

Trust and Transactions: Exploring Microtransactions in Gaming

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Abstract

This thesis, "Trust and Transactions: Exploring Microtransactions in Gaming" takes a comprehensive look at one of the newest and complex systems in the gaming industry, Micro-Transactions. The research goes deep within the history, mechanics, evolution and the psychology behind this new avenue of gaming. With such a diverse array of perspectives throughout the thesis, from the past and the present, this thesis aims to generate the ideas of how the future for this system in gaming will/could evolve into. A central theme throughout the study, is the focus upon the pivotal role of trust in regards to currency and how this role is of upmost importance when looking into the relationship between player engagement and sustaining these in-game economies. The impact of this research extends the boundaries of a computer monitor, more-so contributing to broader discussions on consumer trust, in-game economies, and ethical considerations in online transactions.

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I would also like to extend my upmost thanks to Dr Rachel O'Dwyer, if not for their insightful works, this thesis would have been stuck in place. Their work really pushed the boundaries of my writing.

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Intro

Video Games as a form of entertainment are constantly and consistently evolving in front of our very eyes, long gone are the days of waiting in a queue to play Pac-Man on a bulky arcade machine. Instead, a person can jump into worlds that the imagination can only begin to comprehend, this along with modern technology allows for phenomenal framerates, and graphics and creates an engaging experience like no other. Modern Gaming sounds like a utopia that is ever-evolving, there is a hidden beast within this new age of entertainment, a sly beast that lurks in the undergrowth and has slowly wrapped its grasp around gaming as a whole – Micro-transactions.

What started as the use of coins in arcade cabinets has evolved to take a digital form that in some games has crafted itself into fullscale economies and undoubtedly is visibly entwined in the essence of contemporary gaming. This thesis will be delving deep into the world of Micro-transactions, the delicate dance between trust and currency as an idea and to top it off, it will take a brief look into the future of how gaming & micro-transactions will not only evolve, but how one will affect the other in this ever-quicker evolution.

To begin the deep dive into what Micro-Transactions have become, The thesis initially looks into the birth of Micro-transactions in 2006. It is a historical landmark for gaming as a whole and an event that laid the groundwork for the entirety of the gaming industry to change and grow with this new avenue of gaming. Using the origin of Micro-transactions as a basis for conversation, the research seamlessly transitions to examining the varying forms and types of Micro-Transactions. Following the origin and explanation of what a Micro-transaction is, the thesis will then explore one of the current leaders in the game industry with its use of Micro-Transactions, the global phenomenon known as Fortnite. Within this, the thesis will explore the methods used by this game titan and how integral micro-transactions are to its system. With the past and the present state of the industry explored, the third and final chapter will take a plunge into the ever-changing sea of possibilities for the future of Micro-transactions in gaming aswell as the current similarities most Micro-transactions share with the new and upcoming technology known as Crypto-currency. However arguably the most influential part of the final chapter is the dissection of the most crucial organ within the system of Micro-transactions, the idea that trust is currency and without this trust, Micro-Transactions would be completely non-feasible.

In this thesis, the most prevalent topic discussed alongside Micro-Transactions is the concept of Trust and how it has/is used within gaming/gaming studios. Trust acts as the lynchpin between the relationship of players and the virtual economies created with Micro-Transactions. With the guidance of scholarly contributions from Dr Rachel O'Dwyer, this thesis was able to explore the intricate dynamics and the philosophy of how trust is implemented in the gaming industry/Micro-transactions. By centring the attention on trust as the main element of exploration, the research draws upon Ms O'dwyers' range of work as a great deal of insight and clarity. This then allows the thesis to traverse the digital landscapes of video games and will uncover how the currency of trust, as deeply discussed by Ms O'Dwyer, can shape player behaviours, influence these in game-economic decisions, and holds the key to understanding the enduring impact of Micro-transactions on the gaming

industry. Weaving together Ms O'Dwyer's insights and our analysis, this thesis unveils the pivotal role trust plays in the current space of gaming and a glimpse into future realms of Micro-transactions, hereby crafting a narrative that transcends graphics and code to delve into the real heart of player engagement.

An in-depth analysis of the world of Micro-Transactions in the gaming industry holds serious importance for a variety of reasons. The largest reason is the shift within the gaming landscape since the inception and implementation of Micro-Transactions in games. 2024 marks the 18th year of the use of Micro-Transactions in gaming, the use of them as a means of making revenue within the average game has greatly increased. Therefore it becomes paramount to educate and understand the modern methodologies that Micro-transactions use to ensure the average player will pay for whatever that genre of game could be selling. This thesis acts as a means of educating by helping one understand how they have changed since their initial conception, how they are currently implemented in one of the industry's biggest games and finally, how they could change and evolve.

With this in mind, the deep examination of the relationship that trust has with currency as a concept creates a rather novel and nuanced perspective towards Micro-transactions. Without proper insight into the modern usage of Micro-transactions within gaming, it simplifies the process for a game to build this trust towards an unsuspecting player. However, with this knowledge in hand, it offers practical implications for designing ethical and player-centric microtransaction systems.

This thesis aspires to enhance our understanding and educate about the use of Micro-Transactions in modern gaming. Despite the sheer prevalence of these transactions, there truly is a lack of in-depth research on the various aspects and effects they may pose. This thesis seeks to fill this gap by thoroughly examining microtransactions, their in-game economic spheres, player behaviour towards Micro-transactions, and how vital the role of trust is within the technology. Additionally, exploring trust as a central theme is a novel aspect of this research. While Ms O'Dwyer's works on trust/Vibes as a currency offer a foundation, applying these principles to Micro-transactions allows for unexplored perspectives. This research offers new insights into the dynamics of trust in virtual economies, providing a perspective that can influence ethical design practices and industry standards.

In summary, this thesis seeks to go beyond academic discussions. By connecting theory with industry practices, it aims to educate and provide practical insights that could shape the design of microtransaction systems, contribute to regulatory discussions, and improve the gaming experience for players as a whole. However, to truly understand the full grasp of this thesis it is essential to start at the beginning and ask the question, how did Micro-transactions come to be?

Chapter 1

“How Micro-transactions came to be”

“Micro-transactions are defined as in-game payments for items or unlockable content made directly from real-world money or indirectly through the buying of virtual currency”¹

Micro-transactions have quickly become a staple in gaming. The average triple-A game is guaranteed to come with micro-transactions in some fashion. They are a way for the developer to enhance gameplay, entice players and generate a lot of revenue. However, this doesn't mean that micro-transactions are without controversy and criticism. Some argue they are predatory in how they affect a player and even can offer unfair advantages depending on the type of game. This chapter will explore the fundamentals of micro-transactions and the origin of them. So, where were Micro-transactions born?

The first ever paid micro-transaction in gaming can be traced back to *The Elder Scrolls IV: Oblivion* released in 2006 by Bethesda Studios. Bethesda was always a forward-thinking studio with large prospects for game design, for instance in 1996 they released the second game in the *Elder Scrolls* franchise, *Daggerfall* which broke records with a map as big as England². *Oblivion* is an open-world fantasy game which has the player embark on several quests, fighting monsters and enjoying the fantasy world to its fullest. Bethesda wasn't a stranger to releasing DLC (Downloadable Content), as with previous games they had released expansion packs alongside the main games which offered more content and playability so why are these not considered the birthplace of the micro-transaction? The hint is in the name, Micro. The expansion packs did what they said on the tin, they expanded the game and for a cost cheaper than the original game but not a small amount of money either., this leads to the question as to what Bethesda, an ambitious company known for making large games with equally large expansions, would sell to the public.

¹ (Gibson, E., Griffiths, M. D., Calado, F., & Harris, A. (2022). The relationship between videogame micro-transactions and problem gaming and gambling: A systematic review. *Computers in Human Behavior*, 131, 107219. <https://doi.org/10.1016/j.chb.2022.107219>)

² Josh Strife Hayes. “How DLC started - Horse Armour.” YouTube, 16 June 2023, <https://youtu.be/ZnSwflaCUKE?si=ucWvpl2WhwygbuoA>. Accessed 21 November 2023.



Fig 1. **The Elder Scrolls IV: Oblivion, In-game screenshot, (2006)**

In a fantasy land with races of all kinds, magic, mystical creatures and any fantasy weapon the mind wildly imagines what the first micro-transaction for a game of this could be and in turn, will be equally disappointed to see the reality of what it was. That reality was horse armour, this is the first-ever paid micro-transaction. It adds no benefit to the game, it doesn't add damage protection, and it is only an in-game cosmetic. Which is not unlike the micro-transactions of today. Visually it is striking with its over-the-top design and has an initial gold colour with unlockable variants in the game. The Horse Armour cost €2.50 when it was initially released in 2006 and would be packaged in with further versions of the game following the release. It was not greeted with acceptance but anger and controversy. There are multiple reasons for the controversial reception of the Horse armour. For one it offered no benefit in-game despite costing roughly 10% of an expansion, meaning for every 10 sets of horse armour sold, it equals the price of one of Oblivion's expansion packs which greatly expanded games and offered hours of playability. So was it purely due to a value for money or is there something else?

“In terms of video game control, one can surmise that players who feel that they are in control of a game feel autonomous and competent”³

Bethesda is a game company not only built on the vast worlds that they build and give to the public but also on the relationship crafted between the studio and their fanbase which is regarded as a community due to the size and variety of topics that are brought up in these circles. With the release of the game Daggerfalls in the Elderscrolls series, players were able to take control of the game through unofficial means, creating modifications to the game which affected how it played and would open up new stories and fun. With its sequel

³ Toprac, Paul. Ctrl-Alt-Play: Essays on Control in Video Gaming. Edited by Matthew Wysocki, McFarland, Incorporated, Publishers, 2013. Pg 21

Morrowind, Bethesda gifted the community with the tools that they originally used to make the game.

“While sometimes simply playing can lead players to feel as if they are taking part in creating the game world, other times players do help construct the game’s universe by modifying—or “modding”—the game.”⁴ These tools allowed for huge amounts of modifications which in these circles would be abbreviated to just “mods”, mods would affect all aspects of the game, from the visuals to the gameplay to the characters and stories.⁵ These tools would of course carry over to Oblivion, with a whole new game and a plethora of new tools at the disposal of players. This trust between Bethesda and the fans would give the mods created by the community a real sense of value, despite how outrageous or silly they may have been, this trust and the plethora of modifications would attract even more players towards the franchise.



Fig 2 The Cantina, “Found Oblivion’s Weirdest Mods” (2018)

This begs the question, with all the newcomers to the franchise, Why would a new or existing player want to pay for something they would be able to get for free when there would be more options with game-changing attributes due to the unlimited scope of mods? With the ability to mod the game, one would think the Horse Armour DLC should have been a colossal failure, this however, wasn’t the reality and that is also due to modding. Horse Armour was a huge success and was one of Bethesda’s best-selling add-ons, but why is that? Modding is a popular practice with an almost unlimited scope of potential although it has one huge drawback, it is only possible on a PC. Consoles like the Xbox 360 and PlayStation 3 which both had Oblivion as a playable title, were unable to have said game modified. Therefore when a console player sees PC players with such a variety of mods and different elements of gameplay, the visuals alone would lead a person to want to get

⁴ MEAGAN ROTHSCHILD, AMANDA OCHSNER and JONATHAN GRAY. Ctrl-Alt-Play: Essays on Control in Video Gaming. Edited by Matthew Wysocki, McFarland, Incorporated, Publishers, 2013. Pg 91

⁵ “A History of Modding in The Elder Scrolls.” Skyrim Modding Tutorial, 10 March 2012,

something cosmetic so they could feel included. This could explain high price sales, although it still makes one wonder. To look into this possible avenue, analysing an interview with a director and executive producer from Bethesda, who was an executive producer on Oblivion, should shed some light on the subject. In an interview with IGN (Imagine Games Network) Bethesda Director Todd Howard was asked about the infamous horse armour.

“I think horse armour is fine. The price point at the time was the issue.”⁶ Mr Howard further delves into the creation of the armour and explains how someone at Microsoft advised them to charge more for the DLC as they had been selling themes for more money than the initial price for horse armour. He also says in the interview how they had been keen on the expansion packs, the modality of the games and how they would get similar elements to console games. This supports the theory that console players were the driving force behind the great sales of the DLC⁷. When asked about the sales of the DLC, while not saying anything concrete, Mr Howards reaction tells a story of a thousand words. This was the birthplace of the micro-transaction and while the companies watched in awe at the success of the horse armour, creating their own “horse armour”, Bethesda has since moved away from the use of micro-transactions. The latest Bethesda game Starfield which was released on September 6th 2023, has absolutely no micro-transactions, what you buy is what you get. With all this in view, Micro-transactions could have failed if not for the home console market and the limitations due to the software.

PCs as a technology offer a level of freedom that is unattainable in console gaming. Just like how Bethesda trusts its community with the tools to alter their game, a PC owner can alter their hardware, in whatever way they see fit. This ability to alter and upgrade hardware is how consoles as a technology came to be. The reasoning behind this is due to cost, PC parts will vary in price but new technology which can push a computer past previous limits and offer a smoother experience comes at a high price. So the average consumer who doesn't even own a PC of any kind will look at the daunting prices of current computers and instead go to the ever-popular alternative, gaming consoles. Gaming consoles offer the ability to play said games right out of the box, not every PC is made for playing games but every console is made specifically for that purpose. However as previously mentioned a PC owner can upgrade hardware, a practice that a console owner, does not have the luxury of doing. To play the latest games, you need the latest hardware, when a console is released the technology used to make it, at that point is already obsolete.⁸ Therefore consoles as a product, encourage Consumerism. On one hand, with a PC, you have a higher entry cost but with the added ability to do a variety of other tasks aside from just playing games with better longevity. In comparison with a console, you have a cheaper entry without the need to build or customise the machine to play games.

Despite being a cheaper option, a console on paper doesn't seem to have as good of a reputation as a PC. One of the main reasons for consoles to exist besides the

⁶ Knoop, Joseph. “Bethesda's Todd Howard Doesn't Regret Elder Scrolls IV: Oblivion's Horse Armor DLC – IGN Unfiltered.” IGN, 7 June 2019,

⁷ “Why Are Gamers Moving From Console to PC?” Jealous Computers, 11 February 2022,

⁸ “Comparative Study of PC and Gaming Console for Video Games.” International Journal of Engineering Research & Technology, 2020, <https://www.ijert.org/research/comparative-study-of-pc-and-gaming-console-for-video-games-IJERTC ONV8IS05060.pdf>.

higher-powered PC market is with exclusives. Exclusives in gaming are also the driving force of competition between brands. Xbox, Sony and Nintendo all have exclusive games, characters and services that are not available on each other or PC. These exclusives are what create communities for the different gaming platforms, be it Master Chief from Xbox's game Halo, Kratos from Sony's God of War or Mario from Nintendo's Mario games. Characters and franchises that one only has access to via specific consoles are the heart and soul of console gaming, why is that?

"If there's trust, you don't need money."⁹ A quote from Ms O'Dwyer will be explored in further detail within the thesis. In regards to how it applies to exclusives and the platforms they are on, trust is currency, without trust currency has no value. We value trust over everything, money as we know it acts as a stand-in for trust. This is what gives value to the different platforms, the different and varying trust one will have in them. They trust that Mario will have whimsical adventures and save the princess. The trust that Kratos will have a brutal and gory rampage through a pantheon of Gods. The trust that Master Chief will save humanity from a galaxy-ending war. Through gameplay, music and storytelling, we grow with these characters and trust in them.¹⁰ Mario for example is one of the earliest video game characters and is Nintendo's mascot, a character equal in status to Mickey Mouse. Due to the family-friendly nature of the character and the games he has starred in over the years, it is safe to assume he would be a trusted character. People who grew up playing Mario games would have no issue letting their kids play them aswell. This trust in a character is worth more than money. It creates a sense of loyalty in the brand that will keep people buying consoles from these platforms, not necessarily out of logical need but due to the trust they hold in that brand. This loyalty is the heart of gaming communities. So what happens when a game monetises this loyalty to get more players?

⁹ O'Dwyer, Rachel. Tokens: The Future of Money in the Age of the Platform. Verso Books, 2023 pg 124

¹⁰ "Exploring Different Forms of Emotional Game Character Attachment." Aalto | Research, 1 January 2019, https://acris.aalto.fi/ws/portalfiles/portal/38172805/SCI_Bobb_Exploring_Emotional.pdf.

Chapter 2

“How Fortnite Sells Loyalty”

Fortnite is a third-person shooter released on July 21st 2017. Originally it was sold as a Zombie survival game called Fortnite “Save the World” but on the 16th of September, Fortnite released a new mode, Fortnite Battle Royale. Fortnite’s Battle Royale mode is what the game is known for. Epic Games released a tweet commending the fact that in November 2023, Fortnite Battle Royale had reached an astonishing 100 million players¹¹

There are several appeals to Fortnite as a game, and one of the main factors is the fact that the ever-popular Battle Royale is completely free for the public. When released, Fortnite was the first in its genre to use the free-to-play model. A game model which hinges directly on the sales of Micro-Transactions to make a profit and allow the game to sustain itself. This model is a risky move as it relies completely on the idea that a person would purchase these micro-transactions, so how does Fortnite do it?

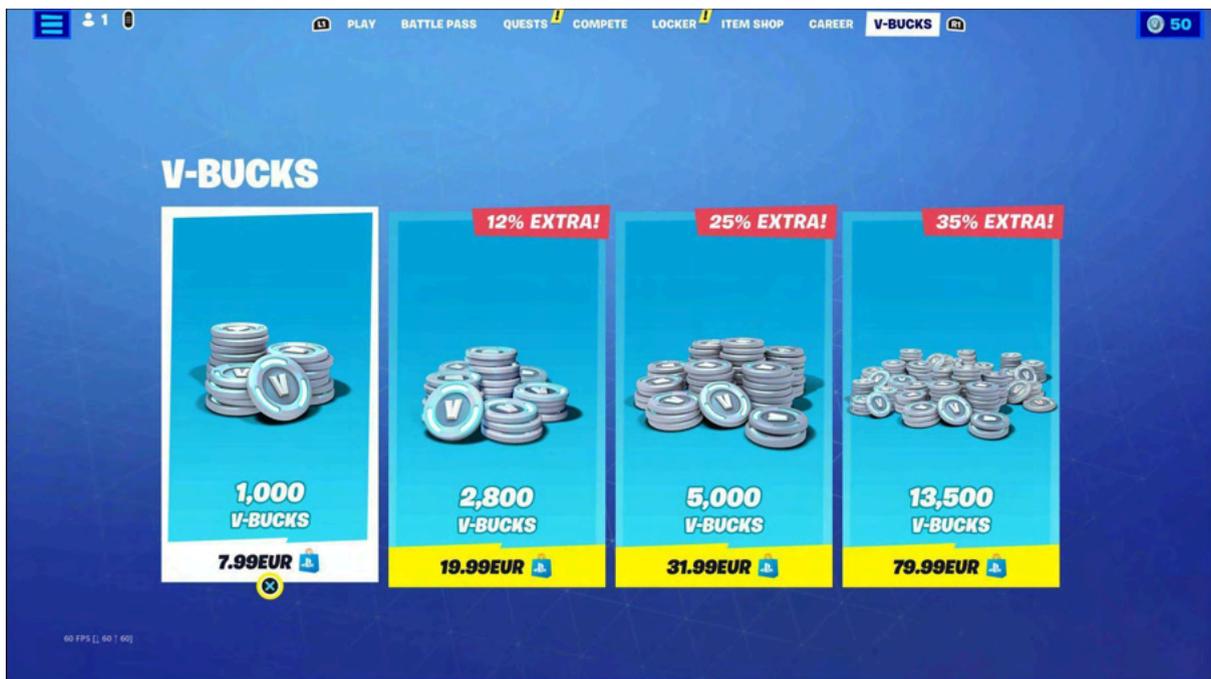


Fig 3. Fortnite, (2023)

The above image shows Fortnite’s microtransactions known as V-bucks. This in-game currency creates Fortnite’s economy and is the only way a person uses real-world money for in-game items. Although that isn't the most notable part of the image, the most notable part is the use of colour within the menu. The menu, the boxes around the V-bucks and even the V-bucks themselves have blue on them.

¹¹ Sam Cawley “Fortnite player count reportedly hit 100 million players in November.” GAMING bible, 3 December 2023, <https://www.gamingbible.com/news/platform/fortnite-player-count-reportedly-hit-100-million-players-in-november-360333-20231203>.

Blue is used heavily throughout Fortnite's menus. In colour psychology, it is said that the colour blue is heavily associated with trust, security and loyalty.¹² The free-to-play model means Fortnite needs the trust and loyalty of its players, so it is no surprise that this psychology may be implemented into its menus to allow consumers to feel like they trust the game. If you get their trust, you get their loyalty and in a game like Fortnite, loyalty can be monetized. "Money Is Trust"¹³This trust is used within Fortnite's biggest asset, the Fortnite Battle-pass.

The battle pass is a system that incentivises playtime, and a sense of loyalty to finish and unlock all items the battle pass offers. The more you play, the more levels you gain, and you are awarded more access to items within the battle-pass. To unlock the items within the battle pass you, first of all, have to purchase it, the game does give access to some items for free but the length of time in between items would lead a person to be impatient compared to a person who owns the full battle pass. The battle pass has its currency called battle stars.

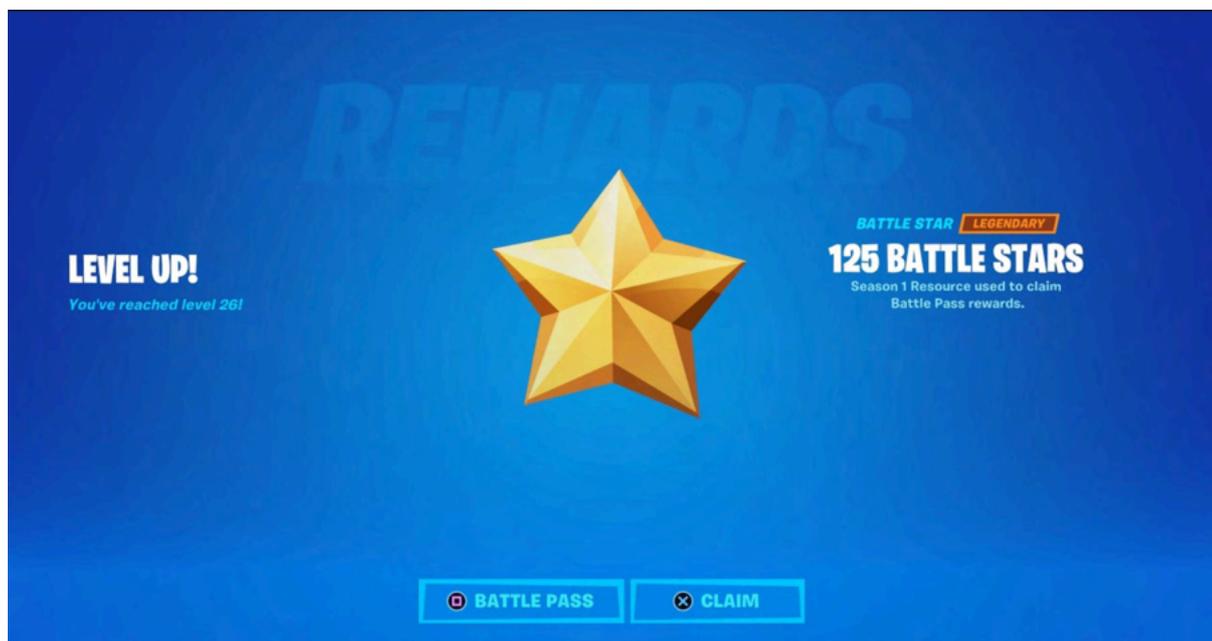


Fig 4. Fortnite, (2023)

The battle stars have a positive nature due to the mindset that receiving a gold star is a great reward. This idea plays into how Fortnite utilises this system. For one to earn battle stars, they will have to level up, as seen in the above image, this pushes the player to keep playing as with every level up they get, the more stars they earn. To unlock an item in the battle pass, you need to exchange battle stars, these items range in price from 3-7 and character skins will cost you 9 stars. With how the battle pass is crafted, a player will have unlocked everything on a page, while they have already achieved the level required for an entirely

¹² Maybray, Bailey. "Color Psychology: How To Use it in Marketing and Branding." HubSpot Blog, 11 July 2023, <https://blog.hubspot.com/the-hustle/psychology-of-color>. Accessed 12 December 2023.

¹³ O'Dwyer, Rachel. Tokens: The Future of Money in the Age of the Platform. Verso Books, 2023 pg 123

other character and host of items. This leaves a player without having the necessary battle stars to purchase everything on the page, which further pushes a player to play. However people are busy, homework, jobs, family and life can all get in the way and it can be a time-consuming process to get all the items within a battle pass. There lies a paid alternative.

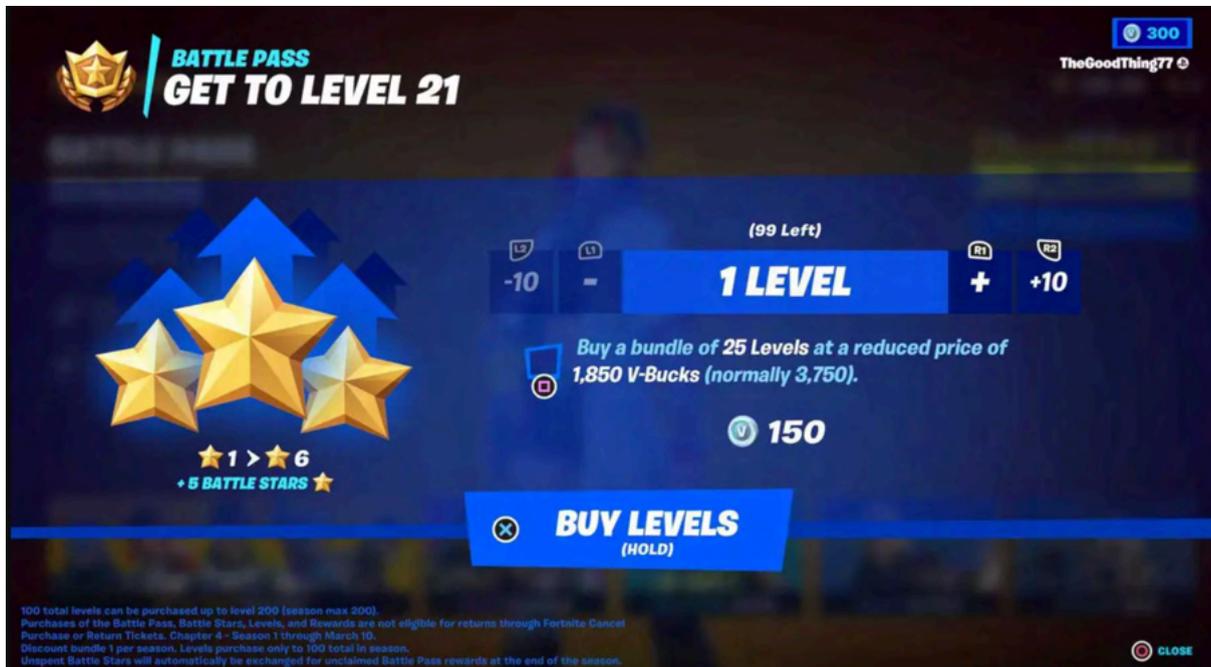


Fig 5. Fortnite, (2023)

This is the ability to purchase levels in Fortnite, which not only gains the player more unlockables but also the battle stars needed to purchase these items without having to play. This artificial sense of loyalty is upheld, as while you aren't spending the time necessary, you are spending the money. A sophisticated system is built upon the trust of a player, but not everyone is going to want to spend money on characters they have no relationship with, this is Fortnite's biggest strength. Its ability to collaborate and include characters and people from every walk of life. The first major collaboration within Fortnite was in May 2018 with Marvel Studios, the collaboration was tied with the film Avengers Infinity War where players could stop Thanos and take the infinity gauntlet for themselves.



Fig 6. Fortnite, (2023)

A strong collaboration would pave the way for skins, abilities, emotes and more. As mentioned in the previous chapter, this loyalty and trust a person has in characters carries more value than money can buy. Offering beloved characters as playable skins and events allows Fortnite to enter communities it wouldn't have just by being itself. This loyalty a person has in a character or franchise will then have the ability to transfer over to the game itself, because playing a regular game of Fortnite may not sound as exciting as playing a game of Fortnite while dressed as a wide variety of characters from pop culture.¹⁴ Also to note, Fortnite collabs are not limited to just fictional characters but they also include real-life people.

¹⁴ "Fortnite Skin-Tracker - Every Battle Pass in Fortnite." Skin-Tracker, <https://skin-tracker.com/fortnite/all-battle-passes>.



Fig7. Fortnite, (2023)

“Their value emerges, not from any strong correlation between share price and the underlying asset, but from the hype, circulating a bet. From vibes.”¹⁵ Another quote from Ms O'Dwyer perfectly describes the presence of these 3rd party skins and events. It does not matter what price Fortnite puts on these assets because their presence alone is a huge driving force for their value. Fortnite's use of 3rd party assets has increased as time has gone on due to the trust and loyalty the brand has. For one, it has an accommodating art style which allows even horror characters like Micheal from Halloween to look friendly without completely changing the fundamentals of the character.



Fig 8 & 9 Fortnite (2023)

¹⁵ RACHEL O DWYER,(2023), We Vibin', Living Currency,https://rachelodwyer.substack.com/p/we-vibin?utm_source=profile&utm_medium=reader2

“My contention is that the success of Fortnite is partly linked to their efforts in adopting a UX mindset.”¹⁶ Dr Hodent is the former Director of User Experience (UX) at Epic Games, the quote is a brief description of how she believes her department is one of the reasons for the success of Fortnite. In the article, she goes through the development process that her team had in creating Fortnite’s user interface (UI) and certain game mechanics using the feedback of play-testers. This allowed them to create a seamless experience which would allow anyone who played the game to find the gameplay engaging and easy to digest which undoubtedly is essential to the success of any game.

Find out why: mastering harvesting (e.g. weak points)



Fortnite (2014 dev build)



Fortnite (2015 dev build)

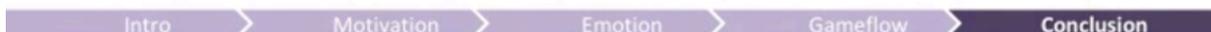


Fig 10, HODENT, Celia. “Understanding the Success of Fortnite: A UX & Psychology Perspective.” 22 July 2019

One example of this process is visible in the above photo, which shows two different versions of Fortnite, the photo on the left has a player mining for ingredients which are used for crafting in the game. “some players were complaining that the game was too “grindy” ¹⁷ when met with this criticism, the system designers looked over the elements and found nothing wrong with the system. This is where it's concluded to not be a design flaw but instead not taking into account the player's perception. Action games have been found to train players to have heightened perceptual skills,¹⁸ so it was no wonder they would stumble across issues like this. In the second photo, they apply one of the ideas to resolve the issue, which was to make the weak point more visible. Using the UX pipeline that Dr Hodent discusses in the article shows

¹⁶ HODENT, Celia. “Understanding the Success of Fortnite: A UX & Psychology Perspective.” 22 July 2019, <https://celiahodent.com/understanding-the-success-of-fortnite-ux/>.

¹⁷ HODENT, Celia. “Understanding the Success of Fortnite: A UX & Psychology Perspective.” 22 July 2019, <https://celiahodent.com/understanding-the-success-of-fortnite-ux/>.

¹⁸ Chopin, A., Bediou, B., & Bavelier, D. (2019). Altering perception: The case of action video gaming. *Current Opinion in Psychology*, 29, 168-173. <https://doi.org/10.1016/j.copsyc.2019.03.004>

how essential it is to have trust in the people who will be playing your game because if you can trust how a player responds to gameplay, it will give that gameplay more value.

Trust can be seen in every nook and cranny of Fortnite's code. From its development process to the trust companies and people have to collaborate with Fortnite and allow it to use their likeness and property, even down to the colour it uses for its menus. Trust is the most important gear within the Fortnite system. However true trust is earned and for Fortnite, the trust of parents is not easily achieved. Ever since the release of the Battle Royale mode in 2017, Fortnite's largest demographic is the young adult. "In the UK, the Video Standards Council rated Fortnite as PEGI 12 for frequent scenes of mild violence. In the US, the ESRB rate Fortnite as Teen, only suitable for those 13 years and older"¹⁹. So there it is, a game that is easy to control with approachable visuals, no blood and is safe for its demographic in the eyes of the law. With all this taken into consideration, Fortnite should be seen as a trustworthy game but even Fortnite is not without controversy. Video games with violence and the public reaction to these games are anything but a new topic. For example, the first arcade game was released in 1971 and in just 5 years, the first controversial video game would be born.



Fig 11, Death Race (1976)

Death Race (1976) as visible above has the players controlling cars via steering wheels and running down "gremlins" which after a reported "scream" would leave

¹⁹ Andy, Robertson. "Fortnite Battle Royale - What parents need to know." *Internet Matters*, 20 December 2022, <https://www.internetmatters.org/hub/guidance/fortnite-battle-royal-parents-guide-keep-kids-safe-gaming/>

tombstones once they have been touched. When compared to similar games of the modern age like Grand Theft Auto which boast realistic graphics, it is hard to imagine how a game would inspire such an outcry. For one, at the time these graphics would have been top of the range, but the true controversy stems from the “intent”. “I shudder to think what will come next if this is encouraged. It’ll be pretty gory.”²⁰. The myth that a video game could incite violence and death due to its contents has been scientifically researched with no definitive answer time and time again.²¹ With heightened visual violence in modern games like Call of Duty or Grand Theft Auto, games like Death Race are not met with the same levels of discontent. This applies to Fortnite as well, as previously mentioned, it is a game without Blood or Gore, and the only violent elements are the intent of the game, which is to eliminate players to be the last player remaining and the use of weaponry within the game itself, therefore it is not a controversial element of the game. The genre of Battle Royale games however is built upon the use of violence to prosper and win so while it may not be a visually violent game, it is the face of a violent genre²². To combat this and shift the image of Fortnite from being just a Battle Royale, Epic Games has implemented several changes and additions to the game to shift the perception of the Fortnite brand.

The first of the changes was met with controversy and was delivered through an update in November 2023. The update was specifically used towards Fortnite’s Creative mode, which allows players to create custom islands and experiences. In the new update, islands marked for general or younger audiences would not allow certain skins, emotes or even loading screens from being used due to the adult nature of certain skins and emotes²³. The controversy stems from the lack of trust in its audiences and the idea that on a whim, any skin could be censored or completely banned. The most notable change from this update was the game's opening loading screen.

²⁰ Blumenthal, Ralph. “Death Race.” *The New York Times*, 28 December 1976, <https://www.nytimes.com/1976/12/28/archives/death-race-game-gains-favor-but-not-with-the-safety-council.html>.

²¹ Orlando, Alex. “Do Video Games Cause Violence?” *Discover Magazine*, 8 March 2023, <https://www.discovermagazine.com/the-sciences/do-video-games-cause-violence>.

²² “Battle Royale Games - Last 7 days Leaderboard.” *Gamesight*, <https://gamesight.io/leaderboards/battle-royale-games>.

²³ Byrd, Matthew. “Fortnite's Controversial Cosmetics Ban Explained: What Skins Are Banned?” *Den of Geek*, 17 November 2023, <https://www.denofgeek.com/games/fortnites-controversial-cosmetic-ban-explained-what-skins-are-banned/>.



Fig 12 & 13, Fortnite, (2023)

Aside from the less dynamic background, the main difference is the fact that in image 1, all of the characters are holding a variety of weaponry while in the second photo, none of the characters are holding any weaponry of any kind. The second big difference is the use of blue as a background for the characters, as mentioned earlier, Fortnite commonly uses blue as a colour for its menus and in colour psychology, blue is primarily associated with trust and loyalty.



Fig 14 Color Psychology: How To Use it in Marketing and Branding, July (2023)

Fortnite was trading trust for trust, its community was built on the backbone of its cosmetics and the showcasing of its battle royale. This trust would be very quickly recovered with Fortnite's following major update. The latest Fortnite chapter would not introduce one major game mode but instead three brand new completely separate modes.



Fig 15, Fortnite, (2023)

The new opening screen for Fortnite showcases all 4 major modes within Fortnite, First of all is Battle Royale which is represented by the character with the pickaxe who previously would have been wielding a weapon. The second and most popular of the new modes is Fortnite Lego, it is a survival action game in the same vein as Minecraft, on release it had 2.45 million players all playing at the same time.²⁴The third is on the bottom right is Rocket Racing which is a racing mode using the vehicles from the popular game Rocket League. The fourth and final mode is Fortnite Festival which is based on games such as Guitar Hero but is not an official collaboration with the brand. Not only do these modes add new gameplay elements but they have also expanded the Fortnite store. Certain Battle Royale skins and emotes have Lego variants, which allows Fortnite to sell emotes and skins even if the player has no interest in playing the Battle Royale. Rocket Racing sells car customisation in the Fortnite store. Fortnite Festival has an entirely separate store and its variation of the battle pass, this store sells 3rd party music, instrument cosmetics and Fortnite Festival emotes only usable in the mode. Fortnite has moved from being just a game, into being a platform for gaming. Truly turning itself into a one-stop shop where anybody can play almost whatever they want in just one place, for free. “Lego Fortnite is going to be a permanent mode – at least for the foreseeable future. Fortnite Festival is also here to stay, and the same goes for Rocket Racing”²⁵ For the moment Fortnite has transformed into a platform, a place where anyone can see something they might show interest in purchasing, be it music or branded character or Lego. Fortnite's future's a mystery, and so is the path of Micro-transactions, so how might Micro-transactions evolve with gaming?

²⁴ “Lego Fortnite draws 2.45M concurrent players on launch weekend.” Polygon, 11 December 2023, <https://www.polygon.com/fortnite/23996588/lego-fortnite-launch-player-numbers>.

²⁵ McCrae, Scott. “Is Lego Fortnite permanent – here's how long the new mode will be in the game.” The Mirror, 13 December 2023, <https://www.mirror.co.uk/gaming/lego-fortnite-permanent-heres-how-31663827>.

Chapter 3

“The Future for Micro-Transactions ”

“The perfect token, the anonymous author suggests, is one where trust is no longer necessary. Bitcoin promised a token that would dispense with the need to trust in banks or in other people – where all you had to trust was that the code worked as it should.”²⁶

A perfect token where trust is no longer necessary said by an anonymous user, observed by Dr O'Dwyer is fundamentally impossible, trust is currency and where there is currency of any kind, there will also be trust. The focus of her book is that of the blockchain and the cryptocurrency that goes with it. While not explicitly in the same vein as Bitcoin and the blockchain, Micro-transactions and the items they purchase are not so different. In the coming future, it would not be unlikely to also see the inclusion of the blockchain in gaming, so how would this affect Micro-transactions and the current trust in gaming? Let us look at the similarities between Crypto-Currencies like Bitcoin and in-game currencies such as V-Bucks.



Fig 16 & 17 Google Images, (2023)

“Bitcoin was the first cryptocurrency created and is now the most valuable and well-known. It was first launched in January 2009 by a computer programmer or group of programmers under the pseudonym Satoshi Nakamoto”²⁷ “Just like these virtual currencies, Bitcoin is a form of digital money that is not backed by any physical asset or government.”²⁸ V-Bucks are a digital currency which previously have already been looked into, are used to purchase a

²⁶ O'Dwyer, Rachel. *Tokens: The Future of Money in the Age of the Platform*. Verso Books, 2023

²⁷ Julie Pinkerton “The History of Bitcoin, the First Cryptocurrency | Investing | U.S. News.” *US News Money*, 14 November 2023, <https://money.usnews.com/investing/articles/the-history-of-bitcoin>.

²⁸ “The surprising similarities between in-game currencies and Bitcoin.” *D-Central Technologies*, 9 December 2022

large selection of goods within the space of Fortnite. In comparison, Bitcoin is a digital currency which can buy physical goods outside the space of a game and can be exchanged for these in-game currencies. The difference between the two however is the fact that as a currency V-bucks is centralised in comparison to the decentralised nature of Bitcoin. Which remains its biggest selling point. However, there is a binding trait that both V-bucks and Bitcoin share, which, as previously mentioned, should no longer be necessary. An element that Ms O'Dwyer goes into great detail, an element which has been mentioned over and over. Trust, trust is the key fundamental for currency, without trust, money is worth nothing. Therefore anything that has trust has value and can be considered currency. In her book, Ms O'Dwyer uses the example of the Irish bank strikes from the late 1960s to the early 1970s, money became nothing, that was until shopkeepers stepped up to the plate and in place, became faux banks. The people stepped up and helped each other and she said “ If there's trust, you don't need money.”²⁹. She goes on to mention how despite this there were still issues with robberies and that money fills in the gap for trust, leading to the reason for bitcoins creation. A self-governed currency which can't be robbed, hypothetically. The idea is that you don't have to trust the banks and therefore only need to trust yourself.

The flaw in this logic is the fact you have to have trust in your technology, computers, hard drives, USBs, online databases and wallets. None of these are as perfect or foolproof as one would think. Trust in technology is still a relatively new concept, digital representations of real-world items can be cropped, copied, altered, or faked much easier than physical counterfeiting. People live in a physical world, they will trust that an apple will be an apple just by holding it, feeling it and being able to examine it with our senses. None of this applies to digital items like Bitcoin or V-bucks, you can't tell if they are genuine using your sight unless you can understand the coding, your smell, sense of touch or taste, do nothing because they only exist as code, not on the physical plane³⁰. The visuals used for V-bucks or Bitcoin as seen above could be anything, using money as a reference and making it look like currency is only to create a sense of trust due to our experience with physical money. V-bucks uses its bluish tint to keep in line with the overall colour scheme of the game and what stands out, particularly in the name for the currency, “V-Bucks”, is the use of “Bucks”, this term is slang for the American dollar and traces its origin back to Colonial America when buckskins were traded for goods.³¹ The use of an existing currency as a base to create trust is another similarity between Bitcoin and V-bucks. Bitcoin takes a different approach to the issue of owning a symbol, since there is no central authority, it theoretically isn't tied down to any set graphic or symbol. This however has not stopped the design and use of these symbols to communicate Bitcoin with visuals, to breed visual trust in the new technology.

²⁹ O'Dwyer, Rachel. *Tokens: The Future of Money in the Age of the Platform*. Verso Books, 2023 pg 124

³⁰ Carusi, Annamaria. “(PDF) Trust in the Physical/Virtual Interworld.” ResearchGate, https://www.researchgate.net/publication/228197171_Trust_in_the_PhysicalVirtual_Interworld.

³¹ Jackson, Amanda. “What Is a Buck? Definition as Money, Meaning, History, and Value.” Investopedia, <https://www.investopedia.com/terms/b/buck.asp>.



“Satoshi Nakamoto created this lettered golden coin for the original Bitcoin client, released on January 9, 2009.”³² The first in a long line of Symbolism for Bitcoin and what would lay the blueprints for the currency’s look, The next iteration of this symbol would define Bitcoin visually.



On February 24, 2010, Satoshi posted an updated icon³³ which would become the definitive symbol for Bitcoin as a whole. While V-Bucks are similar to Dollars via slang, Bitcoin is similar in design. As visible above both Bitcoin and the dollar sign have two lines going through them vertically. The dollar symbol is one of the most “trusted” currencies in the world due to America’s size and influence on media and pop culture, it would be no wonder a new type of currency would try to utilise this familiarity. Another element of Bitcoin is the use of Gold. “Colour psychology teaches us that the color gold tells a success story”³⁴ Bitcoin as a technology and as something of value is in its infancy. When compared to the value of Gold, which has traceable jewellery back to 4400 BC³⁵, there is no surprise as to why Bitcoin would wish to be compared to something as valuable. These elements work towards giving Bitcoin an upfront sense of trust for the individual that owns Bitcoin, it makes them feel as if they own something more than a few lines of computer code

This element of trust is much simpler with V-bucks in comparison. A person needs only trust in Epic Games or whoever is the sole owner of said currency. When compared to the sole nature of trust with Bitcoin, there is far less handling necessary in comparison to V-Bucks, you don’t need to purchase a virtual wallet or safeguards and you don’t need to worry about server space. The trust is merely in Epic Games to keep your V-Bucks protected. As previously mentioned, Skins and Collabs with Fortnite are the backbones of what makes up Fortnite’s sales, modes and events. The legacies of certain people and fictional characters

³² “Visual language.” *Bitcoin Design*, <https://bitcoin.design/guide/getting-started/visual-language/>.

³³“Visual language.” *Bitcoin Design*, <https://bitcoin.design/guide/getting-started/visual-language/>.

³⁴ “Gold Color Meaning: The Color Gold Symbolizes Wealth and Success.” *Color Meanings*, <https://www.color-meanings.com/gold-color-meaning-the-color-gold/>.

³⁵ “The History Of Gold Jewellery.” *Gatsby Jewellery*, <https://www.gatsbyjewellery.co.uk/blog/history-of-gold-jewellery>.

carry a great deal of love, trust and loyalty this trust is what gives value to micro-transactions, without this trust, they would have no worth as they currently have no usability outside of their respective platforms. This is subjective to change as visible with the exceptional growth rate of technology,³⁶ it is a venture into the unknown as to what could happen.

The future of micro-transactions is a mystery. One of the potential avenues currently known and still being developed is a system named the blockchain. The blockchain is where the birth and current status of the bitcoin is held. Without the blockchain, Cryptocurrency would not exist. The Blockchain acts as a public receipt, showing the transactions of bitcoin/cryptocurrencies. For example, how could the blockchain operate in a game space such as Fortnite? "It allows users to have one profile that they can use across multiple platforms"³⁷ With Fortnite's recent updates and additions which transformed the game into a platform of itself, there have already been elements similar to that of the blockchain being implemented. In the game mode Rocket Racing, certain cars and car decals can be shared and transferred between Rocket League and Fortnite Mode Rocket Racing. This allows a person to share and use their skins and customisations between different games. With blockchain integrated, the in-game currencies would be usable outside of the games themselves, thus meaning a person has direct control over their expenditure and potentially would be able to earn money directly through a game, therefore a person could be earning money through a battle pass and instead of it being used on the game it could be used for food or other. The example used with Fortnite is only possible since both Fortnite and Rocket League are the property of Epic Games.

At this current moment, there is no public evidence that such a system would be able to be implemented between other platforms due to the focus on the exclusives of each gaming platform. Exclusivity is a positive aspect for game companies such as Nintendo, Sony and Microsoft but it shares its number of drawbacks. Exclusives are what drive developers to outperform one another, which allows for better technology and better games. Unfortunately, it does mean certain games are left to obscurity due to unsuccessful consoles, it also can cause tension between these platforms. "a horde-based spinoff of the Spec Ops missions, will be exclusive to the PS4 for an entire year"³⁸ Another factor that should be accounted for is the fact that a blockchain would not fit in every game category. It would not make sense for a Fortnite skin to appear in a Super Mario Game due to the fact they come from completely different game genres. With all this in mind, it doesn't necessarily mean that certain agreements between these gaming titan can't be forged, the blockchain and micro-transactions are both still in their infancy and are an ever-evolving piece of technology. There is no doubt the use of both will be vastly different in a relatively short space of time. While currently only a hypothesis, there undoubtedly will be a widespread attempt at including the blockchain in gaming's fast-approaching future.

³⁶ Jalink, Wolter. "With technology moving at breakneck pace, how can businesses keep up?" EY, 29 June 2022, https://www.ey.com/en_ch/digital/with-technology-moving-at-breakneck-pace-how-can-businesses-keep-up.

³⁷ "How Blockchain In Gaming Is The Next Big Thing ?" Appinventiv, <https://appinventiv.com/blog/blockchain-in-gaming/>

³⁸ Nason, Sam. "Does Exclusivity Help or Hinder the Video Games Industry?" Redbrick, 18 October 2019, <https://www.redbrick.me/exclusivity/>.

Outro

An everchanging landscape, with no definitive idea of what it holds for the gaming industry, Micro-transactions as a technology are here to stay. Despite the difficulties faced due to the exclusivity focus of each respective gaming platform, it is evident a balance between competition and the currently unknown is likely to sculpt the future of the gaming industry and Micro-Transactions as a whole. This thesis has covered as much as it can for the past, present and future of Micro-Transactions. This thesis began by delving into the history of Micro-transactions, from looking at how they originated from a mere visual enhancement to the sheer backlash from the community behind this game. Here is where the research began to look into one of the key elements of this thesis, trust. From there it moved to the present and examined one of the biggest games in the market and deciphered how its use of trust and brand loyalty allowed it to reach audiences and communities that otherwise wouldn't have had such exposure. Finally, to end the journey a question was asked, a question of what the future is for Micro-transactions and looked towards the unknown and the similarities that Micro-transactions have with similarly evolving technologies. A question with no true answer, one that all one can do is wait and watch.

As this investigation into the gaming industry's unknown future and the consistent role of Micro-transactions is wrapped up, it is imperative to reflect on the central questions and objectives of this thesis, since its conception. These questions and objectives were the driving force behind the investigation into Micro-transactions history and relevancy as a technology. The overarching question about the future of this technology remains enigmatic, which emphasises the sheer speed at which current technology as a whole is evolving, which pushes the objective of this thesis, which is to educate about this new technology as it is currently. Providing a comprehensive look into the current state of Micro-transactions in gaming, this thesis allowed for the entire history to be unravelled to show how quickly they have transformed. While researching for the thesis, certain avenues and methods that were popularised with Micro-transactions have already become outdated. Thus showing how quickly this new technology is transforming and adapting as a system and a method of economy. However one of the biggest themes of this thesis is undoubtedly the research into the idea of Trust.

Due to the work of Dr O'Dwyer, a significant portion of this thesis goes into great detail about the methods used by Micro-transactions involving trust. There are two quotes from Ms O'Dwyer's work which hold great importance within this thesis, these quotes being; "Money Is Trust"³⁹ and " If there's trust, you don't need money."⁴⁰. At surface value, these quotes almost seem like they counter one another but in the context of Micro-transactions, they fit like a glove. In an ideal world, we would not require currency, instead, trust would be that currency, therefore trust is money as Ms O'Dwyer says, however not all currency is necessarily money. Livestock and physical resources act as a currency of their own,

³⁹ O'Dwyer, Rachel. *Tokens: The Future of Money in the Age of the Platform*. Verso Books, 2023 pg 123

⁴⁰ O'Dwyer, Rachel. *Tokens: The Future of Money in the Age of the Platform*. Verso Books, 2023 pg 124

however in a transaction, there is a physical gap, this is where money comes in and acts as that trust. It is a supplement for trust, it creates a sense of value for what is being traded. This is the bread and butter for all Micro-Transactions as this sense of value takes the shape of a variety of services as discussed within the thesis. This is why trust is such an integral piece of this thesis, without a sense of trust or the value associated with it, there would be no revenue from Micro-Transactions and therefore they would not be a viable resource for the gaming industry. As well as that, the idea that trust is currency isn't a topic that is widely discussed without properly researching the concept. That is why it is such an important theme and ties into one of the main objectives of this thesis which is to educate about Micro-transactions as a concept but also how personal trust can be monetised by companies of all types, this thesis just delves into the topic of these payments within the gaming sphere.

This thesis has shown that Micro-transactions have become ingrained into the workflow of any upcoming game, be it by an independent creator or from a major studio. Within this creative process, one must decide whether or not their game will benefit from the use of Micro-Transactions, therefore this thesis aims to provoke a reassessment of the use of this evolving technology as to how it should be ethically used and presented. With trust playing such a pivotal role in gaming, the creative process of these studios should focus its efforts on listening to the communities of the players, to cultivate this trust as a means of improving the gaming experience, fostering more positive community relationships versus taking this trust and monetising it as a means for financial success. Micro-transactions and the use of trust instead could be used as the building blocks for the future to create extensive and inclusive gaming ecosystems.

Throughout this thesis, a tapestry using the threads of time has been crafted. The past, present and future all weaved together with trust as our sewing needle. From humble beginnings, Micro-Transactions have defied controversy, they have shaped the industry to its will and are undoubtedly a cornerstone of the modern era of gaming. With no sign of going away, the seeds of the future have been planted and the stitching of crypto-currencies and the blockchain acting as a door to the potential future for this technology. An ever-changing tapestry with no end, the gaming industry and the communities behind this platform, await the next breakthrough, as there is no possible way to understand how it will shape and change gaming as a concept.

In conclusion, this thesis has partaken a journey through the stratified system of Micro-transactions, unveiling its past, announcing its present and contemplating the potential of the unknown landscape, its future.

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Fig 5. Fortnite, (2023)

Fig 6. Fortnite, (2023)

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Fig 11, Death Race (1976)

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