique viewers, and during that year, there were 3446 paying esports tournaments held. The esports audience is estimated to be close to 500 million people. (Sillis 2020, 1–7.)

2.2.5 The success of a videogame

Some games are successful, and some are not. The studio and the investors need to know if the game was successful and the main features that contributed to the success. Even though a company would get money out of the game, it might not mean all the players are happy with the state of the game, and the players would stick around.

Key Performance Indicators (KPIs) are broadly defined as the numbers and indicators of performance the studio cares about the most. When identifying success in games, these numbers are the most critical. They might change over time, and they evolve with new implementations of technology. When creating marketing campaigns and strategies, the

teams look at the customer base and form data to develop their tactics. As user data is often readily available, they can identify behaviors and preferences. (Fields 2014, 62).

In live games, the developers might know when a player logs in and out, what play modes, maps, and weapons they select, and where players have died or killed another player. Picture 3 shows an example of this in the Ubisoft game Assassin's Creed Brotherhood, where the heatmap shows all failures in the mission area. (Arifianto 2020.)
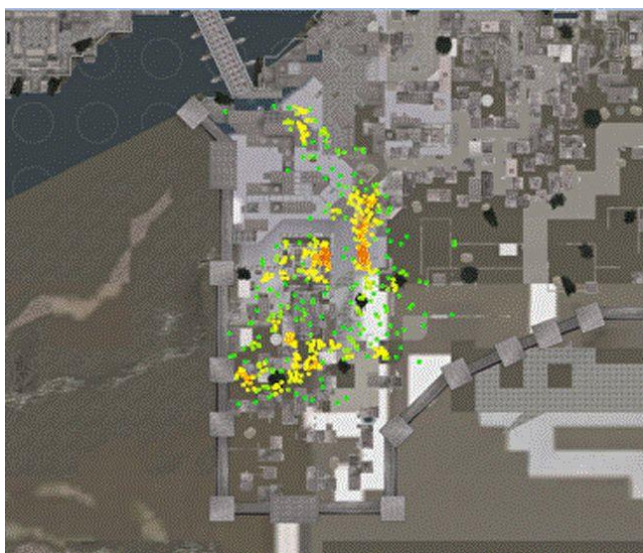
Picture 3. Heatmap of failures in Assassin's Creed Brotherhood (Arifianto 2020)

Traditionally important KPIs in videogames are daily active users, acquisition, and retention. Daily active users (DAU) measures player population, including all unique users during a day. Acquisition measures the number of players who start to play the game and retention of how many of them continue to play. Peak concurrent users (PCU) describe how many users are playing at any given moment. (Fields 2014, 57, 59).

KPIs are used to indicate the success of monetization. Conversion rate (CVR) shares the number of users who try the game and how many become paying customers. This conversion can be done through a free weekend or a demo of a game. The average revenue per user (ARPU) shows the amount of revenue divided by the number of users. Lifetime value (LTV) shows the expected amount that a player will spend over the entire relationship with the game. (Fields 2014, 60.)

In live games, the KPIs can be valued differently. Pre-sale and launch window sales matter less, but user retention and engagement are significantly more critical. A thriving, active community in social media is essential to a successful live service game. Traditional critic scores matter less due to the evaluation done at a single point in time. Services like

Steam also show recent reviews (Steam 2021.) The KPI of customer satisfaction has, in the case of Hitman 2, not changed much. (Arifianto 2020)

3 GAMES THAT HAVE EVOLVED

Some videogames have been able to thrive for decades and evolve their production strategies and features to a broad audience. The Sims was first released in 2000, and World of Warcraft in 2004. The game universes had had previous games, but these became the most known ones. Both games are currently the biggest games of their genres, the Sims dominating the life simulators and World of Warcraft the massively multiplayer online roleplaying games. They have a different approach to continuing the game franchises. The Sims has four major Sims games, each with expansions, and World of Warcraft is still in the base game but is continued through expansions. The Sims 4 has reached over 33 million unique players after its launch in 2014 (Jovic 2021a.) The most recent World of Warcraft expansion Shadowlands in 2020 became the fastest-selling PC game of all time, with 3.7 million copies sold on the first day. (Mayer 2020.)

3.1 The Sims

The Sims is a series of life simulation games developed by Redwood Shores Studio, owned by Maxis. The Sims series is based on the earlier SimCity franchise. In the Sims, players create their character, a Sim, and control their life. The game of going to work, doing dishes, and parenting became one of the most successful videogame franchises. The four main games: the Sims released in 2000, the Sims 2 in 2004, the Sims 3 in 2009, and the Sims 4 in 2014 can each be expanded with expansion packs. The franchise has also seen many other games such as The Sims Online and The Sims Medieval. The game has also gone to mobile in the Sims FreePlay. (GameSpot 2017.) The gameplay has three main elements: Create a Sim, the build mode, and the gameplay. (Electronic Arts 2014.)

The current game is the Sims 4. The player base has grown every year since its launch in 2014. Electronic Arts reported the game had more than 33 million players. (Jovic 2021a.) With the game's already long lifespan compared to the other iterations, the game has expansion packs for 39,99€, game packs for 19,99€, stuff packs for 9,99€, and kits for 4,99€ to purchase on top of the base game to bring more content.

Expansion packs are the major game updates and usually bring a new world and game-changing features. An example of an expansion pack is the Discover University, which brought a new city with two universities, lectures, degrees, and new professions. Game packs are mainly focused on a new gameplay feature, such as vampires or restaurants. Stuff packs are mostly about items, such as Tiny living or Laundry day. Kits are the most recent, smallest, and cheapest additions to the game, and they specifically focus on one of the three aspects of the game, with a specific theme, such as vacuums or 1980s sports

clothing. (EA 2021.) These packs are the primary monetization model of the Sims 4 and have been the traditional way of monetizing the Sims games. The Sims 3 also had an external store, where players could purchase worlds, houses, and single pieces of items or clothing. (The Sims 3 2021.)

As the Sims games are targeted to a broad audience, they have a large female player base, roughly 50%. The Sims team has also moved from 20% female developers in 2014, which was considered high, into having one of the most prominent female workforces in the industry, including women leads. The Sims has expanded from a building simulator into having complex emotional systems using the team's vast knowledge and background. They have introduced realistic university experiences and widened gender boundaries, sexuality, and relationships. (Takahashi 2014; Cacho 2020.)

The Sims team has recently started collaborating with influencers and introduced the Game Changer program. Game Changers are primarily content creators who will get early access to all the new content and give their honest opinions about them through the program. In a recent expansion pack in 2020, Snowy Escape, Game Changers were brought even more closely to participate, and they build a lot of the pre-build houses to the new world, such as the house in picture 5 created by lilsimsie. The expansion pack was themed around winter sports and Japanese architecture. (Delgreco 2021.)

Picture 5. A house created by a Game Changer in Snowy Escape (Electronic Arts 2014)

Through the COVID-19 pandemic, the Sims was growing significantly in Southeast Asia. The market demographic is uncommonly broad, and innovative marketing methods have been successful. In 2020 the team had a Halloween campaign, where influencers from the fashion industry created costumes for the Sims 4, and then they dressed up as their Sims in real life. The team has also collaborated with artists such as Katy Perry and the makeup brand MAC. (Whittaker-Thompson 2021.)
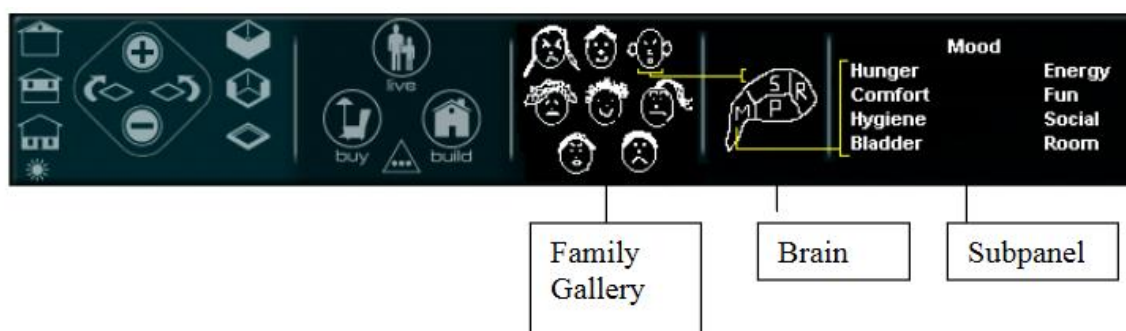
3.1.1 Development of the Sims

Will Wright, the creator of the Sims games, worked first with other game projects and slowly realized how much he enjoyed creating the worlds rather than playing in them or blowing them up. The first simulation project, SimCity, was odd at the time, as the player would be managing a world and its traffic. There was no winning or losing. After game publishers turned down SimCity, Wright came across Jeff Braun, and together they started the game company Maxis. By 1992 SimCity had sold a million copies. Throughout the 1990s, they continued to release Sims games.

The idea of a living dollhouse was formed as the development team realized how much people liked using home design tools for fun. Wright developed a prototype of the home design tool and later added Sims, the characters to it. The original idea of a Sim was to give feedback to the player of the design. During this time, the studio struggled financially, but as it was acquired by Electronic Arts (EA) in 1997, Wright got the resources to bring the Sims alive. (GameSpot 2017.)

The Sims

In February of 2000, the Sims, or later referenced as the Sims 1, was released. The game offered a possibility to create a sim, customize it, move it to a house or an empty lot, and the player could then do whatever they wanted. The player had complete control of the game and could even decide if the Sim had a level of free will to fulfill their needs. A Sim would not necessarily choose the most thoughtful action, and a lazy Sim would chill out and watch TV. (GameSpot 2017.)

Picture 6 displayed an early draft of the user interface when the idea was just to add characters to a building game. The brain was supposed to indicate motives, personality, skills, and relationships. When another Sim would simulate the Sim, the social part of the brain would flicker. Picture 7 displays the needs and interface that made it to the final game. (Hopkins 1998.)

Picture 6. The Sims early development of needs (Hopkins 1998)

Picture 7. The Sims needs and user interface (GameSpot 2017)

Money, relationships, and skills needed to be managed by the player. With a high enough relationship, the player could also try to have a baby, which did not look like their parents as the game was missing a genetic system. In Sims 1, Sims did not die of old age but could die in accidents, such as drowning. As it was a sandbox game, the game did have built-in cheat codes, and the player could use them to gain money or fill needs.

Early on, the game was supposed to include same-sex romances, including all the shades between monosexual, heterosexual, and nonsexual. This was unique for the videogame industry at the time, and having the possibility to marry same-sex was unheard of. The team struggled with this and intended to move away from this plan to avoid politics and criticism. Maybe luckily for the franchise, the person developing the social interactions for the game had an old version of the design document. Not much later, at a videogame convention E3, the team was displaying the wedding of two straight sims. Due to the time limitations, the audience was just two female Sims. During the presentation, the two females decided to make out, which became the main topic of the E3. EA was rumored to cancel the game. The game ended up not having explicit sexual preferences but giving the player total control. This control has been stated to be an essential step of freedom in the Sims games. (Hopkins 1998; Rossen 2021.)

A unique part of the Sims games has been their language, Simlish. When the team started to develop a language for the game, they thought first to use an unfamiliar language, such as Navajo or Ukrainian. It got quickly complicated, as they could not find enough native speakers for these languages, and English-speaking actors had a hard time getting through their lines. Simlish is a made-up language, with some word-for-word translations, such as sul-sul meaning hello. It gained so much popularity over the years that Katy Parry and the Back-Eyed Peas re-recorded some of their hits in Simlish. (Rossen 2021.)

Critics praised the Sims, and it became the best-selling PC game of all time over the first years. As stated earlier, half of the player base were women, and they also played the game more. The game encouraged players to create stories and communities. The first

expansion pack was published six months after the original release, which became extremely popular with the desire for more content. Half of the players who bought the base game purchased the expansion pack. They continued developing more expansion for the game, including one for traveling and one for farming. As the players were hungry for even more, they started creating custom content. EA first supported this through their tools, and later the community learned to make anything, starting with hairstyles, household items, and actions. (GameSpot 2017.)

The Sims 2

The Sims tale continued through the city version Urbz, the console versions including multiplayer, and the attempt on an MMO game, The Sims Online. Quickly, the team was pressured towards the next major title in the franchise, the Sims 2. The development team expanded from 5 to 20 people. The basic idea was established in the first game, but they added more complexity to personalities, needs, fears, and aspirations. Genetics, life stages, dying to old age, and family trees emphasized the feeling of families and communities. The major technological advancement of the Sims 2 was the engine now supporting a full 3D view of the world. As seen in early development in picture 8, the players were no longer locked in a specific view. Customization options were added from eye color to custom clothing. (GameSpot 2017; Joic 2019)

Picture 8. Items in the 3D view (Joic 2019)

The Sims 2 was supposed to be released in January 2004 but was delayed until September, as pools would not have made it to the original launch date. The game was again a

hit and sold a million copies in 10 days and 4.5 million during the first year. Eight expansion packs were released during the following years, including the already loved pets and traveling from the Sims 1 and new packs, such as university and seasons. The players still wanted more content, which created the demand for stuff packs, smaller packs focusing on one aspect, such as the family fun stuff pack. The Sims team also found a chance to collaborate with H&M and Ikea to bring their named packs. (GameSpot 2017.)

The Sims 3

The Sims 3 was the game known for having the most customization. In CAS, the players could go into extreme detail, such as choosing a voice for their Sim, and in both CAS and build mode, they could customize any item through a color wheel. The significant technological advancement was an open world without loading screens. The whole neighborhood was available at once, and Sims could travel with cars and bikes. All the Sims in the neighborhood would continue their lives without the player's input, die, have children, and gain relationships. The neighborhood was also fully customizable, from the lots to rocks.

The idea of the open world was praised, and it was the biggest PC launch ever. Unfortunately, the open world brought many issues in home PCs. 11 new expansion packs, mostly already familiar ones, were released during the following years. The expansion Showtime got in-game messaging to other players and a chance to send your popular sim to a friend's game. Into the Future was the final expansion for the Sims 3 and was a unique take with futuristic items, such as robots. (GameSpot 2017.)

The Sims 4

The most recent addition to the game franchise is the Sims 4, and it is still receiving updates and expansions regularly. It was sold to the community with the idea that the Sims are now more intelligent and have unique personalities. They also look unique, as all features of a Sim could now be dragged instead of having to choose features from presets. The building process was more fluid, and prebuild rooms could be directly added to a lot. These ideas sounded great, but in the launch, the game was missing many features, such as toddlers, swimming pools, and grocery stores, which caused the game to get worse reviews than any of the previous versions. The team had also moved back from the open world of the Sims 3. Slowly, during the next few years, the team brought many of the missing features back into the game.

The frequency of the expansion packs was also slower, but they started adding game packs that included more gameplay features. Stuff packs were also a part of the product family, as expected. Players had a say on a stuff pack in a poll, and the community chose

they wanted to do laundry, and it makes sense, as the Sims is, in the end, a life simulator. (GameSpot 2017.) The Sims 4 is still receiving regular updates also to the base game. In 2019, the developers included more aspects to the Sim gender, and the player can choose, for example, how their Sim reproduces or uses the toilet. The most recent expansion pack, Cottage Living in 2021, also brought the lake tool to the base game, and the team has been updating skin colors and hair types. (Rossen 2021; Electronic Arts 2021)

3.1.2 Success and future of the Sims

Wright changed permanently the way the fun in games is viewed. Games, where there is no straightforward winning or losing, have an established genre. For Wright, the game worked because people wanted to see reflections of themselves. The people gained pleasure in taking care of their characters, which were just regular people, not superheroes. A generation of children has grown up with the games, and the audience is still there. The Sims has been undoubtedly a success. In the most recent years, the community perception of the development process and products have been shaking, and not everyone has loved the most recent additions to the game, and there are a lot of bugs that have been in the game for years. (Rossen 2021.)

The next Sims game has been confirmed to be in development. It is often called "The Sims 5." Based on the information available in 2021, the game is expected to be released at the earliest in 2023 and to be developed in Unreal Engine, a game engine used in many games, for example, Fortnite. The developers have also stated that the game will have competitive, online, and subscription-based features, including non-linear, narrative, and story-driven experiences. EA's CEO Andrew Wilson has also stated the game to be a cross-platform experience. Even with all these new possible features, the game will stay true to its core and allow a single-player experience. (Jovic 2021b.)

3.2   World of Warcraft

In November 2004, World of Warcraft became officially the biggest game ever made with two million lines of code and twice as large a team and budget than any other Blizzard Entertainment project. The subscriber amount grew into the size of the world's biggest cities. The company grew from hundreds to thousands of employees. The interface, quests, and game elements, in total over a million words, were translated into six languages. The game introduced 9000 types of enemies and non-playable characters. In 2004 WoW servers handled 10% of all global internet bandwidth downloads, with the players contributing roughly half of active internet traffic at any given time. (Staats 2018.)

Blizzard Entertainment was known for Warcraft strategy games, and World of Warcraft (WoW) became the massively multiplayer online role-playing (MMORPG) addition to the franchise. WoW was released in 2004 after five years of development. In 2021, the game is still the most prominent MMOPRG game. (Chatfield 2010, 79; Blizzard Entertainment 2021.)

World of Warcraft is a fantasy game with adventures, quests, and gear to find. As an open-world game, players can choose how and where they choose and if they want to adventure alone or with friends. The player selects a class for themselves, each with their powers and limitations. Mage is a powerful spellcaster but cannot sustain heavy damage, and rogue can attack unexpecting enemies from the shadows. There are two factions for each player to choose from, the Alliance and the Horde, already familiar from the earlier Warcraft lore. Players can only play and group up with players from their factions.

At the maximum level, originally at level 60, the player reaches endgame. The main endgame content is full of battling the final enemies of the game through 5 player dungeons and 10-30 player raids. The challenges require strategy and planning, but also a community to commit to the progress. The communities are called guilds, which are groups of friends or serious players to battle in the player versus player (PvP) or player versus environment (PvE) content. The most ambitious players compete for the world first kills whenever a new patch brings a new raid. The community aspect is the core part of Wow, and it has been able to sustain the game's popularity. WoW also translates to real life; as the players spend hundreds of hours together, it is easy to continue those relationships outside of the game. Many skills can be translated to other aspects of life. Harvard Business Review published an article in the early days of the game that quoted: "The best indicator of a person's qualification to lead a new internet-company is not an MBA, but a level 70 guild leader position." (Chatfield 2010, 81-83.)

Picture 9. World of Warcraft expansion box arts (Wowpedia 2021a)

After the launch in 2004, World of Warcraft has received eight expansions, with each in-troducing new worlds, playable races, and stories. After the original launch of the game in 2004, Burning Crusade was released in 2007, Wrath of the Lich King in 2008, Cataclysm in 2010, Mists of Pandaria in 2012, Warlords of Draenor in 2014, Legion in 2016, Battle for Azeroth in 2018, and Shadowlands most recently in 2020. All expansion key arts can be seen in picture 9. (Blizzard Entertainment 2004).

World of Warcraft Classic was a remake of the original game, released in 2019, and the team added the first expansion, the Burning Crusade, in 2021. Blizzard decided to hit the nostalgia button and try to reach old players and give the new ones a chance to experi-ence the original game in its full glory. Classic was introduced with many original issues and imbalances. After lengthy discussions pre-launch, the team decided to bring some quality of life changes, such as stat revisions implemented initially in later patches, even though they wanted to keep the game as close to original as possible. The Classic is all about the community. The importance of relying on other players to succeed has been something the community has looked back from the original game. (Messner 2021.)

The base game and seven first expansions can be accessed by having a monthly sub-scription, priced around 12.99€ in 2021. The most recent expansion, Shadowlands, needs to be purchased for 39.99€. World of Warcraft: Classic is free to play to those who already

have a World of Warcraft subscription. (Battle.net 2021.) In 2015 Blizzard introduced the WoW-token. It offers a way to exchange real money for in-game gold and in-game gold back to game time. The price of the game time token is $20. This created more income and was a counter to players selling gold to each other in the black market. (Wired 2018.)

After the Warlords of Draenor Blizzard has been quiet about their subscriber numbers. Figure 9 gives an idea of the development until 2015. Traditionally the expansion launches have the biggest concurrent subscribers, and during the next few months, the number steadily drops. Warlords of Draenor launch had 7.4 million players, and the decline was more rapid than usually to 5.5 million. During Warlords of Draenor, they decided to stop sharing the subscriber numbers and pointed out there were better ways to view the success of a game. Warlords is considered one of the worst expansions in the game's history, with hideous lag, server outages, and queue times in the launch, continuing with players dropping soon after the expansion launch when they did not find the content interesting. (Haas 2014; Hillier 2015.)

Number of World of Warcraft subscribers from 1st quarter 2005 to 4th quarter 2014 (in millions)
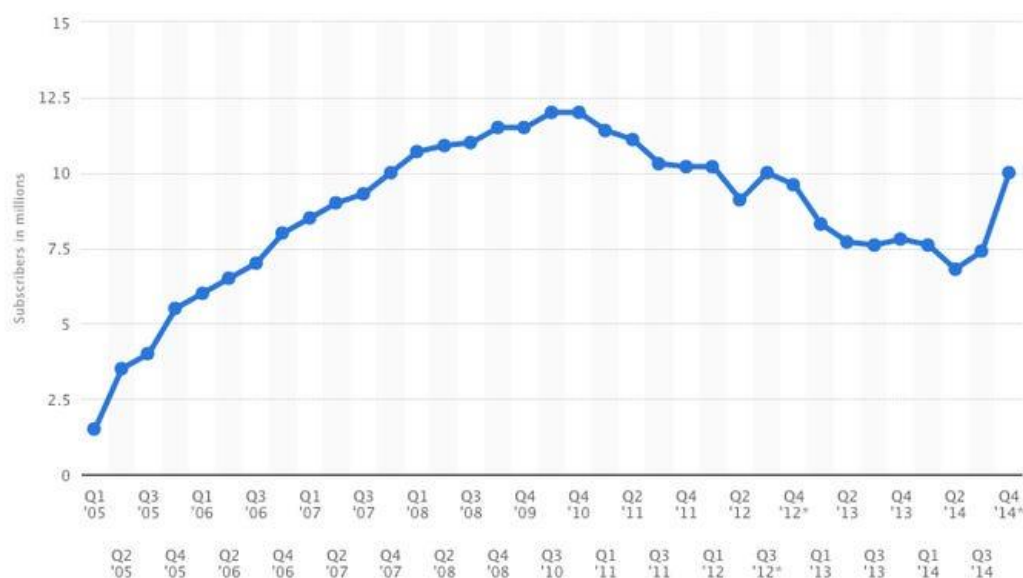
Additional Information:
Worldwide

Source:
Activision Blizzard
© Statista 2015

Figure 9. Number of World of Warcraft subscribers from 1st quarter 2005 to 4th quarter 2014 (Gilbert 2015)

3.2.1 The development process of World of Warcraft

Verant Interactive released its game EverQuest in 1999, and it took the leading role in the MMORPG genre, creating fundamentals for the upcoming games. (McMahon 2019.) The Blizzard Entertainment developers got inspired by playing EverQuest and wanted to develop their MMO, but make it better and place it in the Warcraft universe. The game was supposed to look attractive, have clear quest indicators, and be targeted towards more casual players. One fundamental difference was that in WoW when a player died, they just needed to run to their corpse, and they did not lose any of their armor. (Staats 2018; Williams 2019.)

Picture 10. Early concept art of Elwynn Forest next to Elwynn Forest in the current game (Staats 2018; Blizzard Entertainment 2021)

John Staats (2018) was a developer in the WoW team from its early production, sharing his story in The WoW Diary. The game was supposed to be extremely advanced. Staats worked as a 3D programmer early in the production timeline, but no game engine, the software framework used to run a game, could run the files due to their size. Staats had to believe the technology would catch up, which became the single biggest issue in the development. Clever solutions were needed across the game to compensate for this.

The team began working with Warcraft III's engine, but as the previous Warcraft games were more strategy games, the engine could not keep up rendering large, complex assets and landscapes. Midway through 1999, World of Warcraft got permission to develop their own game engine. Even though creating an engine was expensive and took time, it laid a solid foundation for the future of WoW. Videogame development was less about good ideas and more about discoveries, detours, and problem-solving. Each decision should be a base to build more, and no tool should be made to be used only once.

Picture 11. Ideas in the Warcraft III engine of how inventory and looting would work (Staats 2018)

Data processing became a crucial point, as all information processed should not take excess space. Already in the game's launch, WoW was prepared to support half a million players, each with potentially ten characters, quests, discovered areas on the map, achievements, all in a terabyte of storage space. On top of this, each player had their personal inventory, which later was limited in size due to server hardware costs. If a hard drive failed, the data could not be lost. In a scenario where a data server would crash in an MMO game, trying to roll back to an earlier safe file would enrage the customers as they would lose their progression.

A breakpoint for the team was double digits in concurrent players, as they worked with character animation and collision. Bodies of water, instances, user interface and abilities were first on the list. There was so much to do and so much the team wanted to create. Quickly there became a need for producers to balance all of these needs. The lead gameplay programmer summarized their feelings about the rest of the development cycle: "Anything is possible. It's just a matter of how much time we want to spend coding it." Changing one thing also affected many others. Through moving dungeons, zones being shrunk or deleted, the world was constantly changing. Picture 12 shows the plan of the world map and instances in 2001.

Picture 12. Dungeon Plan from October 2001 (Staats 2018)

"The world server is down," was heard often in the office, a cry from the interior level de-sign room, as they had no way to see their work in the game without the servers. At this point of the development, servers could be down for weeks, and the team worked blind.

WoW's core was summarized to players improving their character by acquiring better gear. Gear was obtained by killing monsters, completing quests, and crafting items. These were the main activities, and all of them needed to be engaging and fun. Developing en-gaging gameplay was a lot of educated guesswork, as programmers and artists created most assets for the designers before knowing where the game was explicitly going. (Staats 2018.)

Picture 13. The original races at the time of the first double-digit concurrent users (Staats 2018)

For the players, the core part of an MMO is the characters and their abilities. As expected, developing combat was the hardest thing to prototype before the technology was finished. Classes were built a spell at a time, and they needed to be distinct from other classes. It took nine months of creating abilities to test group combat, see how the abilities fit with each other, and which classes were fun to play.

The team decided on nine classes, fewer than some MMOs, but they were all distinctive and filled different roles. Druid, hunter, mage, priest, rogue, warlock, and warrior were available to all, while paladins were only for Alliance players and shamans to Horde players. In 2021 the game had gained three more playable classes. The player identity was also about the race, displayed in picture 13: human, night elf, gnome, and dwarf on the Alliance; orc, tauren, troll, and the undead, respectively on Horde. The team wanted to bring also nagas, ogres, and demons for the players, but they were cut due to time restrictions. Especially nagas were a big commitment, as they did not have similar feet as the other races and would have needed completely new animations. (Staats 2018 & Blizzard Entertainment 2021.)

As the game was starting to get pieced together, testing started. The Blizzard quality assurance (QA) team was one of the biggest among independent game companies. They were in the development process from the start to give ideas and feedback. Each team tested their neighbour's games to provide fresh eyes for the content. Until 2002 everyone promoted to development positions for the WoW team was seasoned in the QA team. The ideology of "If it doesn't work, fix it" sounded simple, but it created an environment where nothing was set in stone, and every part of the team worked towards perfection. Everyone pointed out each other's oversights and was keen to ask questions. (Staats 2018.)

Quests were a large part of the leveling experience, and the team wanted the player to quickly find the quests when entering a zone, giving a player something they were supposed to be doing. The idea was that the game would then become freer as the player emptied their quest log. This idea was scrapped quickly in playtesting, as the players did not know what to do after the quests ended, and the team needed to implement way more quests. Quests were more demanding and more time-consuming to create than anticipated, as the team wanted various kinds of tasks: each quest required creatures, abilities, behaviours, dialogue, and items. New abilities gave more mini-games and mechanics were later introduced as boss fights. (Staats 2018; Williams 2019.)

Announcement and competition

When WoW was supposed to be announced, the MMO bubble was at an all-time high after the success of EverQuest. Many MMO games were never finished, and investors backed off as they could not tell if they were scammed. The major competitors for WoW were EverQuest and Star Wars Galaxies. EverQuest was already a seasoned game, and through major changes in their management, they were the main competitor. Star Wars Galaxies was later described as "ambitious mess" with its unique languages, skill points, and economy. Still, it struggled with balance, and the economy crashed later due to changes made with the intention to speed up the game. The Japanese announced Final Fantasy during this period, but this was not something the WoW team was worried about, as the Japanese were more focused on consoles. (Staats 2018; Thursten 2021.)

The stakes were high to convince everyone of the potential of WoW. The team prepared for the announcement day with a gameplay trailer and a few zones for the media. As could be expected, not everything went as planned. A few days before the announcement, a fan discovered the domain worldofwarcraft.com to be registered to Blizzard. This accidentally leaked the name of the new game. Even though leaks have happened throughout the game history, the team was disappointed, as they could not introduce the game for themselves, but they got the chance to release the demo and screenshots, and the fans loved them. The questions from the community were about subscription fees, beta testing, and concerns about the release date. The questions about release were valid, as the game took until Christmas 2004 to be ready. Other game developers were not sure of the idea to cater to a more casual audience.

In the E3 gaming conference in 2003, the players got to play WoW for the first time. The team discussed what to show and what temporary fixes were made to make the demo feel more finished. WoW's debut was impressive in the videogame industry and impressed the developers more than journalists. The game worked well and showed potential for solid gameplay. The most burning question was naturally still the release date, but the team just answered, "When it is ready." Blizzard Entertainment, unlike many others, was able to finance their own game and therefore have more control of their standards and was thus able to give this answer.

The original goal of shipping at the end of 2003 was crushed as the team was shown the competitiveness of the MMO games released at this time. Before this, player housing, mounts, player versus player combat, and underwater combat were on the chopping block. Even some of them were needed for the launch of the game to make it. A suitable release date was also hard to find, not only because of the development cycle but also

due to other releases, especially EverQuest II. As the new EverQuest would have a subscription model, the team thought it could be valuable to wait until after that so the customers would have had time to get used to a new monetization model. For example, The Sims Online was not getting enough sales due to the market rejecting subscription-based games. (Staats 2018)

Alpha tests

The first internal alpha was launched in Autumn 2002 so other teams in Blizzard could test the game. Not a single server crash happened during the first week of testing. The game peaked on over 60 concurrent users, but they found gameplay problems such as ninja looting, where a stealth class would gain the rewards for an enemy killed by another player. Most loved the game. Already at this point, the game developers were found sneaking out from the restricted game areas – already finding ways to create money – and irritating players who were away from their computers by killing them by setting a campfire under them.

The team also developed a lightweight programming language Lua. The players were through it able to customize their user interfaces and implement functionalities. Not everyone in the team understood why the user would not like the default interface. Adding modification tools was popular at the time, as it expanded the game's shelf-life as players could create content themselves. The function showed its power when fans got their hands into it. The players figured out how to make timers for bosses, and they re-arranged their UIs. (Staats 2018; Targett, Verlysdonk, Hamilton & Hepting 2021.)

Blizzard hired the first game master (GM) close to the internal alpha. The primary role of GMs would be to work in close contact with the players. Before the launch, they helped with everything else, such as enemy spawn placement. Over a hundred people were hired for support positions before the launch.

Mounts were one of the latest features added to the game, and their appearance was a surprise for almost everyone working with the game. Picture 14 shows a render of the early model. Aside from cosmetics, the only functionality of mounts was the added movement speed. Many wanted to have mounted combat because as soon as players were given control of a rideable mount, they wanted to fight while mounted. The idea was played with, but due to nobody figuring out a workable vision for the combat mechanic, it was left out.

Picture 14. The first mount models (Staats 2018)

Public beta

Blizzard was persuaded to launch on the Asian market simultaneously with the main release. More questions arose due to recruiting Asian support staff, creating optional ways of monetization, and the legal considerations as the game could not include gore or violence. This decision pushed the release date to 2004. The team ended up having the Korean audience as a part of the beta testing, which was uncommon at the time.

"We are nearly completely done for the most part," commented Twain Martin, a database programmer on the project. The team tried to reach for the launch in February 2004, even though player versus player combat would not be ready by that point. The launch was then pushed forward due to stability issues. Everyone's morale was low. Artists and programmers sat in their own corner, busy doing their own thing. What rose the spirits was the friends and family alpha with 200 concurrent players, with a hundred-page file of suggestions, and most importantly, everyone loved the game. A year before the game's launch, the game had over 4200 unique props, 200 textures, 400 dungeon objects, 15000 icons, and 100 player outfits.

The crunching continued. The team worked with pathing, localization, and skills. The team tried to choose the least bad option for monetization issues and decided to write the code for handling the player's credit card information. Minimap was a user interface tool to help to navigate in big cities and instances. More people got to test the game, and the first cinematic movie was in creation. In March 2004, the team prepared for 2000 concurrent players on a single realm for the public beta. In September, they were able to have stable servers for 23000 people in a stress test. (Staats 2018)

Dragons were by far the most complicated model, but they have been so tightly a part of the fantasy world that they were included. Just the pure size of the model was hard to grasp, even to some developers. Picture 15 shows one of the early bosses, Onyxia, in the modelling phase and later in the game. (Staats 2018.)
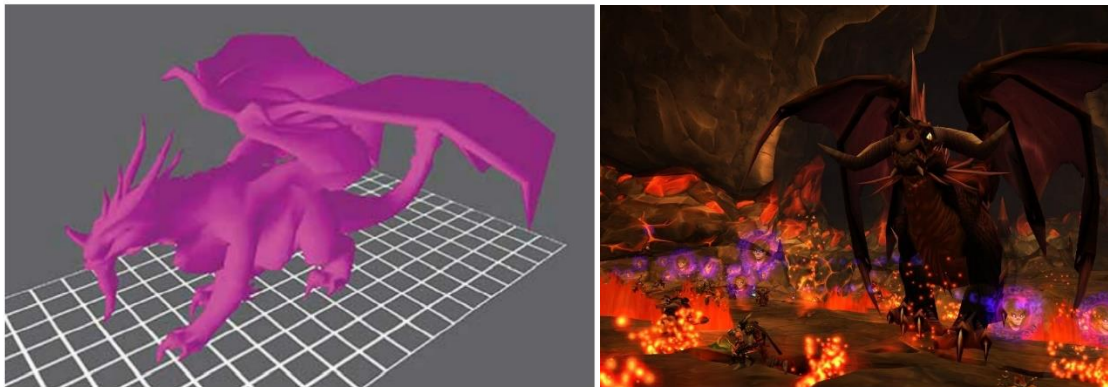
Picture 15. The development of dragons (Staats 2018; Wowhead 2021)

One of the later added features in the game is these days known as the auction house. It was a bit controversial, as it limits the player-to-player transaction in the form of a market board. It was still deemed necessary, as the team expected the players to develop something like a marketplace plugin with addons quickly. Players can sell weapons, armour, crafting reagents, and other goods to each other in major cities for a small cut. Auction houses were initially realm and faction specific. This was changed in 2006 when also faction neutral auction houses were included. Later in the Warlords of Draenor expansion, the faction restrictions were entirely removed. (Staats 2018; Wowpedia 2021b.)

Picture 16. The auction house in TBC Classic (Blizzard Entertainment 2020)

As players levelled up, they gained more abilities, which created the structure of a class. Talents are developed to complement the base abilities, making the leveling process more satisfying. Picture 17 shows how they started with attribute points that were quickly abandoned, as every player would always pick the same attributes that were the strongest. The picture also shows how they approached the issue through a skill tree, customizable for each class. As the player moved deeper into their chosen path, they would gain new aspects to their classes, which were later the foundation for specializations, such as for a warrior the tank and damage dealer specializations. (Staats 2018.)

Picture 17. The development process from attributes to a talent tree (Staats 2018)

Through testing, the developers realized some players were playing way more than intended, never logging off, and having multiple people playing on a single character. Blizzard did not want the game to be an endless treadmill and created the rested experience. When a player logged in, they would gain the full experience of their quests and then draining it to half. Naturally, players hated it, and they changed it to be a bonus experience. The change had a psychological effect on players even though the result was the same, and it taught the team to work with bonuses instead of restraints. (Williams 2019.)

Launch

The final gold master CD was prepared for mass production and distribution. During the month after, the team was fixing bugs for the first patch, and there were fewer than three hundred bugs in the whole game, which was honourably low. The team was relieved, but

they had to look forward to the following patch, as the wish list for new features was long, namely player versus player combat, expansion zones, new dungeons, and other things pushed aside earlier. The team tested the upcoming player versus player zones and raid content while waiting for the release.

Preorders were standard practice, and those numbers did not promise big sales for WoW, as the team sold 400000 copies in North America. In the launch, the game showed indications it would be something never seen before. People, who loved the Warcraft universe, lined up to get their hands to the game worldwide, and they ended up selling 240000 copies on the first day. The game sold out and gained six times more concurrent players than any other MMO ever. It was quickly noticed that something was wrong with the servers. With the player load and loading issues combined, the servers crashed for weeks. Blizzard had the best servers available, but only a few people knew how they worked. The situation started to resolve over the next few weeks. After this, the team focused for months to keep up with the demand and stabilize the services. (Staats 2018; Wired 2018.) When the players finally got into the game, the third unexpected thing happened, as the players played way more than estimated. They were reaching the end game and finished the challenges faster than the team had anticipated. Despite the downtimes, the players found the world magical enough to wait. (Williams 2019.)

3.2.2 Expansions

World of Warcraft continued its journey through expansions, already briefly introduced in chapter 3.2. Each expansion brings traditionally new environments, storylines, bosses to defeat, dungeons, features, and balancing changes.

In the first expansion, the Burning Crusade (TBC), the players continued their journey through a dark portal to another new world. It was a success, and it sold nearly 2.4 million copies during the first day (Williams 2019). The expansion added the awaited formal and competitive player versus player combat and access to new classes and abilities. TBC added a 10-player raiding experience in addition to the original 25-player encounters. Daily quests were a new feature that would be a part of the game for the decade to come. Previously quests were in place to guide the player through the game and tell stories, but now the player could continue questing in the endgame.

Introducing flying mounts created new technical limitations with how fast a player could move through the world so flying felt rewarding, but the game could keep up with the player. The team had to completely change their view of the zone design, considering the flying routes and transitions between zones.

Wrath of the Lich King (WotLK) was led by the most notorious villain of the franchise, the Lich King. One of the most significant philosophical changes made at this point of the game was the dungeon finder. It was a tool for a player to pick their role, queue for a dungeon with random players, and teleport directly into the dungeon. Dungeon finder reduced the time players needed to stand around in capital cities trying to form a party. Even though it reduced the barrier of entry to dungeon content, it was seen as a questionable change, changing fundamentally how the game's social aspect worked. (Wired 2018).


Picture 18. The Burning Crusade and Shadowlands feral druid talent trees (Blizzard Entertainment 2020; Blizzard Entertainment 2021)

The talent system was overhauled, mainly focusing on significant quality-of-life improvements. It had been a pain to go to a major city, spend a lot of gold, and have the action bars messed up if the friend group needed a different role filled. After the WotLK changes, the players could pick their specialization from a menu anywhere in the world, and the action bars would automatically change. Picture 18 shows the changed specialization talent threes and the 2021 version of a feral druid talent three. In the process, multi-specializations or hybrid characters became a thing of the past.

The setting of the third expansion, Cataclysm, was that the great dragon Deathwing had destroyed the world of Azeroth. The idea sounds like a lot of developer work, but luckily it gave a chance for the developers to go back to old zones and remake them to fit the world and bring them to the current technological standard. The team started by giving each zone a colour: green, yellow, or red, based on how much the area needed a rework. Greens did not need much work, yellow needed tweaks of terrains and quest lines, and finally, red zones were going to get a total teardown. Slowly, as they worked their way through the zones, they wanted to do more, and most zones ended up turning at least yellow. (Wired 2018).

There also happened a change in how the dungeon difficulty was viewed. In the classic era, the dungeons were challenging and lengthy, and over the following expansions, they became more accessible, letting players rush through them. Cataclysm had more hard dungeons, with the design philosophy that just finishing the dungeon was an accomplishment. This was controversial, and not all players were happy, and in the beginning, finishing the dungeons through the dungeon finder was rare. The developers realized they needed to create both hardcore and more casual dungeons. This was addressed later with challenge mode and mythic dungeons. (Williams 2019.)
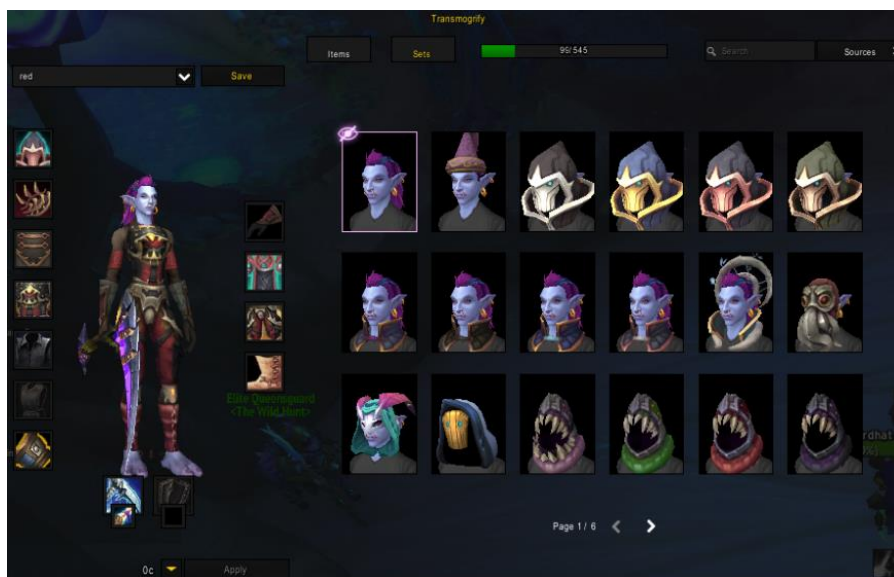
Picture 19. Transmogrification system in Shadowlands (Blizzard Entertainment 2004)

The transmogrification system was also added. The system meant that any piece of gear a player acquires goes into the transmogrification system, and later the appearance can be applied to other pieces. This diversified how the players looked and made old content intriguing, as the players went out of their way to find the appearances, even though the pieces would not give more player power. (Wired 2018.)

The art style of the Mists of Pandaria expansion, as seen in picture 20, was heavily inspired by Asian culture, and it brought pandarens as a playable race. It was the first race to start without a faction, and during leveling, the player decided which faction they wanted to join. The expansion was about discovery rather than fighting a powerful enemy, and it was remembered later as the expansion where each class was exciting and unique to play. The story arcs were complicated and colourful. Blizzard brought scenarios, small stories that were approachable by any sized group, where the player was part of the story. Challenge mode allowed players to run the dungeons in a more challenging mode and receive more rewards. (Wired 2018, Williams 2019.)

Picture 20. The Pandaria architecture in the Mists of Pandaria Cinematic Trailer (World of Warcraft 2012)

From the start of WoW, the server decision defined the playing experience, as the player could only see and interact with players from their server. Over time, the team introduced cross-server PvP content. In MoP, if a player invited another player from another server to their party, they would phase into the same space and be able to interact with each other. The same was done with the dungeon finder, which reduced the queue times.

Warlords of Draenor was the start of story arcs that continued over expansions. The final boss of Mists of Pandaria, Garrosh Hellscream, continued as the main character in Draenor's Warlords. Garrisons were the prominent expansion feature. Garrisons were the teams take on player housing, giving the players their own space and progression system around it. The team wanted to bring back the story of creating an army by building a base, armoury, and lumber mill. The garrison was a stronghold, where the player could lead their forces and send them to complete missions on their own. The garrison eventually ended up not giving much playable content. The technical difficulty became hosting millions of garrisons simultaneously over instanced dungeons—the solutions for this laid foundation for sharding technology introduced later. Sharding moved players to different game layers, making sure each shard had players but was not overpopulated. (Wired 2018; Williams 2019.)

The Legion expansion was about the battle against the core enemy in the Warcraft universe, the Burning Legion. WoW had last seen this enemy during Burning Crusade. Order halls were added as a garrison-type system, but for the classes. To beat the Burning Legion, the players had to find new ways to fight them, firstly with artifact weapons. Each specialization had its weapon with a unique backstory, visuals, and a progression system, shown in picture 21, where the players gained power over time. This, alongside class halls, was why the expansion was remembered from class identity. The weapons were the

most legendary in the Warcraft universe the team wanted to finally give to the players. They knew from the start that giving a lot of depth and power gain to this system would not be sustainable over multiple expansions, and the system had to be abandoned when moving forward. The removal of artifact weapons left classes feeling weak, moving to the next expansion. (Wired 2018)

Picture 21. The artifact progression system menu (Wired 2018)

The new class, Demon Hunter, found its purpose in fighting demons, and what a better place to bring them to the game but to fight a legion of demons. In this expansion, the major technical development was the draw distance, how far a player could see, which was especially important, as the expansion zone had a flying city and high mountains. Time walking saw its first iterations, making it possible for a player to experience the dungeons and raids from earlier expansions scaled to be accessible. (Wired 2018.)

Battle for Azeroth was another expansion focused on returning to the game's roots, the factions, and the war between them. "We are putting the war in Warcraft," summarized Jimmy Lo, the visual development supervisor.

Warfronts were a feature that fed into this lore, where 20 players would fight over the control of an area filled with bases. The idea of Warfronts was loved by many, but it ended up with flaws. Alliance faction players could not even play the game mode during the first week due to the restricted availability. Each faction also needed to collect resources to open the game mode. At the start of the Warfront, players can choose what they want to do – collect wood, iron, or fight the enemy, eventually upgrading to siege machines. It was fun for the first time. The players playing the game a lot realized fast that the impact the players had, in the end, does not contribute much to the result of the fight, and quickly it became a mandatory chore to do. (Messner 2018b.)

The iconic Battle for Azeroth feature was island expeditions. A team of three would fight against AI or other players on an island, collecting resources and fighting the other team. The islands re-used existing assets from the game, attempting to make the island feel populated with familiar creatures but still a bit different every time, keeping the experience fresh. Island expeditions were a leap in the AI development of the game. The game's user research team, discussed in more detail in chapter 3.2.4, worked with the island expeditions alongside dungeons and warfronts.

The user research team did a lot of testing, especially on how the AI felt and if the urgency against the other team was apparent to the player. The scatter chart in figure 10 shows the players' experience against three different AI iterations based on how long the match took and if the player won or not. The blue dots were the more fighting-focused AI, yellow was the more gathering and mob fighting AI, and the red tried to evaluate between these two options. (Wired 2018; Jenrette 2019.)
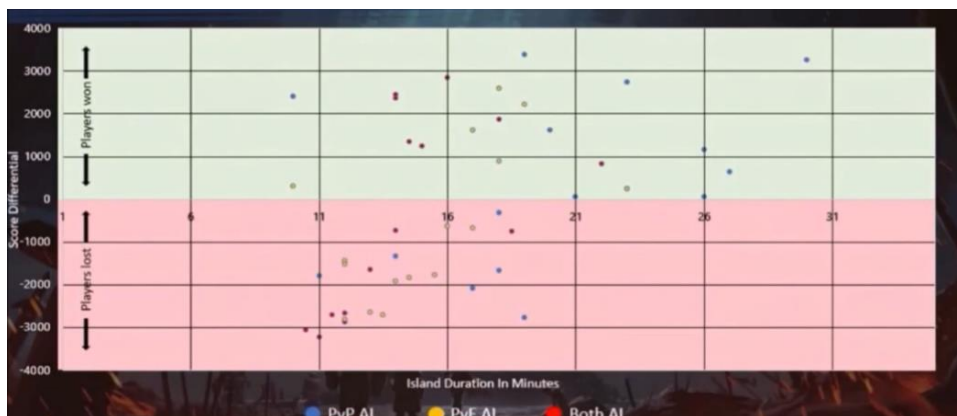

Figure 10. Island expedition AI player data (Jenrette 2019.)

The community perception of Battle for Azeroth was mixed, especially after Legion that was viewed as one of the best, if not the best, expansion in WoW history. The cohesive story and down-to-earth approach still appealed to players. The biggest problem seemed to be the power gain systems. The major new gearing feature replacing the Legion artifact weapons were the Azerite equipment pieces. Each player was able to equip three Azerite gear pieces, being slightly different for each class. Picture 22 shows the system inside one of the Azerite pieces. When the player acquired this gear, they could unlock one of the abilities on the outer ring, and as they collected Azerite Power, they could start opening the inner rings. The first issue was when a player would get a new, higher item level gear piece, and it might not have been an upgrade, as they could not unlock the inner powers. Blizzard tried to balance the powers for each class, but it took a while. Some classes were insanely overpowered for an extended period of time. (Messner 2018a.)

Picture 22. Azerite traits (Messner 2018a)

Battle for Azeroth also included a "stat squish," bringing down the inflated numbers in the game. It made damage, stats, and item levels more manageable, as the players now do maybe a thousand damage instead of a hundred thousand. It sounds like a quick tweak of numbers, but the world was huge, and everything needed to feel the same, even though the numbers were different. All content from the past 15 years needed to be tested, and some did still feel off later. (Valentine 2018.)

The most recent expansion at the time of writing this thesis is 2020 released Shadowlands. The expansion had the end of its production during the COVID-19 pandemic, and the release was delayed. Shadowlands brought the players to the afterlife. The world of the dead is split into four covenants, each working in their own part assigning positions to the souls coming to the afterlife, and the player can choose which one they want to join. Each covenant gives a player a class ability and a covenant signature ability. The WoW team did their best to balance the abilities, but quickly, many classes shifted towards one or two due to them being better power-wise.

A new feature for Shadowlands was a new starting zone. Initially, each race would have their own starting zone, but the team wanted to have a more comprehensive and instructive experience for new players, and now everyone starts from Exiles Reach in their first playthrough. The old zones still exist and can be picked when leveling the next character. The new zone shows the different types of quests on the current standard and introduced the dungeon experience. The entire leveling experience was overhauled. There was just too much content for a player to experience, and the leveling experience was mainly about jumping from zone to zone. Now, a player could choose which expansion of the game they wanted to level in, and the world would scale with their level. As a part of the earlier number squish in Shadowlands, the maximum level was reduced from 120 to 60 for the first time. (Wolfe 2020; Valentine 2018.)

3.2.3   World of Warcraft esports

World of Warcraft has had esports almost from day one. If there is something to compete for, the players will want to be the best. Being the realm first max level mage does feel good. In recent years, the three cornerstones of WoW esports have been the player versus player tournaments, the world first raiding, and the dungeon tournaments. PvP and dungeon tournaments are held in a dedicated tournament realm supported by Blizzard.

Already six months after the game's release, the team added a player versus player honor system to encourage players to play PvP to gain more rewards. Shortly after, organized PvP systems were added. Battlegrounds were 10 or 40 player team fights in a large field, and by the end of the week, the players would gain honor points based on their performance, which could then be used to purchase armor and mounts. Another year later, the arena system was implemented for two, three, and five-player teams. 3v3 later became the competitive standard, laying the foundations for esports. At the annual fan expo, BlizzCon, Blizzard has held their esports competitions. In 2019, the best players from each continent would arrive at BlizzCon for the Arena World Championship finals. Blizzard also included for the first time in-game store items for the viewers to purchase, increasing the price pool. (Hollingsworth 2019a; Hollingsworth 2019b.)

One of the most significant changes during the recent years to the WoW esports has been the mythic dungeon system. During Legion, the regular dungeons got a keystone system that would scale up endlessly, creating repeatable 5-player content. The team had to finish a dungeon in a given time, clearing a set amount of the enemies in the dungeon. If the keystone was completed within the time limit, the key would upgrade to a higher level. (Hollingsworth 2019a; Blizzard Entertainment 2021.)

In 2017 and 2018, Blizzard brought the Mythic Dungeon Invitational (MDI) to BlizzCon, where the best teams of each region would battle to become MDI champions. The teams competed side by side, and the first team to complete the dungeon would win. The keystones in MDI have been lower than the highest keys ever done, so it got a reputation of speedrunning the dungeons. Blizzard has let the community vote for what they want to see in the competition, such as affixes, buff the bosses, or the mobs would have an enrage effect. During Battle for Azeroth, 2019, they also got their seasonal championship format, just like the Arena World Championships. Blizzard has supported more community-driven tournaments in recent years, and in 2021 The Great Push, where the players did significantly higher keys, gave more value on clean plays and new tactics. (Hollingsworth 2019a.)

Since the beginning of raiding, players have been competing for the first kills. One of the best guilds of all time was the Finnish guild Paragon, taking world firsts consistently from 2010 through 2014. In the beginning, the competition was not serious, and the team struggled to keep raids going due to the lack of players. The guild spent a lot of time analyzing combat log data and working that into tactics. In 2012, the guild was followed by thousands of people worldwide, but the kill videos would be released with a delay, and there was no other coverage of the race. In BlizzCon 2011, Paragon would be playing on the stage, where they fought against several bosses from past raids. They even spawned multiple raid bosses at once, and the best players of the world tried to manage the unexpected scenarios. Paragon ended up disbanding in 2016 due to the lack of Finnish players. Blizzard tested the Race to World First concept in the following years by having two guilds on a stage, trying to finish the Firelands 25-man raid. Raiding was and still has not been heavily supported as a competitive aspect by Blizzard. Forums and guild ranking sites were the best way to know who had killed the bosses first for a long time. (Hollingsworth 2019a; Starym 2011)

For the first time in 2019, the viewers could watch the World First race in real-time. The advantages of sponsors and the support from the community finally outweighed the possibility of opponents spying on the tactics. (James 2019.) Especially during Battle for Azeroth and increasingly in Shadowlands, guilds hold their Word First races shared in social media and live-streamed in Twitch. Sanctum of Domination raid tier started in July 2021. The two favorite teams, Complexity-Limit from North America and Echo from Europe, were the fan favorites for the win. Both teams had players playing from venues, and they were sharing their progress through their live stream with casters. (Raider.io 2021; Hollingsworth 2019b.)

3.2.4   Videogame development at Blizzard

Blizzard was founded in 1991 as Silicon & Synapse by Allen Adham, who got the money to start a company from his parents after he graduated from university. He was the sales guy, and he convinced his friends to quit their jobs and start working with him. Morhaime, the second CEO of Blizzard, was there from the beginning and started by being the entire IT department. The name Silicon & Synapse never really took off, and in 1994 the company tried to find another suitable name for the company. The team browsed through a dictionary, and Adham stumbled into the word Blizzard.

The company's first projects were about adapting existing games to other platforms, but they managed to release their first projects in the first year. They started hiring people who really liked games, coding and were into making video games. There was a thrive for

perfection from the beginning, and the minimum was never enough. The first two games in 1992, Lost Viking and Rock n' Roll Racing won their respective categories as the best puzzle and racing game of the year. Especially Rock n' Roll Racing was like any other racing game, but with rockets and rock. In the following years, the company continued with the royalties it got from their games, which was not quite enough, and there was just almost not enough money to pay the salaries. Warcraft was the company's first self-published game, so the team had complete control of the packaging, and their name was on the box. Warcraft debuted in 1994 on PC, being one of the first real-time strategy games. It was the game that made Blizzard Entertainment known in the industry. (Takashi 2016; Gameplanet 2011.)

When WoW shipped in 2004, the WoW team had 60 employees, and it had taken over five years to produce. It scaled up the entire company. Over the following years, the game grew, and in 2005 it hit 4 million subscribers, leading to the first BlizzCon. The company has hit its successes with StarCraft II, World of Warcraft, and Diablo III. The main games, expansions, and sequels require a large workforce, and the WoW team had over 250 developers leading into Warlords of Draenor. (Takashi 2016; Gameplanet 2011.)

The videogame industry was storming with company merges, and Blizzard got their part. Eventually, in 2008 Blizzard became the current Activision Blizzard, as Vivendi Games and Blizzard merged with Activision in an $18.9 billion deal. The merge made Activision Blizzard the world's largest videogame publisher. With 2600 employees, Blizzard continued to operate independently, with Morhaime reporting to the Activision Blizzard CEO. (Takashi 2016.)

Blizzard reported an $8.09 billion profit in Q4 2020, a 25% jump from the year before. This was heavily due to the success in the Call of Duty franchise, but also World of Warcraft and Candy Crush contributed to the great year. The company plans to move to free-to-play markets, especially on mobile, and continue delivering content as a live-service model. (Michael 2021.)

The development cycle of a new WoW expansion starts two years before the launch, which is usually the same time as the previous expansion is launching. One part that slows down the development cycle is the sheer size of the world, as the team wants to keep supporting its legacy content. This requires advancements in technology and dropping some features, such as Artifact weapons, after an expansion. Most of the game infrastructure is now in the cloud, which did not exist in 2004. (Valentine 2018.)

Quality Assurance and Testing

The Blizzard Quality Assurance team has been in the development process from the beginning. The team is seen as an essential part of game development. Due to the experience, the QA team has an expert for each game feature, such as dungeons, overseeing the process. Working alongside the QA team, Blizzard's games user research team focuses on usability, playtesting, and surveys.

As WoW as a game has its unique needs, Jenrette (2019) shared how they conduct user research. Their user research team focuses on the three main categories: usability, playtesting, and surveys. Usability could be solving a situation where a player has gained a skill point but never uses it. Playtests are tests in controlled environments, and the game lab holds up to 20-players for the raid tests. Surveys, internal and external, are a simple way to get targeted feedback. The most tested part of the game is the first hour of the new content.

Dungeons have been an essential part of each expansion. Dungeons are 5-player content with a tank, healer, and three damage dealers. As the process of creating new dungeons is repeated constantly, understanding what works is relevant in trying to avoid wasting time. For the expansion Battle for Azeroth, the game designers wanted to specifically know how the bosses and the minions between bosses felt like.

Blizzard always had a more hardcore testing team for the game's most brutal content, but to get feedback on all content levels, they need more people to test. The user research team can provide valuable input for game designers through videos, gameplay data, and surveys. Figure 11 is an example of a study collected of a dungeon's bosses' difficulty and fun. From these metrics, it was noticed that boss 2 is more challenging and less fun than the others. The three main questions the QA team then asked the playing team were if they understood the mechanics, if they felt they could respond to them, and if they understood how to defeat the boss. Even though something would be challenging, it can still be fun, and therefore the issue is essential to recognize. The entire process is also explicitly done for each role. In this dungeon, the tanks were generally not having as much fun, as the enemy forces constantly stunned them.
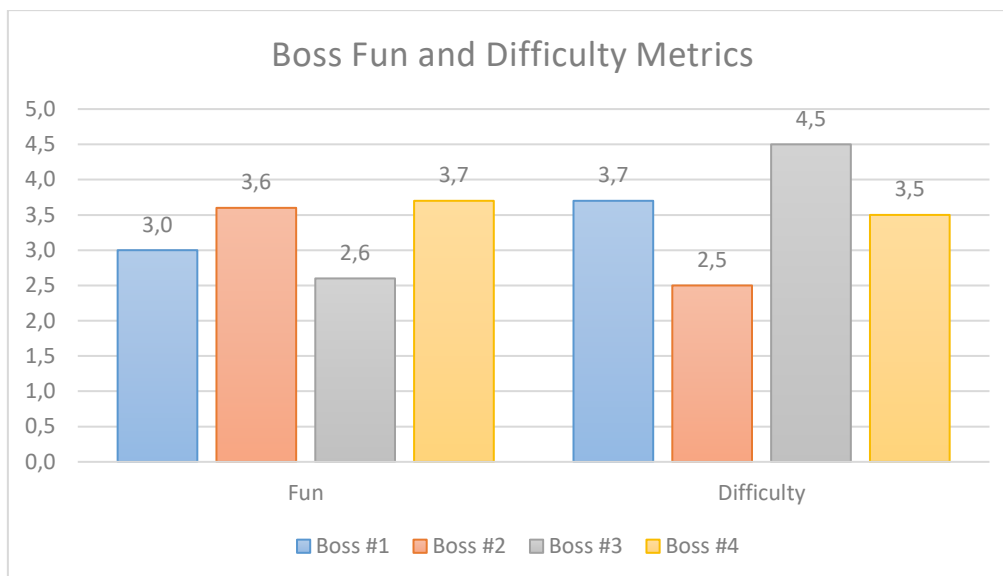
Figure 11. Boss fun and difficulty metrics (Jenrette 2019, modified by Elisa Rissanen)

World of Warcraft has had public test realms (PTR) in active use. The new content and features are mass tested. Some nights are dedicated to raid testing, and most bosses get to see gameplay from actual raid teams. A released PTR also indicates to the community a patch is well on its way, and it is relatively easy to see the state of the new build. Anyone can access the PTR by downloading an additional launcher from the Battle.net launcher. Ahead of new expansions, beta keys are given out to those who opted into it. Often streamers are also able to share some keys. (Rossi 2021.)

3.2.5 Current state, success, and the future

Patch 9.1, Chains of Domination, was released in July 2021, with an exceptionally long waiting period since the expansion was first released in December 2020. Ion Hazzikostas, the lead game director, explained earlier in the spring how the team has been playing catchup with the pandemic and remote work. Even though the Shadowlands expansion was also delayed, it was already in production when the pandemic hit, but Chains of Domination was done entirely remotely. (Preach Gaming 2021.) Shadowlands was a success in sales, but it has struggled with some of its features, especially in the endgame and the storytelling.

The future of WoW seems uncertain from the community's perspective. In July 2021, a trend that already started earlier resurfaced to the mainstream media. Final Fantasy XIV, another MMO, had been consistently breaking player records to a point where their servers cannot handle new players most of the day, and it is viewed to be because a lot of WoW players were moving to the game. Big streamers known to the WoW community

have been playing the game, especially to mention Asmongold, averaging 150000 viewers on his first time playing Final Fantasy. The community has been discussing a lot about wanting the WoW developers to communicate and listen to the community actively. The excess systems set in place to create the player power have also been heavily criticized. (Tassi 2021.)

Blizzard has also been struggling to keep their status as a company. The company has been in the spotlight also earlier due to workplace issues, especially regarding the wages being lower than the industry standard. In July 2021, the company was sued by the state of California over sexual harassment, unequal pay, and retaliation. The situation is still unfolding, but there has been heavy movement from influencers and the workers of Blizzard. (Perculia 2021.)

World of Warcraft was never too unique or innovated a game genre, but it was flexible, and many decisions felt meaningful. WoW inherited a lot from games like Warcraft III and EverQuest. An early study from Duchenaut, Yee, Nickel, and Moore (2006) stated that even though the game had an idea of a casual game, the players still make a significant time investment. Especially in the early days of WoW, the players did not feel like these tasks they spent time on were repetitive chores. Blizzard did take inspiration from their single-player and real-time strategy games and did cater to a broader audience than other MMOs. In the end, WoW was and still is a social game, and a lot of the player experience is about making friends, developing skills, maintaining order in the guild, and helping those who might struggle. (Hornbeck 2016.)

4   DISCUSSION

The goal of this thesis was to describe the production efforts made to create successful, lasting videogames. The leading game companies do not share much of their development philosophies, but the ideas are transparent through their decisions. This chapter attempts to answer the stated research questions.

Reinventing games is often done through major content drops. The companies innovate features, loaning them from other games, add content consistently, and incorporate the latest technology. Games changing drastically over time need to clearly understand the game's core and what makes people play it. The Sims 4 is adding likes and dislikes system after multiple years to deepen the personality system of a Sim, which has been a focal point since the launch.

The success of a videogame does not have a clear definition and is dependent on the product. It balances between making money and making good, lasting games. The best project can do both easily, but we often see the need for a quick sale. The WoW and the Sims 4 expansions have recently left the community questioning if there should be more. Defining and improving the player's feeling of fun has been challenging. The companies have set a high bar for themselves, and they need to work it to keep the customers satisfied. The Sims community has been left feeling like there should be more in the recent content updates. Through innovation and being active with the community, the companies can make money by first creating a good game.

The running joke about Blizzard is "the small indie company," which is often used when something is broken, which indicates the high expectations of quality considering the resources the company has. Quality has and will be a crucial factor in both games to make happy customers. Explaining the thought and developing process and displaying the developers as humans make it easier for the community to understand delays and issues.

The things Blizzard did with the World of Warcraft Classic should be remembered. Naturally, the success was partly fueled by nostalgia, but the developers included the community throughout the development process, and the players felt they were developing the game alongside the company. The involvement was done through the dedicated forums for discussion and early beta access, especially to influencers. The developers shared their philosophy behind the decisions they made. (Penno 2019.) World of Warcraft has been the best of the best, but it seems like it has lost a bit of the sparkle and is trying to cater to a too wide an audience. For the current game, leaving arbitrary systems behind, and looking back to what players truly enjoy, will secure the franchise's future.

4.1   Future of games

Games are powerful, gamers have a lot of influence, and they are passionate about games. Some things are clear, and some are unclear. The future of the entire entertainment industry is clouded with changes in innovations. Potential can be found in the advancement in gaming hardware, virtual reality, cloud gaming, and new monetization methods. Games as a Service is going to be a heavy trend affecting how game consumption is viewed. The esports industry keeps growing and maybe eventually competes with traditional sports, which creates a unique business environment and a chance for any game to be the next competitive hit. However, what is certain is the gaming industry will be making a lot of money, and the amounts will even rise. Investors are flooding the market, creating more opportunities but potentially changing how content in games is viewed.

It is hard to measure fun. When we talk about what is a successful game, it is hard to put in numbers. Especially as the industry and the market grow, there is more money to make, maybe a bit less of the original passion for games and more focus on monetization. The hardest part will be to produce mass games that are still truly fun to play.

It is hard to describe the vast worlds these games have, how their communities carry history and the unique relationship gamers have with the game developers. MMO gaming is on the rise again, and a lot of new games are in development. Having more games in a genre is always better, and the innovations will rotate to different games, and the developers need to do more to keep on top of the competition. WoW will likely stay as the most prominent game, but the new ones such as New World and Ashes of Creation will bring competition.

The Sims franchise is slowly facing new competition with indie games but will be its genre's main game. The Sims 4 still has opportunities to make the game deeper and more cohesive, but many look forward to Sims 5 or other Sims releases. Especially with the promise of online and multiplayer aspects to their game, it will be increasingly important to be aware of the game's core and how people want to play it. Transferring the enthusiastic online creator community to new titles can be tricky, and the game needs to be a success from day one.

A central point of future research will especially be monetization and the Games as a Service model and how they affect video game production. Closely tied to that, there are questions about how customers enjoy games and what makes a game fun to play.

5   SUMMARY

The videogame industry has been growing at an extreme speed and evolving over the recent decades. Some games have been able to stay on top through time and reinvent themselves and their development process. This research investigated what production efforts have been made to keep these games successful through document analysis. The thesis focuses on two leading franchises: World of Warcraft and the Sims.

The literature survey glanced over the history of video games, what a current product life cycle of a game looks like, and how games are monetized. Customer management and marketing were discussed shortly to connect the industry back to the overall entertainment industry. This research worked as the qualitative research base for the thesis.

The Sims franchise is based on a series of games with expansions. The development process was ambitious from the beginning, and to bring a house-building game alive, they needed humanity. Each game included some new major technical innovations, the Sims 2, a 3D world, the Sims 3 an open world, and the Sims 4 a complex personality system. The team is still working heavily on the Sims 4 game, released already in 2014, adding new content through expansion packs and creating new features to the base game. The continuous work has kept the game growing yearly.

The history of World of Warcraft starts with a small, ambitious, and perfectionist company in 1999. The game has received eight expansions, all adding major content patches with a story, new features, and sometimes going back and fixing the earlier experiences. The most recent expansion Shadowlands was the fastest-selling PC game of all time. The game has experienced its highs and lows and has seemed to be struggling with excessive, repetitive content. The remote working due to COVID-19 has significantly delayed the development cycle. Testing and keeping the game fun is in a major role, and the game has a lot of potential in esports. WoW tries to cater to a large audience, and due to them moving further from the community, the players have not always been satisfied.

The research results were specific to the games. Overall, successful reinventing of live games is done through innovating and loaning features, adding new content, and incorporating the latest technology while keeping the quality high. The development team needs to understand what the true core of the game is. Communication with the gaming community has been proven successful in gathering feedback. The future of games is partly unclear, but it will offer increasing opportunities. The competition will be both a challenge and a possibility for established franchises.

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