The Consumer Journey within Decentralised Markets: A Case of Non-Fungible Tokens

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Abstract

Non-Fungible Tokens (NFTs) are unique digital assets which operate in a decentralised system that facilitate true digital ownership and product authenticity, leading to significant consumer interest. Despite growing interest, a gap exists in understanding the consumer journey regarding NFT purchase and consumption. This study aims to enhance comprehension of the consumer motivations and ownership intentions in NFT markets through the theoretical framework of Consumer Culture Theory (CCT). By exploring the three stages of the consumption journey - pre-purchase, acquisition and possession and post-purchase evaluation and behaviour – this research contributes to a nuanced understanding of consumer behaviour.

Employing a qualitative phenomenological methodology, the study involved in-depth, one-on-one interviews with twenty-five NFT consumers. These participants were selected through purposive sampling within a virtual community to understand consumers lived experiences of NFT purchasing and consumption.

The findings revealed a comprehensive consumer journey of NFT consumption. This was categorised through three stages: risk and motivation of consumption, digital ownership and market processes, and value creation and consumer behaviour. Additionally, twelve distinct personas were identified, illustrating varied motivations and behaviours among NFT consumers.

Theoretical contributions include a holistic expansion of CCT research to encompass decentralised digital asset consumption, addressing a critical gap in existing literature. Practically, the findings provide valuable insights for organisations and marketing teams, enhancing their understanding of consumer motivations, ownership intentions, and value attributed to NFTs. This knowledge empowers marketers to better interact with communities, customer journeys and experiences of both current and prospective consumers of Non-Fungible Tokens.

Keywords
Non-fungible tokens, NFT, Consumer Consumption Theory, consumer behaviour, digital ownership, qualitative research, consumption journey.

Statement of Authorship

This thesis includes work by the author that has been published or accepted for publication as described in the text, except where reference is made in the text of the thesis. This thesis contains no other material published elsewhere or extracted in whole or in part from a thesis accepted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Declaration of Authenticity

“I, James Di Martino, declare that the PhD thesis entitled ‘The Consumer Journey within Decentralised Markets: A Case of Non-Fungible Tokens’ is no more than 85,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work”.

“I have conducted my research in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University’s Higher Degree by Research Policy and Procedures.”

Ethics Declaration

All research procedures reported in the thesis were approved by the Institute for Sustainable Industries & Liveable Cities (ISILC) and given the approval number of HRE22-148.

James Di Martino 7.11.24

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List of Abbreviations and Acronyms

AI: Artificial Intelligence

ASIC: Australian Securities and Investments Commission

BAYC: Bored Ape Yacht Club

BC: Blockchain

CCT: Consumer Culture Theory

CE: Customer Engagement

dApps: Decentralised applications

DAO: Decentralised Autonomous Organisation

DCO: Digital Consumption Object

DCCT: Decentralised Consumer Culture Theory

DeFi: Decentralised Finance

DLC: Downloadable Content

DNS: Domain Name Service

ENS: Ethereum Name Service

ERC: Ethereum Request for Comment

ETH: Ethereum

F2P: Free To Play

FIFA: Federation Internationale de Football Association

FOMO: Fear Of Missing Out

HOG: Harley Owners Group

IAP: In App Purchases

ICO: Initial Coin Offering

ID: Identity Document

IP: Intellectual Property

IPO: Initial Public Offering

IRL: In Real Life

MMO: Massively Multiplayer Online Game

MOD: Moderator

NFT: Non-Fungible Token

NASDAQ: National Association of Securities Dealers Automated Quotations

Pixel Vault: PV

PFP: Profile Picture

POAP: Proof of Attendance Protocol

UI: User Interface

UK: United Kingdom

USA: United States of America

WAGMI: We Are Going to Make It

SDT: Self-Determination Theory

SEC: U.S. Securities and Exchange Commis

Chapter 1: Introduction

1.1 Introduction

Non-Fungible Token (NFT) ownership has grown exponentially over the last decade. In 2023, Forbes valued NFTs at $10 billion (Lurie, 2023). To date, Forbes has stated that the global NFT market cap has reached nearly $18.29 billion at an annual growth rate of 2,636% since 2021 (Wang et al., 2024). As this has become an emerging multibillion-dollar sector of the economy, there is not only a latent need but an urgency to understand this consumer market better.

NFTs are new digital assets which use smart contract technology that has emerged from the introduction of cryptocurrency, Bitcoin and Ethereum Blockchains (Rehman et al., 2021; Hasan and Salah, 2018). Recording consumer transactions on the blockchain certifies authenticity and ownership (Chirtoaca et al., 2020) taking place in a decentralised market (Bodó et al., 2021). Thus, NFTs work as unique tokens that publicly attest the ownership of digital items (for example: art, music or game items) or physical assets that have been tokenised (such as cars, accessories or documents). NFTs can be viewed as a new asset class that exists within the digital world and may be accessed through combinations of computer hardware (Fai, 2021) and software (Rehman et al, 2021; Wang et al., 2021). Consumer interest in NFTs is growing, yet little is known about the journey consumers go through to acquire, use, keep or dispose of these assets. As there is currently insufficient research at present on this relatively new asset class and decentralised markets, this study will investigate why consumers choose to consume NFTs. This research provides a conceptual framework for understanding consumer adoption of NFTs through the lens of Arnould and Thompson's (2005) Consumer Culture Theory (CCT) for the adoption of NFTs by consumers.

This chapter provides background information on digital assets, identifying gaps in existing research and presents the research question. The methodology is described briefly with a supporting rationale, along with the practical and theoretical contributions of the research. The chapter concludes with the structure of the thesis.

1.2 Research context

The research context is framed around decentralised markets and the relatively new technology of permissionless (protocols being accessible to everyone without restriction) blockchain systems (Bodó et al., 2021; Bezuidenhout et al., 2022). A decentralised market is defined as a market where technology enables investors to interact directly with each other instead from within a centralised

exchange (Investopedia, 2024). It is within these decentralised markets that NFTs and cryptocurrency are purchased and traded through blockchains (Wang et al., 2021). It is important to note that full decentralisation within social economies is difficult to achieve as it relies on autonomous agents and centralised platforms (Bodó et al., 2021). This is where the function of NFT technology automates transactions without the need of third-party interference (Rehman et al., 2021) leading to an evolutionary era of full consumer ownership of digital assets.

The growing interest in NFTs has captured the attention of the media, individuals and organisations who have created digital assets within virtual communities (Hamari & Keronen, 2017; Goldfarb & Tucker, 2019; Fai, 2021). Digital assets have been a growing area of interest since the rise of the internet over the past thirty years (Watkins, 2015). It is through this evolution of the internet that the blockchain was created in a frustrated response to the financial crisis of 2008 by an anonymous user (or users) acknowledged by the pseudonym 'Satoshi Nakamoto' (Vranken, 2017). This blockchain was called Bitcoin, which is a peer-to-peer network system that allows quick distribution between individuals (Vranken, 2017). The Bitcoin blockchain is a technological marvel providing a secure, trusted and decentralised control mechanism that records online activity (Hasan and Salah, 2018). To counter the shortfalls and lack of authenticity of ownership within centralised marketplaces, the impact from the introduction of the blockchain cannot be underestimated. Every transaction occurring on the Bitcoin blockchain network (Bitcoin units sold/exchanged/transferred) is electronically stored on an open-source ledger (Conti et al., 2018). An open-source system is one in which the source code can be altered by anyone who has access to the programming applications (Bretthauer, 2001). The decentralised structure of the blockchain allows consumers freedom and transparency to view all transactions made (Rehman at al., 2021). In an expansion of Bitcoin technology, the Ethereum Blockchain was founded in 2013 by Vitalik Buterin (Buterin, 2016). The introduction of smart contracts was made possible by the Ethereum Blockchain which allows programs such as decentralised apps (dApps) to create and build on its open-source network (Chuen et al, 2017; Iaccarino, 2022). Thus, the technological advancement of Ethereum and programmable smart contracts set a foundation for creating the NFT standard (Wang et al., 2021) which will be elaborated on in Chapter 2.

1.2.1 The evolution of NFTs

While NFTs are relatively new to consumer markets, the origins of NFTs stem back to before the introduction of Ethereum when consumers experimented with the Bitcoin blockchain. Here, Table 1 chronicles the genesis of NFTs from 2011 to the present time. Bitcoin was created purely for peer-to-peer payment systems, so the ability to trade digital assets was restricted to the Bitcoin Blockchain specific program code (Jacobs, 2014). The first instance of tradable digital assets can be traced back to decentralised 'domain name systems' (DNS) in the form of 'Bit Domains' and 'Coloured Coins'

(Kalodner et al., 2015). Namecoin emerged as a fork from the Bitcoin Blockchain, meaning that Namecoin was split from the Bitcoin blockchain into its own protocol that acts as a new blockchain with different software changes (Kalodner et al., 2015). Subsequently, the creation of the digital artwork Quantum on Namecoin was a trailblazing moment largely forgotten, though would later be seen as the inspiration of what ultimately landmarked NFTs (Vitalik would go on to reference Quantum and Namecoin in the Ethereum Whitepaper) (Buterin, 2016; Exmundo, 2023). Through Namecoin, the introduction of Counterparty marketplace allowed an exchange of digital assets between users to exist. In turn, the online games of Spells of Genesis and Force of Will released digital assets for their virtual platform (Komiya and Nakajima, 2019; Férdeline, 2022). This was a revolutionary technology that also gave birth to a popular art brand of Rare Pepes (collectable art NFTs based on the Pepe the Frog meme) to become tradable on Counterparty. However, it was not until the release of the generative artwork NFT collection CryptoPunks (collectable art NFTs) on the Ethereum blockchain that the NFT concept was introduced (Steinwold, 2019; Lee, 2021a). This has essentially created the golden age of NFTs. Following this era, NFTs in 2022-2024 entered a period of frequent volatility and market value corrections, leading to a rush of meme NFT collections from Milady Maker, Sappy Seals, Lil Pudgys and Pudgy Penguins (Wątorek, 2024). These NFT meme collections have a high-risk threshold that can result in extreme success or failure (Krause, 2025). Successful meme collections cultivate strong community members (that have made profit) and become dedicated to these NFT meme brands (Krause, 2025). Unfortunately, this has also resulted in some unsuccessful meme projects where consumers have lost significant money buying into NFT projects that have flopped (Kappos et al., 2023) as they purchased the NFT meme at the top of the market (Wilson & Conlin 2025). Consumers who enter the NFT market by purchasing memes are enthralled into a different consumer journey as their behaviour is embedded in the value of what culture and society has placed on the meme NFTs. This has led to consumer journeys that do not follow a traditional path. Now in 2025 with President Donald Trump's pro-crypto stance, NFTs have shifted with the classification of meme coins and NFTs from commodities and securities to the new classification of collectables (Krause, 2025).

As shown in Table 1, prior to NFTs it was incredibly restrictive and therefore quite uncommon to transfer or trade a digital asset out of a centralised, controlled third-party platform. This greatly limited the ability of organisations to integrate digital assets into their operations (Watkins, 2015). It has been argued by Johnstone (2019) that assets and possessions are similar, but they are fundamentally separated by a financial store of value that can be issued or transferred. For example, consumers can trade digital assets on the blockchain that are fully owned and tradable between consumers (peer-to-peer). Although, Mardon and Belk (2018) argue that organisations have incorporated digital items, currency, and assets to an extent in games and virtual communities. These could be items such as skins, alternative weapons or in-game currency that are non-interchangeable

from the platform on which they were purchased. For instance, in the popular online card game Hearthstone, purchased digital cards are locked to the platform and are nontransferable between other consumers or for Fiat currency (Kononov, 2015). Fiat currency refers to any currency that is not backed by a physical commodity such as gold or silver but rather has its value derived from an authority such as a government (Martin, 2021). Digital assets in these cases have been bound to virtual communities, games, or streaming platforms where the consumer is essentially owning a copy of a copy, not the actual authentic (unique) digital object (Watkins, 2015; Wang et al., 2021; Kaczynski and Kominers, 2021; Rehman et al., 2021).

Table 1

NFT project contribution from 2011 to present

Year	Project Name	Contribution	Source
2011	Bit Domains	Consumers were able to claim dot bit Identity Documents (ID)s and then set the value to their server address. The data stored on Bit Domains was minimal and allowed a small amount of data to be stored such as a name. Claimable names on Bit Domains were scarce which led to supply shocks. This demonstrated a massive customer interest in digital scarcity within tradable digital assets.	Jacobs (2014) Férdeline (2022)
2012-2013	Coloured Coins	Coloured Coins use the smallest amount of Bitcoin units that can be used to represent assets such as property, the ability to issue its own cryptocurrency, issue shares of a company, subscriptions, and even coupons. However, there was a big downside to this technology where the coins could only represent values if everyone agrees on their worth. An example of this downside is if three people agree that 100 Coloured Coins act as 100 company shares, it just takes one person to no longer equate Coloured Coins for this entire system to collapse. The platform is not decentralised as orders are not enforceable which can lead to monetisation. This is the earliest form of a digital asset that extended Bit Domains simple name system where the contribution of Coloured Coins set a foundation for future technology.	Steinwold (2019)
2014-2015	Quantum Counterparty Spells of Genesis Force of Will	The earliest form of a comparable NFT property can be traced to its humble beginnings in 2014. Quantum was created by digital artists Kevin and Jennifer McCoy, and thus the provenance and ownership of digital images emerged. Quantum would pave the way on setting the foundation of what was to come on digital ownership through blockchain technology. The limitations of Namecoin prevented further experimentation and standards that would be introduced later with Ethereum and the ERC (Ethereum Request for Comment) standard. During this time, Counterparty was released which is a protocol that allows asset creation on a decentralised exchange. As this platform was built on the Bitcoin blockchain, it was unable to scale. However, Counterparty enabled a series of projects to function. This included an early crowdfunded game called Spells of Genesis to use its token Initial Coin Offering (ICO) of Bit Crystals as in-game currency, making it tradable for users (a revolutionary feat in crowdfunding). In addition, this led to the popular trading card game Force of Will which was the 4th ranking card game in North American sales (behind Pokémon, Yu-Gi-Oh and Magic: The Gathering). The popularity of Force of Will demonstrated the value proposition of putting assets on the blockchain for digital ownership, thus leading to further experiments.	Exmundo (2023) Steinwold (2019) (Kalodner et al., 2015) Komiya & Nakajima (2019) Férdeline (2022)

2016	Rare Pepes	In 2016 users began to create Rare Pepe assets on the Counterparty platform based on memes which have an intense and active fanbase. Rare Pepes shaped the way consumers interact and observe digital assets. This can be linked to the Rare Pepe Meme Directory which had experts (self-made scientists) that were clarifying the rarity of Pepe memes. Rare Pepes created a gold standard in rarity of artwork which has a close association with digital collectables (e.g. full NFT ownership).	Franceschet et al., (2021) Arnould & Thompson (2005) Finucane (2018) Steinwold 2019
2017	Curio Cards	Curio Cards was the first decentralised project to conceptualise displaying a permanent art gallery, cutting out the middleman and enabling artists to sell their work directly to customers. Curio Cards are the first recognised digital asset to sit on the Ethereum blockchain. Curio cards consist of 30 unique series of NFT cards from 7 different artists that helped to establish the royalty fees towards artists that NFTs became known for later in 2021.	Klllick (2021)
2017	CryptoPunks	Larva Labs experimented with generative art and realised that they could create unique characters on the Ethereum blockchain. These characters were limited to 10,000 where no two-character generations would be the same. All of the CryptoPunks are 24 x 24 pixel art images that were inspired by the Cyberpunk genre, being a possible link to the futuristic nature of the internet. Larva Labs made the decision to release only 10,000 generative artworks as free mints which were claimed quickly and can now be traded on the Larva Labs website or the OpenSea marketplace. What has been claimed to be an experiment in digital collectables (inspired by Pokémon and baseball cards) led to the major contribution of the ERC-721 smart contract standard for NFTs. The ERC-721 smart contract would go on to be an industry-wide used code in which many people would continue to innovate.	Steinwold (2019) Lee (2021) Schaar & Kampakis (2022) Ward & Clark (2002)
2017	Ethereum Name Service (ENS)	Ethereum Name Service (ENS) is one NFT that provides users with a domain name that links to their digital wallet. The digital wallet code (used to transfer funds to and from users) is a random set of numbers that reflects the user's digital address which is displayed as up to 40 alphanumeric characters and can be replaced by a name followed by dot eth (XXXXX.eth) signalling a similar epithet to domain names. This is a major contribution and expansion of bit domains on the Ethereum blockchain. In addition, this improves upon Web2 domain names for websites and as history has shown, major corporations' domain names are valuable and sometimes seek very high valuations.	Xia et al., (2021)
2017-2018	CryptoKitties	The birth of CryptoKitties in 2017 is said to be the catalyst that took NFTs into mainstream marketplaces. Users bought, bred, and traded cats for rarity, generating interest from venture capitalists and consumers from around the world. The rise and fall of CryptoKitties generated much interest from investors and entrepreneurs in the new mechanisms, ideas and integration of NFTs as digital assets consumers could buy. The open-source nature of CryptoKitties led to a series of	Steinwold (2019) Sako et al., (2021) Jiang & Liu (2021) White et al., (2022)

		permissionless third-party developers who built applications on top of the public CryptoKittie smart contracts, enabling derivatives and the eventual derivative market of NFTs.	
2019-2020	Decentralised Finance (DeFi)	One of the ground-breaking achievements to come out of the Ethereum Blockchain in 2018 was the emergence of Decentralised Finance (DeFi). DeFi is responsible for taking the use case of cryptocurrency further by transforming traditional financial products into a decentralised economy of trusted and transparent protocols. The protocols (staking, lending and leverage) developed around DeFi would contribute to NFT consumption. Specifically, staking NFTs would create an entire speculation market on potential passive income from holding NFTs.	Barbereau et al., (2022) Liu et al., (2021) Lahajnar and Rozanec (2020)
2021	NFT collections Beeple Bored Ape Yacht Club	A milestone in NFT art collections was the historic sale of Beeples $69M "the First 5000 Days" NFT which created mass hysteria and hype, ultimately generating a lot of interest in NFTs. The Bored Apes Yacht Club (BAYC) are a collection of 10,000 randomly generated pictures of apes with various traits, essentially inspired by the CryptoPunk NFT project. The artwork of the BAYC created a vibe-driven community that provided consumers who changed their profile picture to become a part of a consumer tribe, movement, and culture, comparable to the meme culture of Rare Pepes. The BAYC contributed to NFTs by providing a foundation for generative art models with airdrops, future perks for having a BAYC NFT and incentives to drive valuation based on hype and future benefits for excited NFT holders. This, combined with a growing network of celebrities and high-profile individuals, led to the contemporary power of NFT consumption.	Steiner (2022) Schaar and Kampakis, (2022) Steiner (2022) Sharma et al., (2022) Delaplaine (2022) Reyburn (2021)
2022-2024	Meme collections Games	The emergence of NFT Meme collections can be traced back to meme coin collections such as Doge coin (inspired by the dog meme) and garnering power of online communities that in turn introduces new consumers to Web3 platforms. During this period of time this led to an increase in online communities around NFT collections such as Milady Maker collection, Lil Pudgys, Sappy Seals and Pudgy Penguins which initially all started as meme projects and would go on to have dedicated community members, becoming a more serious collection. Hence, consumers have also bonded in communities with likeminded individuals sharing NFT brands through declines in NFT valuations. This period also featured the resurgence of games and NFTs, with big companies such as Square Enix creating an NFT trading card game called Symbiogenesis and Ubisoft creating a new tactical roleplaying game called Champions Tactics Grimoria Chronicles. This has led to NFTs transforming gaming marketplaces through consumers gaining ownership of in game assets that their characters acquire.	Krause (2025) Wątorek (2024) Kappos et al., (2023) Kitonyi (2024)
2025-Present	Trump Coin More memes Bear Market	The admission of President Donald Trump's pro-crypto stance led to the reclassification of meme coins and NFTs to be collectables rather than securities or commodities. At current, the market of cryptocurrency and NFTs resides in a bear market of extreme volatility.	Krause (2025) Wilson & Conlin (2025) Yona (2025)

1.2.2 Defining NFTs and blockchain technology

NFTs are a wholly owned digital asset that live on a decentralised blockchain, separating them from simply being a digital item and into being a true digital asset with real world value. Given the uniqueness of this product it is important to describe what allows an asset to be classified as an NFT.

Popescu (2021) defines NFTs as a digital certificate of authenticity that cannot be replicated, is stored on a blockchain or ledger and is used to represent ownership of unique items. NFTs can include asset ownership of items such as art, virtual land, real estate, music, domain names, licensing, ticketing, security protocols, vouchers and videos (Fai, 2021: Wang et al., 2021). This study presents the argument that prior to NFT technology, digital assets consisted of algorithms, website addresses and non-physical items where the term 'digital asset' had not yet been clearly defined (Toygar et al., 2013; Nakavachara et al., 2019; Rehman et al., 2021). The term 'digital asset' was strikingly absent from academic literature or industry before the power of NFT technology (Watkins, 2015; Hamari and Keronen, 2017; Goldfarb and Tucker, 2019). The recently coined term of 'NFT' refers to the authenticity, certifiable accountability and transferability of digital assets and possessions (Kaczynski and Kominers, 2021). Thus, NFTs are a unique form of digital asset as they redefine how consumers own digital products.

Chuen et al. (2017) discuss the shortcomings of the traditional financial transactional system. These deficiencies are brought to light by the power of blockchain technology and decentralisation which solve a problem of third-party interference occurring within traditional financial transactions. Blockchain technology has created a major boon towards the safe storage and ownership of digital assets. This allows for increased capacity, better security, and faster settlement where consumers are in charge of their own finances (Cheun et al., 2017). It is through blockchain technology that NFTs show unique characteristics. They can be traded, gifted or sold as wholly owned digital assets. Here, NFT technology grants owners the rights over their digital assets on the public ledger of the blockchain which can be tradable for and through digital currency (Faqir-Rhazoui et al., 2021). Toygar et al., (2013) argues that an advantage of intangible digital assets is that they do not wear and tear like tangible physical assets do and thus may be reused again and again. It must also be stated that physical assets such as land, gold, and houses provide a store of value and financial return (Schuetze, 1993) that prior to the introduction of NFTs did not exist for digital assets (Wang et al., 2021; Rehman et al., 2021).

Zamani and Babatsikos (2017) discuss that decentralised peer-to-peer payments is a way to combat and prevent a future financial catastrophe. Conversely, Farell (2015) and Taskinsoy, (2021) elaborate on the pitfalls that the technological advancement of cryptocurrency has seen since its formation in 2008. This has been exacerbated with the introduction of thousands of additional cryptocurrencies (Antipova, 2021) which have provided new payment gateways for digital and non-digital

consumption. The technology-led explosion of new financial products connected to cryptocurrency tracks similarly to the volatility and speculation in traditional stock markets (DeLong and Magin, 2006). While there is ongoing debate amongst academics around the merit and pitfalls of decentralised ownership, given the growth of this new industry, consumers seem to have a different relationship towards their usage of cryptocurrency versus Fiat. This is because cryptocurrency is not controlled by a third party but sustained by the consumer through the blockchain. This is an area of research that requires further exploration. Thus, this study explores the unique characteristics of NFT consumption within decentralised financial systems.

1.3 Research problem, questions and aims

Past research has established the importance of digital possessions, decentralisation and assets such as NFTs (Watkins, 2015; Wang et al., 2021; Sahu & Chandramohan, 2023). It can be argued that NFTs are an evolved form of assets within the digital realm where there is a sense of ownership and motivation towards their consumption (Fai, 2021). This research focuses on understanding the lived experiences of consumers who actively purchase NFTs. The participants selected in this study were active NFT traders in a global market. According to Wang et al., (2021) the value of NFT markets is not fully known. The growing interest in consumer diversification of their wealth via investments in digital assets such as NFT is rising, providing a unique area to investigate (Bsteh and Vermeylen, 2021). This emerging and growing asset class is particularly important in understanding as they are operating in a decentralised market which is not well understood.

To this end, understanding the unique characteristics of consumption and consumer behaviour in decentralised markets on purchasing NFTs is important as consumers now have direct control over their assets without third party integration (Rehman, 2021; Ante, 2021). In addition, decentralised markets offer authenticity for digital assets such as NFTs that are verified on the blockchain; this is simply not possible on centralised marketplaces (Sahu & Chandramohan, 2023). As NFTs are purchased on the blockchain, these digital assets are wholly owned allowing consumers more direct control, access, royalties, communities of likeminded peers and use cases (Popescu, 2021; Madine et al., 2023). Consequently, decentralised markets offer a new frontier of consumer behaviour by presenting the opportunity of consumer owned assets that are not affected by the constraints of centralised systems. One such example is when consumers are at the mercy of third parties much like Amazons Kindle service (Perzanowski & Schultz, 2016). Digital books purchased on platforms such as amazon kindle service operate in a centralised market which is controlled by middlemen (Hasan and Salah, 2018) which can be removed from consumers libraries, which means consumers do not truly own the books. NFTs, on the other hand, which operate in decentralised markets place the power of ownership back to consumers. Thus, given the unique characteristics of products, such as NFTs

operating within decentralised markets understanding consumer behaviour idiosyncrasies warrant further investigation.

Hence, this research investigates the motives of consumers who purchase NFTs. Specifically, the research observes consumers at each stage of the consumer journey of NFT consumption. Through the findings of this research, the aim is to understand how organisations and businesses can improve marketing and targeting strategies for NFT products towards consumers**.** This leads to the following research question**:**

> What are the motivations and ownership intentions of consumers in Non-Fungible Token (NFT) markets?

To answer this question, it is important to elaborate on NFT markets and the consumers who inhabit these decentralised marketplaces through answering the following specific areas of enquiry:

1. Investigate consumer motivation towards the purchase of NFTs throughout the consumer journey of NFT consumption.
2. Identify the unique features of NFTs which influence consumer purchases.
3. Research the value consumers place on NFTs.
4. Profile the psychographic characteristics of NFT consumers.

1.4 Theories relevant to the research

This study takes on several theoretical perspectives which include the theoretical lens of Consumer Culture Theory (CCT) and motivation theories.

To better understand NFT consumption, this study is situated in the research of Consumer Culture Theory (CCT) as elaborated on by Arnould and Thompson (2005). CCT is constructed around a set of theoretical ideology structures among consumers personal, collective identities, culture, underlying experience, dynamics of sociological categories, processes and culture dynamics (Cova et al., 2013; Arnould and Thompson, 2005; 2007). Here, CCT is a core concept in understanding new cultures, consumption patterns and cultural methods (Askegaard, 2015) making this theory very relevant to understanding the NFT marketplace and its consumers. NFTs bring forth a major shift to consumption practices in the context of marketing and consumer behaviour. Rokka (2021) provides commentary on the future direction of CCT, where he suggests that CCT should continue to be investigated in different contexts. Considering that NFTs operate in a decentralised market, using CCT should help to explain patterns of consumption within NFT communities. This will assist in understanding the consumer journey of NFT consumption which may change the way digital assets are understood and differentiated from other products. It is argued in this thesis that to better understand digital assets,

CCT needs to be reviewed to accommodate for decentralised consumption practices. This in turn will inform the way organisations and individuals can adopt or market digital assets such as NFTs.

Maslow's Hierarchy of Needs theory (Maslow, 1943) is used to explain consumer motivation of NFT consumption along with McClelland's Achievement Motivation Theory (McClelland et al., 1953; 1961). Maslow's Hierarchy of Needs theory highlights the order of needs from the most basic needs of survival through to more complex needs (Poston, 2009). The needs at the bottom of the hierarchy are associated with survival while the higher needs are associated with self-fulfilment (Maslow, 1943). These motivational needs-based theories will help to categorise characteristics of NFT consumer consumption ranging from basic needs, through to psychological needs and self-fulfilment needs (Maslow, 1943; Poston, 2009). Furthermore, McClelland's Achievement Motivation Theory attempts to predict and explain behaviour based on motivations that stem from achievement, affiliation or power (Lussier and Achua, 2007; McClelland, 1953; Moore et al., 2010). McClelland et al. (1958) defines achievement as:

> Success in competition with some standard of excellence. That is, the goal of some individual in the story is to be successful in terms of competition with some standard of excellence. The individual may fail to achieve this goal, but the concern over competition with a standard of excellence still enables one to identify the goal sought as an achievement goal. This, then, is our generic definition of achievement. (p. 181)

As follows, this theory will assist in understanding the rationale behind consumers that continue to purchase NFTs to gain better rarity and exclusivity from their digital assets.

1.5 Contribution to theory and practice

The existing literature on digital assets and NFT consumption is currently inadequate in understanding the journey NFT consumers experience in their motivation, preferences, ownership and value assessment. This research attempts to provide a more thorough understanding of NFT consumption to assist organisations and marketing teams in integrating digital assets into their operations.

1.5.1 Practical implications

From a practical perspective, the research outcomes ultimately benefit an organisation's understanding of decentralised digital asset consumption in many ways. Firstly, it allows a more efficient interaction between organisations and potential consumers. The research explores the relationship between the NFT and entire consumer consumption cycle from pre-purchase, acquisition to post-purchase evaluation. This will assist organisations in implementing decentralised digital assets within workplaces, understanding the different types of consumers and what consumers are seeking

from these digital assets. These digital assets were stated by Watkins (2015) to be difficult for organisations to implement. Herein, the practical implications of this study help to guide and assist organisations with understanding how NFTs can supplement user interaction and purchasing of products.

Secondly, this research will assist marketing teams in not only understanding consumer behaviour around NFTs but also being able to communicate with consumers in these markets more efficiently. While research on this area exists (Colicev, 2023; Fai, 2021l; Yilmaz et al., 2023) this research goes deeper into exploring the relationship between the consumer and the NFT market and the stimulant influences of NFT purchases.

Lastly, the research provides consumer profiles that identify the types of consumers that purchase NFTs which can further assist organisations in segmenting and targeting consumers. This thesis will contribute to the literature by profiling the NFT consumer through the modelling of consumer personas. Here, marketing teams and organisations can better target and understand the diverse types of NFT consumers who show a range of purchase motivations and intentions.

1.5.2 Research implications

Conceptually, this thesis bridges the research of Consumer Culture Theory (CCT) by Arnould and Thompson (2005) and the customer journey by Lemon and Verhoef (2016) and Jaakkola and Alexander (2024) to develop the framework of the NFT consumer journey. As a result, this research makes contributions to the literature on the consumer journey of NFT consumption from pre-purchase to post-purchase evaluation.

Firstly, this study provides a conceptual model of the consumer journey of NFT consumption for organisations and marketing teams to better target consumers for the consumption of their digital assets and NFT products. Research by Peres et al., (2023) documents a comprehensive editorial overview on the impact of blockchain on core marketing areas such as decentralisation, peer-to-peer, secure, immutable, tokenisation, public, pseudonymous and open-source logging. In addition to a branding perspective of brand elements, NFTs as value, co-branding and customer equity there remains a clear lack of understanding around the types of consumers who purchase NFTs and what motivates these purchase decisions. Furthermore, current complexities exist on what an NFT is versus what it is not and how communities (through the volatility of NFT prices) can be impacted by word of mouth among members of communities. This conceptual framework outlined in this study explores consumer motivations, ownership preferences and valuations of NFTs. This conceptual framework builds on the customer journey by Lemon and Verhoef (2016) for decentralised digital asset consumption. This study, however, details the journey that consumers go on with digital assets and expands upon the interactive relationship between consumer and NFT during each stage of

consumption. The conceptual model is split into three stages of (a) pre-purchase, (b) acquisition and possession and (c) post-purchase evaluation and behaviour.

Secondly, as digital assets are a relatively new area of digital consumption, this study contributes to understanding consumer motivations by discerning factors that lead consumers to purchase NFTs. This study expands further on the findings of Zhang (2023) in examining NFT price determinants of risk and reward, the experience economy and value of NFT utilities delivered to consumers in tangible and intangible ways. In understanding consumer motivations through the consumer journey this study contributes to understanding how NFTs fungibility plays an active part in consumers' willingness to pay for NFTs and the price sensitivity of risks that can hinder purchases. Decentralised markets and communities are relatively new (Hoffman, 2023; Marchetti, 2022) and thus absent from current CCT studies (Arnould and Thompson, 2005; Rokka, 2021). Thus, research is important to understand the consumer journey of NFTs in this new context of decentralised markets.

Lastly, the findings of this research also contribute towards identifying the unique features of NFTs which influence consumer purchases, and the value consumers place on their NFTs. Hofstetter et al., (2022) discuss the unique feature of NFTs in the form of digital ownership, uniqueness, value, authenticity, sharing, status, decentralised branding and distribution which are expanded on further in this study. Hence, this contribution observes the consumer benefits of NFTs vs traditional digital physical offerings. More recently, Hofstetter et al., (2024) raises the discussion of scarcity and social value as important impacts on NFT pricing. Consequently, this study expands the social value and scarcity behaviour patterns of the types of NFT consumers and the impact of virtual communities to better understand categories of NFT consumption. This contribution also assists in understanding what consumers desire out of their NFTs, which is lacking in current literature and media (Colicev, 2023; Yilmaz et al., 2023; Hofstetter et al., 2022). Understanding the value consumers place on NFTs assists in identifying how consumers dictate the worth of their NFT assets. This research establishes factors of value creation that expands on Hofstetter et al. (2022) and Hofstetter et al. (2024) around NFTs, which provides a deeper understanding of consumer product attachment and purchasing.

1.6 Research approach

CCT advocates for an examination designed to understand the thoughts and actions of individuals within their consumer journey. Qualitative approaches are best suited to CCT studies (Arnould and Thompson, 2018). Qualitative research involves the analysis of reviewing, synthesizing, and explaining data to decode and explain the phenomena being studied. This thesis takes a constructivist approach that assists in explaining events and innovations around the philosophical belief that people construct their own understanding of reality. As such, this study adopts a qualitative approach situated in phenomenology methodology, which helps to explore the lived experiences of individuals

(Creswell, 2013). Participants are able to share their experiences of NFT purchasing, their behaviour within these marketplaces and their consumption practices in this relatively new area of academic research. This research uses in-depth interviews in line with similar studies on consumer consumption and motivation (Arsel, 2017; Fossey et al., 2002). Through this analysis, different analytical procedures can be used to group content together in turn finding meaning through discovery-based approaches (Arsel, 2017). This approach to data analysis allows the researcher to find unique themes and meaning around the collected data.

The procedure involves two levels of analysis: first to review and identify themes that may be recurrent within the data from the participant. Second, it ensures the ability to develop a narrative around the meaningful relation to the consumer journey of NFT consumption. Discovery-focused techniques seek to find patterns and connections among the data. This analysis observes larger segments of text that contain meaning rather than individual words or phrases (Arsel (2017); Fossey et al., 2002). These segments are then sorted, coded, and organised to look for connections or even patterns.

1.7 Thesis structure

This thesis is structured into a total of six chapters which are detailed below.

Chapter 1: Introduces the research purpose and its structure. This chapter highlights the research background, the history and concept of NFTs, the research problem, questions and aims, and the approach to research as well as justification and contribution to theory and practice. This section ends in a detailed structure of the thesis.

Chapter 2: A review of relevant literature surrounding the current understanding of NFTs. In addition, this chapter reviews literature on CCT as well as understanding the full consumption cycle of NFTs from pre-purchase, purchase and post purchase stages.

Chapter 3: Discusses the research methodology and the rationale for its use within this research. This chapter states the philosophical approach of the research which is grounded in phenomenology. In addition, it explores the qualitative methodology used to answer the research question of this study. The structure of the methodology chapter starts with the research design, the use of in-depth interviews, data collecting and reporting.

Chapter 4: This chapter presents the findings of the research and explains the three stages of consumer consumption in relation to NFT markets. It specifically delves into the pre-purchase and acquisition stage, the possession and consumption stage and the post possession evaluation and behaviour stage. This chapter details the full consumption cycle of NFTs, and it concludes with profiling consumers based on their purchases.

Chapter 5: This chapter provides a detailed discussion of the analysis and informs the research question. The development of a conceptual model is presented and is drawn from the data insights within the research findings. New themes that emerged are analysed and the theoretical implications that are raised in this research are explored.

Chapter 6: Concludes the thesis by summarising the findings and application of the research. It highlights the limitations, practical implications, and potential directions for future research.

1.8 Chapter summary

This chapter introduced the research problem, question and aims. Firstly, background information related to NFTs is introduced. Secondly, the research objectives, gaps in the literature and the research aims are stated. Thirdly, the introduction of the key theory, CCT, that underpins this research, and the motivation theory of Maslow and McClelland has been discussed. This helps to explain the importance of the academic framework that supports this study around NFTs. Finally, the methodology employed and the originality of qualitative study that is situated in phenomenology is explained. The chapter concludes with an outline of the thesis structure. The next chapter focuses on discussing NFTs as digital assets.

Chapter 2: Non-Fungible Tokens (NFTs) as Digital Assets

2.1 Introduction

This chapter reviews the literature relevant on the consumer phenomenon of acquiring Non-Fungible Tokens (NFTs) as digital assets. Research on digital assets in the form of art, film, music, or images is relatively new in academia (Ante, 2022; Wang et al., 2021; White et al., 2022). To date, only a few articles have tried to articulate the consumer journey of NFT ownership (Colicev, 2023; Yilmaz et al., 2023), despite the dramatic rise of NFTs in the marketplace. The purpose of this chapter is to explore and understand NFTs as a product and to situate digital assets within academic literature to understand the characteristics, similarities and differences to other products. This chapter begins with a brief history of NFT technology and decentralised markets which details the evolution of this new class of digital asset. Thereafter, an overview of NFT product characteristics seeks to clarify the differences between the dual concepts of Fungible and Non-Fungible products and services. Furthermore, the chapter seeks to focus on the types of consumers that purchase NFTs by relating this back to existing consumption theories. Thus, this chapter delves into the theoretical lens of Arnould and Thompson's (2005) seminal work and others on Consumer Culture Theory (CCT) to expand upon, incorporate into, and understand the consumer consumption journey regarding NFT phenomenon. This chapter concludes with a detailed explanation of the consumer journey of NFT consumption across three stages from pre-purchase to acquisition and possession and finally post-purchase evaluation and behaviour.

2.2 The context of decentralised digital markets: A history of digital ownership

The NFT market exists today in part due to the rapid acceleration of secure decentralised blockchain systems. This is a paradigm shift from centralisation (relying on third-party control) to decentralised (no third-party control) ownership that allows consumers to be in complete control of their digital assets (Sahu & Chandramohan, 2023). The creation of NFTs can be traced back to the literature surrounding the changes within each industrial revolution's impact and disruption to technology (Atkeson & Kehoe, 2001; Clark, 2014; Mokyr & Strotz, 1998; Wang et al., 2021).

The Industrial Revolution tracks a radical modernisation of the global economy through five major shifts occurring from circa 1750 to the present day. These paradigm shifts have been enabled by the adoption of new technologies (Clark, 2014). This ultimately expanded the production of more goods made more efficiently. The first three industrial revolutions took place from 1770 to 2000 and saw the introduction of economic systems which kickstarted rapid technological change (Clark, 2014). This

consequently required more hiring of skilled workers and several groundbreaking inventions (materials, energy, chemicals, and medicine) (Atkeson & Kehoe, 2001; Mokyr & Strotz, 1998). The Third Industrial Revolution gave rise to impressive electronic, technical, cognitive and social skills which dramatically improved labour (Liu & Grusky, 2013). However, it is the digital transformation of the Fourth Industrial Revolution (2000-2020) as stated by Schwab (2017), that has reshaped and contextualised how consumers possess and consume objects. The disruptions of new digital products provide smart and efficient ways to function at home (smartphones and TVs, streaming services, voice operators and gaming interconnectivity) as well as within work organisations (smart technology, computer applications, electronic payment systems) (Umar et al., 2021). Fast forward to the present day, the emergence of the Fifth Industrial Revolution is in full operation. This present Industrial Revolution observes a world that is digitally connected with enhanced Artificial Intelligence (AI) and robots that automate services (Demir et al., 2019).

Reverting back to the Fourth Industrial Revolution, the rise of Web1 and the internet was born. Web1 is a name given to the earliest version of the internet. It featured basic websites where users accessed a browser in what was commonly known as read-only web (Wang et al., 2022). This quickly evolved into what is now known as Web2, a name assigned to the current version of the internet that extends on the processes of Web1. This digital landscape is dominated by centralised institutions offering services in exchange for personal data. This has ultimately incentivised big companies to seek mass monopoly and control user data (Wang et al., 2022). Hasan and Salah (2018) describe a centralised environment to lack transparency to its users. In addition, they also argue that the authority of transactions is not distributed equally, in turn creating unreliable and untrustworthy management. The shift to Web3 as explained by Murray (2023) is built on the next generation of technology known as the blockchain, a decentralised internet platform which gives consumers greater control over their personal data and digital decisions (Golosova & Romanovs, 2018). Without the development of the blockchain as the foundation of securitisation of decentralised ownership and product authenticity, the NFT market would be stillborn. It is only through secure payment gateways to facilitate exchange with Non-Fiat currencies known colloquially as cryptocurrencies on the blockchain that this market ceases from being an interesting concept to becoming a viable consumer market. To understand this further, it is important to discuss the progression of digital items into digital assets and the role that tokenisation plays in their ownership.

2.3 Digital items, assets and tokenisation

To understand the NFT market, what it is and what it is not, it is important to introduce some comparable terms: digital items, digital assets and tokenisation. Lehdonvirta and Castronova (2014) define digital items as products created and bound to a digital environment that can be utilised within a set of rules. In support of the aforementioned Web3, digital items are viewed as the new gold rush

with a market value of USD $52 billion (Vanzo, 2017). Digital items is similar to the term ‘digital consumption objects’ (DCOs), which was posited by Watkins (2015) and expands on previous research by Lehdonvirta and Castronova (2014).

DCOs can best be described as objects that possess no physical substance but exist within digital environments. They can be accessed through hardware (computers) and software-specific marketplaces (e.g. Apple and Microsoft online stores and other applications). Watkins (2015) categorises DCOs as a broad range of digital objects that are accumulated from data with and without being purchased. These DCOs can come in the form of books, films, photographs, music recordings, social networking text messages, blogs and avatars (Watkins, 2015). As highlighted by Belk (1988; 2010) consumers interact with possessions in ways where they develop feelings, therefore, a DCO allows the consumer a feeling of ownership, although it is not real ownership. Conversely, possession of an NFT is proof of true digital ownership, verifiability and product authenticity (Tapscott, 2021). Furthermore, a DCO is locked to a specific platform, where it provides no financial value and allows the user access to merely a copy of the digital item (Watkins, 2015). For example, a consumer that purchases a digital book on Amazon Prime Kindle service can have their book confiscated, refunded and removed from their digital library. Here, Amazon has complete power over the consumers digital copy of the book (Perzanowski & Schultz, 2016). NFT technology on the other hand enables tradable digital goods that consumers can wholly own. Ultimately, this allows NFTs to turn a digital item into a digital asset which becomes a real store of financial value. DCO is a term that is used to summarise a digital item before the introduction of NFTs. Watkins (2015) acknowledges that digital items are subject to a series of limitations when integrating ownership rights to the consumer. Herein lies the difference between digital items and digital assets. Where a DCO is simply a digital item, an NFT is a decentralised digital asset.

Hasan and Salah (2018) investigate the value of intangible digital items through centralised digital marketplaces that have emerged on platforms such as eBay and Amazon. Arguably, the problem with these marketplaces is that they require third-party middlemen to operate and provide a copy of the digital item to the purchaser rather than whole digital ownership of the item. A view discussed by Ante (2021) argues that blockchain decentralisation provides a solution to the ownership issue of digital items which centralised platforms lack. This solution is demonstrated through the purchasing of NFTs on the blockchain which signifies true ownership to all consumers (Ante, 2021). Not only does this provide digital ownership and product authenticity to consumers, but also gives organisations who implement this new technology the chance to exchange real digital ownership of their products to consumers. In essence, this would prevent a company such as Amazon from removing digital products from digital libraries if they were on the blockchain. Thus, Ante (2021) provides a powerful statement that this is the first time in history that the ownership of a digital asset can be stored online, and is traceable, tradable, grants the rights to the consumer and can be tokenised.

Sazandrishvili (2020) defines the concept of tokenisation as the process of ensuring sensitive data is kept safe by creating an algorithmically generated code called a token. NFT technology brings about change to digital ownership and trading systems. The technology opens a new market for consumption allowing for instantaneous selling and swapping via tokenisation. An important factor of tokenisation is clarifying what value a token holds. In addition, tokenisation can also work for physical assets where the value of the physical asset is subdivided into units and these units are represented by a digital token (Liu, 2016). For instance, Liu (2016) explains that a USD $200,000 apartment turns into 200,000 tokens where just one token is worth 0.0005% of the apartment. When the consumer holds 50% ownership of the tokens, the value of their share of the apartment is worth USD $100,000; At 100% ownership of the tokens, the total value the consumer holds is USD $200,000 USD (Liu, 2016). It is evident through these observations that the consumer journey of product acquisition and consumption is drastically changing due to the introduction of tokenisation.

Conversely, research by Herian et al. (2021) reflects on tangible and non-digitised assets through the ownership of real-life physical paintings. Obviously, these paintings would not be physically split evenly between multiple people in terms of ownership. For instance, if there was an arrangement, the painting could only be held by one owner at a time; it simply cannot be cut up and given to several people (Herian et al., 2021). NFTs also have the power to tokenise real world assets such as deeds and homes. Quiroz-Gutierrez (2022) provides the example of how a Florida five-bedroom house was sold and paid for with cryptocurrency in exchange for the house deeds written into the smart contract of an NFT.

In comparison, when creators generate NFTs, they establish a fixed number of supply and total rarity (van Slooten, 2022). Fixed supply indicates that there are a limited number of available NFTs to purchase. It is important to note however that fixed supply does not mean that each token is identical; it is possible for NFTs to contain variations of traits within the fixed supply. These unique tokens within a fixed supply expand into the component of total rarity. Here, NFT assets can be further distributed among multiple people by fractionalisation (Vallejo Seade, 2022) which essentially breaks down ownership into smaller pieces. An example would be if there are five NFTs generated of the same artwork in which each identical NFT represents one of five tokens. Each individual that owns one of the NFTs owns one fifth of the total value of the asset. The five NFTs collectively represent 100% ownership. One particular NFT in existence is an expensive rare Alien CryptoPunk which has seen valuations of over USD $1 million (Plachimowicz & Wójcik, 2022). This rare asset is considered one token on the blockchain. Through the use of smart contracts however, it is also possible to fractionise this token by creating sub tokens which can be owned by several people. This allows multiple consumers to own the asset and have a share in an exclusive NFT (Vallejo Seade, 2022).

An interesting comparison between shares and NFTs is how similarly the markets operate. Both are comprised of buyers and sellers that trade around intangible assets that are purchased and sold on primary and secondary exchanges. Nieh (2022) describes the shares industry as a traditional marketplace that is also known as a capital market. Consumers that own a company stock have a stake within that company, commonly referred to as a share (Al Qaisi et al., 2016). Wilson (1979) discusses how shares can be used within an auction where each bidder submits a price for fractional shares of an item. NFTs also use marketplaces (White et al., 2022), and owners of fractional tokens also have a stake within the digital asset (Kaisto et al., 2024). This is also true for NFT markets where buyers can bid or auction off digital assets (Nadini et al., 2021). It can also be argued that there are several differences between shares and NFTs. A major difference between what Nieh (2022) calls a traditional marketplace (shares) and a non-traditional marketplace of NFTs is that capital markets in a traditional marketplace trade financial securities and shares in a regulated system. This is governed in the United States of America (USA) by the Securities Exchange Commission (SEC) and in Australia by the Australian Securities and Investments Commission (ASIC) (Choi & Pritchard, 2003; Gilligan, 1999). NFTs on the other hand, can be purchased and sold in an unrestrictive market that is decentralised and free from governance (Sahu & Chandramohan, 2023). Ultimately, a major difference between shares and NFTs is that NFTs are on decentralised platforms while shares are on centralised platforms within the system of a regulated financial market.

Collectively, these researchers have explored existing methods of consumption around digital items, digital assets, tokenisation and links to the share market, all of which upon reflection informs that NFTs are intensely connected to the future of digital consumption.

2.4 Product characteristics of Non-Fungible Tokens (NFTs)

NFTs are a new product class that represents ownership and authenticity of an item such as artwork, virtual goods, music and videos through blockchain technology (Wang et al., 2021). The phenomenon of NFTs signifies a paradigm shift in digital ownership transforming how digital assets can be utilised within society. NFTs feature several characteristics which differ from traditional products and services (Ante, 2022). To better understand the characteristics of NFTs, it is important to define Fungible and Non-Fungible products. A product that is ‘Fungible’ is one that is interchangeable and holds the same value regardless of which unit is being exchanged (Wang et al., 2021). For example, in traditional Fiat currencies one dollar AUD is inherently equivalent to one dollar AUD; one dollar is worth the same as any other one dollar no matter who owned it or where it came from before. This also translates to Web3 markets as Wang et al. (2021) states, the cryptocurrency of Bitcoins are all essentially identical to each other as they are fungible tokens much like traditional Fiat currency, following the same principle, that each one Bitcoin is the same as exchanging another one bitcoin

regardless of where it has come from before, there is simply nothing that makes a Bitcoin unique from each other.

Non-Fungible products, on the other hand, are unique and not interchangeable with an identical item of the same value as they each have unique characteristics (Popescu, 2021). For instance, an NFT is unique because it is distinguishable from other NFTs representing unique ownership of the digital asset (Wang et al., 2021). For example, an NFT cannot be exchanged for another NFT as they each have different properties and are not identical like Fiat or Bitcoins. Non-fungibility signifies an inherent uniqueness and irreplaceability of an asset as ownership is permanently recorded and resistant to forgery or duplication. As each NFTs is denoted by a number that has been recorded to the blockchain, no two identical digital assets can exist. The only way for more than one person to own a non-fungible token would be to tokenize the asset so it can have more than one owner (Liu, 2016). Hence, this makes NFTs an innovative digital technology as they have a unique identification code that separates each asset from each other, which Fungible products do not.

To understand the consumer journey of NFT consumption, it is important to discuss the several unique qualities of NFTs and how they differ from other products, specifically services due to their similar characteristics of intangibility. Kotler and Conner (1977) define marketing services as organised activities and programs designed to retain and attract new clients by serving, sensing and satisfying consumer needs through appropriate solutions on a paid basis. Through this understanding of services as Popescu (2021) argues, it is apparent that NFTs contain characteristics that include authenticity (the product is what it claims to be), verifiability (legitimacy of asset), accessibility (ease of reach) and tradability (ability to buy, sell or trade) that can be incorporated into a service or product. An example of these characteristics can be how they enable the royalty fee from an NFT which is paid back to the creator after any future sale of the NFT (Madine et al., 2023). This happens through the connected smart contract of the NFT, which has no third-party interference (Weyl et al., 2022). This is rather different than traditional products where consumers are generally at the mercy of organisations. For example, to exchange shares you must go through a financial institution or broker. In relation to popular video games, such as Hearthstone, all cards purchased by consumers are locked to the organisation's platform without any ability to trade or sell their cards without buying direct from the video game platform (Kononov, 2015).

NFTs are hosted on platforms within the digital world, but they can provide both digital and physical assets depending on the specific NFT that is purchased (Rehman et al., 2021). Through utilising smart contracts, NFTs may enable the purchase of a physical twin product that can be used in the real world, sharing its digital properties (Chohan & Paschen, 2021). What this means is that consumers that purchase a digital NFT may also receive physical products of what they purchase digitally which is

different from traditional products where through NFTs the consumer can own a digital and physical asset.

NFTs can be non-transferable which is another unique product characteristic. For example, 'Soulbound' tokens as discussed by Weyl et al. (2022) enables a proven example. It is through this understanding of services that NFTs can be seen to redefine traditional asset ownership and product authenticity in digital worlds. These types of NFTs provide a way to prevent consumers from selling assets and driving up speculation as they are bound to digital wallets. NFTs that are soulbound assist in providing consumers with documents that cannot be traded like passports or medical data. This helps to prevent fraud that takes place in traditional markets as the soul bound NFTs use the blockchain for authentication.

Furthermore, Spring and Araujo (2009) show a potential pathway for NFTs to be viewed as a service. As presented in Figure 1, Spring and Araujo's (2009) Service Triangle helps to discuss the differences and similarities between NFTs and services. The authors emphasise the change of reality for consumer purchasing through the Service Triangle which consists of a service provider (A), consumer (B) and a reality (C). Furthermore, Spring and Araujo (2009) show a potential pathway for NFTs to be viewed as a service. As presented in Figure 1, Spring and Araujo's (2009) Service Triangle helps to discuss the differences and similarities between NFTs and services. The authors emphasise the change of reality for consumer purchasing through the Service Triangle which consists of a service provider (A), consumer (B) and a reality (C). In this context, the service provider is the platform that provides operations for consumers to interact with such as NFT marketplaces. An illustrative example of an NFT marketplace is Opensea and a blockchain network would be Ethereum that acts as the Service Provider of NFT consumerism. The Consumer consists of individuals or organisations that acquire NFTs to own and use. These Consumers acquire NFTs such as digital art, exclusive content, videos, collectables or community access (Popescu, 2021). The reality consists of the infrastructure of blockchain technology and smart contracts that enables NFT services to function.

By applying the Service Triangle framework, NFTs can be understood as a service-driven asset or smart collectable (Fai, 2021) which executes terms of a service or functions as a product. This is important as NFTs as a service take on properties of both services and products, that are distinct, verifiable and Non-fungible. In conjunction, Table 1 demonstrates the difference of what is Fungible and Non-Fungible through the product characteristics of tangibility, intangibility, digital Fungibility, and Non-Fungibility to better understand NFTs, and how to market them. This is important as NFTs as a service take on properties of both services and products, that are distinct, verifiable and Non-Fungible. In conjunction, Table 1 demonstrates the difference of what is Fungible and Non-Fungible through the product characteristics of tangibility, intangibility, digital Fungibility, and Non-Fungibility to better understand NFTs and how to market them.

Figure 1

Service Triangle by Spring and Araujo (2009)

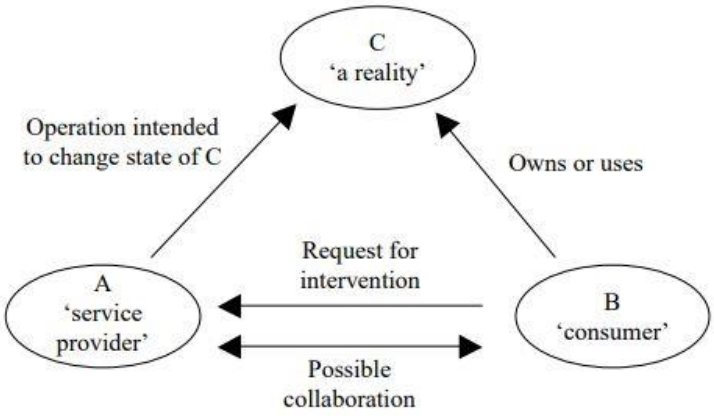

Table 2

Characteristics of Fungible and Non-Fungible products

Product characteristics	**Fungible product**		**Non-Fungible Product**		
	Tangible e.g. Trading cards	**Intangible digital e.g. Gaming skin**	**Tangible e.g. Cars**	**Intangible e.g. Concert experience**	**Intangible digital e.g. NFTs**
Tangibility	Tangible product in that it can be physically seen and touched.	Intangible product as it cannot be carried like physical products.	Tangible product in that it can be physically seen and touched.	Intangible product as the concert experience cannot be taken away.	Intangible digital product (can have a tangible twin)
Ability to visualise and understand	Can see trading card and understand how to use it to play, trade or keep.	Can not touch these products but they can be viewed in online game platforms.	Physically can touch a car. Can interact with this product and use it for transport.	The experience can be unique from person to person, yet they will experience the same performance.	The NFT cannot be touched but can be viewed in a digital wallet or on the blockchain. The image can be used with full ownership rights by the consumer.
Variability	Exhibits some variability as trading cards can have unique characteristics and attributes across transactions and	Exhibits high variability as each gaming skin can have rarity attached to it worth. Unique and special skins may be locked behind payments and skill or even require a substantial	High variability as cars can come in many different shapes, sizes and colours. Even within same categories there are differences in models. Characteristics of cars can	Services can exhibit more specific qualities that have been tailored to meet the customers' demands making variability have more	High variability of NFT represents the unique digital asset with distinct characteristics.

	users. Some trading cards can be very rare while others can be common.	amount of playtime to unlock.	be inconsistent as there are many different options for different preferences.	uniqueness and harder to be interchangeable.	
Risk	Low risks, possibility of scams and scalpers.	The gaming skins are locked to the game platform. In online game services if that platform ceases to exist then the assets are lost.	Can be damaged, requires maintenance. Can also be a dangerous liability, road hazard. Various risks (e.g. financial, social) particularly for high involvement products.	Higher risk compared with tangible products as it lacks consistency and is reliant on situational conditions.	Value of NFTs is strongly dictated by the volatile marketplace corresponding to cryptocurrency. Lots of scams and if NFT is lost to scam, impossible to get it back.
Inventoried	This product can be kept in a pocket or in storage.	The gaming skin lives in the game platform. It can be accessible when the user logs into the game.	This product is inventoried at a physical location of the consumer, generally a garage or parking spot.	The experience cannot be inventoried.	This digital product is inventoried in the digital wallet of the purchaser.
Customers role in the purchase experience	The purchase can be traded to anyone or kept as a collectable or in storage.	The purchase of game skins can function through in game purchases via an online store within the game. Here it is possible for consumers to buy skins for Fiat money that have unique attributes and traits that may not be unlockable in game.	The ownership of the car is placed in the name of the purchaser making it Non-Fungible unless a trade occurs between two parties.	The purchaser experiences the service (concert) until it finishes.	A minted NFT is created by the consumer as proof of purchase in their digital wallet. Alternatively, NFTs can be purchased on secondary markets (these NFTs have been minted) and thus potential consumers interact with sellers.

Ownership	No proof of ownership without a certificate of authenticity as the trading card can be given to anyone. Ownership is for as long as it remains with the purchaser.	The ownership of gaming skins is centralised and in online games are only able to access their purchased gaming skin for as long as the game is active.	The car is registered in the purchaser's name or registered entity. Ownership of the car can be sold or traded with a legal contract of sale and registration transfer, requiring official paperwork through the owner.	Cannot own the experience. There is no physical ownership here.	No physical ownership as NFTs exist on the blockchain within a digital wallet.
Sellers (organisations) role in the experience	Grant the trading cards in exchange for Fiat currency. Once provided with the required currency the trading cards are issued from the seller to the purchaser.	The gaming platform brand generally sells through the in-game shop which sells direct to consumers using the game. It is also possible for lottery style purchases to be set up by sellers that act similar to the properties of collectable card booster packs.	The seller can either be a car dealership or the car can be sold through private sale. The seller in car dealership will work with the purchaser to come to an agreement based on a number of car options.	The experience of the concert is sold first as a physical or digital ticket. After this, the organisation is responsible for making a memorable experience.	The seller creates the minting process on a website for potential consumers to purchase with the appropriate cryptocurrency (such as Ethereum). The seller is responsible for customising this minting experience. Alternatively, NFTs can be listed on OpenSea after minting.
Perishability	A fungible tangible product can degrade, deteriorate and even be destroyed over time.	While the digital skin is not perishable, the product in online games can perish with the demise of the gaming platform and server.	Cars depreciate and deteriorate over time.	The experience of going to a concert lasts as long as the concert is in production. The memories however remain with the consumer.	Non-perishable: NFTs are digital assets that live on a blockchain resistant to physical deterioration or degradation. NFTs are essentially indestructible as the metadata can't be replaced, removed or destroyed (Leech, 2021).

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Table 2 exhibits the various characteristics of products and services in digital and non-digital environments to gain further understanding of the nature of NFTs. When comparing an NFT to tangible products (e.g. Non-Fungible) there are some key differences. Tangible products exist within the physical world although they can also exist within digital worlds, though in these digital landscapes they are locked to platforms which sometimes provide limited tradability (Konstantas & Morin, 2000). Relatively, tangible products can have traits of high rarity which is similar to how NFTs have rarity (Kanellopoulos et al., 2022). However, it is clear that there is no way to record who owns tangible products unless a physical or online ledger is kept. Another potential downside to consider is that it would also be much harder and very time consuming to track each of the owners' tangible products as they would need to be manually recorded and actively maintained outside of the purchasing process. For NFTs, this is a process that cannot be avoided as each owner of the NFT is listed on the blockchain for anyone to search for at any time (Wang et al., 2021). There also exists a product authenticity problem for a tangible product such as a trading card to be verified as it needs to be assessed by a professional grader that provides not only its authenticity but a score rating on its valuation (Kanellopoulos et al., 2022). In the case of NFTs, this becomes far more appealing for the consumer as the product is automatically verified on the blockchain, therefore revolutionising accessibility and verifiability for this digital asset type.

Intangible digital products (e.g. gaming skins) on the other hand are different from NFTs as they are mostly locked to a centralised platform ecosystem (Zachow, 2023). Furthermore, intangible digital products such as gaming skins have several properties that are strikingly different to NFTs (van Roessel & Švelch, 2021). First, they are a part of a microtransaction system which enables purchases within games for real money, in turn giving consumers the opportunity to change and alter in-game avatars without impacting the mechanics of the game (Reza et al., 2022). Second, these in game purchases are part of monetisation models which exist within 'free to play' games (F2P), 'in app purchases' (IAP) and 'downloadable content' (DLC) (Fristedt & Lo, 2019). These gaming skins are essentially confined to a single game (Packin, 2024) where tradability is usually not possible. It can be argued that the Fungibility of this intangible digital product has limitations because of being locked to a centralised gaming platform, whereas the functionality of NFTs extends the properties of the intangible digital product (in this case a gaming skin) due to the decentralised nature of the blockchain. It is evident that the possibility of digital products in the future will exhibit an intersection between intangible digital products like gaming skins and NFTs so users can trade and move their products between games.

NFTs are rather different from their physical counterparts (see Table 1) as they are matterless digital products that follow a unique consumption journey from acquisition to post purchase evaluation (Lemon & Verhoef, 2016); Yilmaz et al.,). Fai (2021) states this difference is due to the fact that NFTs are stored on the blockchain, preserved from wear and tear within a digital wallet and can be

used as a smart collectable, password, or virtual key within digital communities. The importance of digital wallets for the consumers purchasing power of NFTs will be discussed in the purchase stage section of this thesis. The differences highlighted between NFTs and other products require more knowledge of the consumer journey, as the traditional approach advocated by Lemon and Verhoef, (2016) and Jaakkola and Alexander (2024) may not be extensive enough for these non-perishable digital assets. To delve into a solid understanding of the NFT consumer journey, this study uses Consumer Culture Theory (CCT) as its foundation by observing the four key theoretical structures as outlined by Arnould and Thompson (2005).

2.5 Consumer Culture Theory (CCT) and its relation to NFT consumption

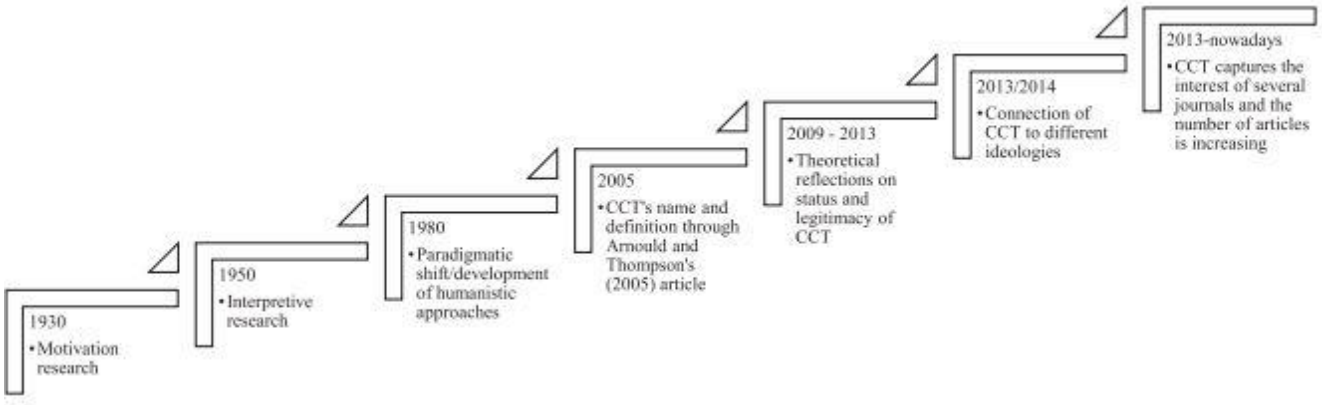
Consumer Culture Theory (CCT), a term first coined by Arnould and Thompson (2005) as a field of research attempted to describe consumer phenomenon by investigating the sociocultural, experimental, and symbolic aspects of consumption from a particular perspective (Garanti & Berberoglu 2018). Despite continuous debate on the exact roots of CCT (Hungara & Nobre, 2021), within this thesis it is critical to understand the origins of this theory and how it relates to the consumers journey of NFT consumption. In gaining an understanding of this theory, it allows for further theoretical enhancement, application, and to advance NFT consumption research in the integrated business world. Hungara and Nobre (2021) carried out a comprehensive systematic literature review of the historical roots of consumer culture, as presented in Figure 2. It begins in early motivational theory and is further informed through a range of ideologies and research perspectives.

As presented in Figure 2, a substantial body of research exists on consumer culture and the consumption journey that has historical origins tracing back over a century. Tracing CCT origins back from 1930 to 1950, Tadajewski (2006) proposes that ‘motivation’ research is the root of CCT research. Here, Katz (1960) highlights motivations behind consumer attitudes and observed consumer behaviour. ‘Interpretive’ research emerged from 1950 to 1980 where research by Belk (1975) emphasised the importance of situational variables in understanding consumer behaviour acts. Here, McCracken (1986) introduces the term “culture” into consumer research, examining cultural meanings that lie within the fabrication of consumer goods and practices. Similarly, Belk (1988), introduces the concept of the “extended” self which highlights the significance of possessions in influencing consumer identities. More recently, leading into the 2000s, Jain et al. (2021) argues that digital selves can create many masks that lead to different consumer purchasing situations. Through the “extended self” that the consumer creates through their different digital selves, physical or real-world situations and relationships can be wholly ignored within the digital world (Jain et al., 2021). Hence, The Extended Self theory is relevant to NFT consumption as these markets are filled with consumers who take on digital masks to purchase digital assets as an extension of their digital profile, external to the physical world.

It was not until the research of Arnould and Thompson (2005) that CCT emerged as a distinct theoretical perspective. As an extension to previous literature, CCT seeks to understand consumer behaviour within broader cultural and social contexts (Arnould & Thompson, 2005), including the role of cultural meanings in shaping consumer identity and experiences. In continuing to expand beyond its introduction in 2005, CCT research has evolved as scholars explore new themes. For instance, Kozinets (2016) explores netnography, which is the study of online consumer behaviour in digital cultures. As NFTs exist digitally, it can be argued that the theory of netnography can assist in understanding NFT consumption within digital communities. In addition, the findings of Cross et al., (2018) highlight how CCT has evolved to explore the repercussions of race, gender, class and sexuality in shaping consumer identities and experiences. In 2018 Arnould and Thompson edited a book on CCT which is now in its second edition 2023 edition which refers to emerging markets. Rokka (2021) elaborates on how the theory has further evolved and observes the future of what CCT could become through four theoretical structures; these structures are called "assembling of experiences", "shaping of brands symbolic universes", "institutional and creative market processes" and "networked and algorithmic mediation of ideologies and desires". These theoretical structures assist in architecting the conceptual model of this thesis which will be discussed in Chapter 5. The recent research of Rokka (2021) also provides an invaluable insight into how CCT can be further expanded upon to examine future marketing practices. It can be seen through the progression of literature from these previous pioneering researchers just how CCT has continued to expand and solidify this influential framework to assess the various rationales behind NFT consumption.

Figure 2

Historical overview of CCT (Hungara & Nobre, 2021)



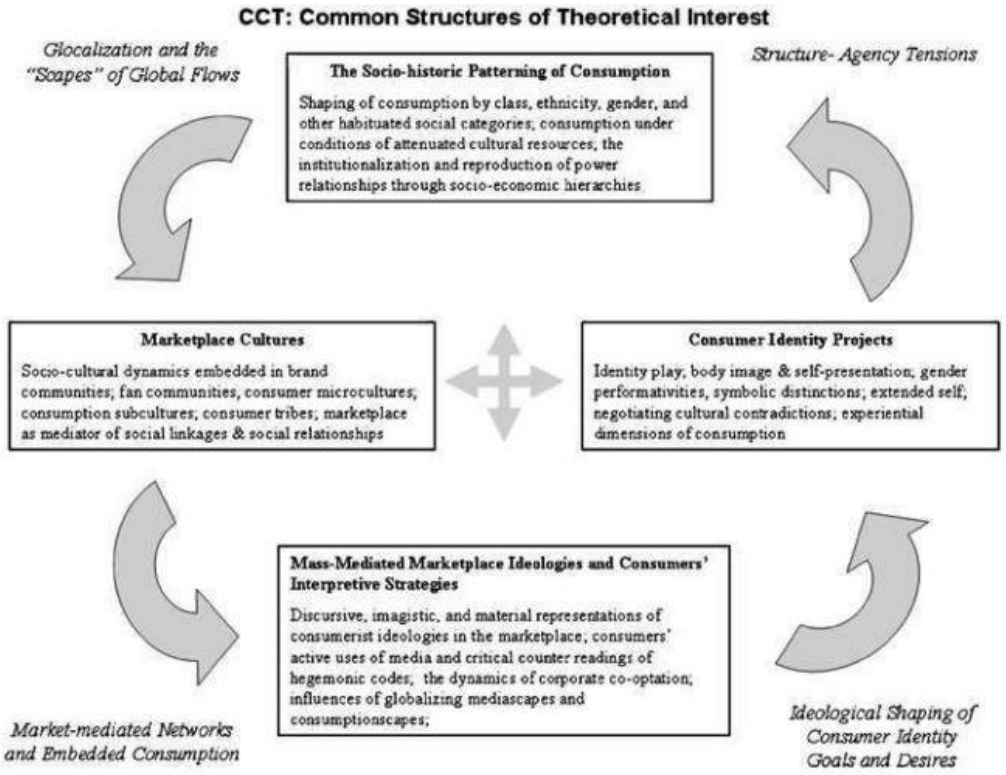
CCT attempts to explain regular and irregular consumption patterns within consumer groups. The seminal article by Arnould and Thompson (2005) on CCT highlights certain knowledge of consumer behaviour by illuminating sociocultural processes and structures. It examines these structures by observing the social arrangement between how people experience culture in connection with the

social resources that they have available within their culture. CCT research focuses on the cultural meanings, socio-historical influences, and social dynamics that shape consumer experiences and identities in the noise-filled environment of everyday life (Arnould & Thompson, 2005). Arnould and Thompson (2005; 2018) argue that consumption phenomena can be understood by observing consumers. These observations, they argue, include class, community, ethnicity, gender, and the full consumption cycle of the consumer including acquisition, possession, consumption, and disposal.

Arnould and Thompson (2005; 2007) present their theoretical structures of interest in four key areas (See Figure 3). These four domains include consumer identity projects, marketplace cultures, the socio-historical patterning of consumption and mass-mediated marketplace ideologies and consumers' interpretive strategies. Each of these domains will be explained in the following sections with reference to NFTs.

Figure 3

CCT: Common structures of theoretical interest (Arnould & Thompson, 2007)



2.5.1 The socio-historical patterning of consumption

The first theoretical domain of CCT is the socio-historical patterning of consumption which highlights how historical and cultural factors influence consumer behaviour. The socio-historical patterning of consumption includes the shaping of consumption by class, ethnicity, gender and other habituated social categories (Belk 2001; Holt, 1995). It also includes consumption under conditions of attenuated

culture resources (McCracken, 1986), and power relationships through socio-economic hierarchies (Clark & Blake, 1994). McCracken's (1986) theory of cultural consumption aligns with CCT as it highlights how cultural meanings evolve over time and influence consumer practices in digital environments. In addition, recent CCT studies by Arnould et al., (2023) reinstates this by discussing habituated preferences of patterns of behaviour, material objects and aesthetic tastes which can change dramatically for new consumer lifestyles. This is particularly relevant as NFT practices become normalised changing consumers experiences and lifestyle patterns. Extending from this, the research of Yilmaz et al. (2023) discusses the patterning of NFT consumption to revolve around liking, purchasing, holding or selling of NFTs.It is through this distinctive patterning within NFT societies that a multi-cultural global community is created (Gupta et al., 2023). Within this community, consumers of different backgrounds are always active in a 24/7 marketplace of constant sales and news (Wang et al., 2021). As more cultures from around the world take part in NFT purchasing, the consumption practices take on new meanings and behaviour as society enters a new historical era. It is through these cultural meanings and behaviours that this theoretical domain is particularly relevant in the context of investigating NFT consumption. Technological advancements in blockchain technology and social media platforms have transformed the ways individuals consume and interact with these digital assets.

Arnould and Thompson (2005;2018) argue that consumer consumption and behaviour is shaped by the surrounding stimuli of social class hierarchies, ethnicity, gender and community. Arnould et al., (2023) discuss the growth of mixed-race consumers involving two or more racial groups which are growing in our society and consistent with NFT communities having a global network of consumers in mixed cultures. All of these stimuli can be said to assist in cultivating the self-concept of individual consumers throughout their consumption journey. For instance, The Extended Self theory by Belk (2013) can be used to examine how digital technologies and consumption practices shape individual self-concepts. As previously discussed, with NFTs this shaping of behaviour takes place exclusively online in the digital world. Online platforms such as Discord allow consumers to remain anonymous (Iqbal et al., 2021) which may alter the patterning of digital consumption practices. Thus, this anonymity may shift the patterns of consumption from a space of recognisable human interaction into one with more anonymity.

The evolution of authentic digital ownership provides consumers with a personal connection to their NFT brand community. The influences of the NFT brand community (van Slooten, 2022) and network (Brouard, 2024) also adds to The Extended Self theory (Belk, 2013) in that the individuals self-concept is shaped through their personal connection to owning part of the NFT brand with access to a network. Equally, the research of Quartiroli (2011) informs that there is a digitally divided self also denoted as a "digital persona" (de Kerckhove & Almeida, 2013) that expands upon the concept of extended self as it can be related to NFT consumption. Digital assets such as NFTs can become part of

individuals extended selves in the form of digital artifacts, social media and online identities which can shape consumption behaviours in digital culture (Belk, 2013). As a result, the consumption of consumers in NFT markets shifts and changes from the wants and needs of their real-world counterpart as purchases in NFT markets cater to their digital self. The theory of The Extended Self is strongly supportive in investigating the changing patterns within NFT consumption, a consumption practice which creates a differentiation of digital identity (Pfeiffer et al., 2022) as a separate self-concept to physical identity.

The social historical patterning of consumption links to marketplace culture by globalisation and the scapes of global flows. This relates to the globalisation of structures within the global economy and diffusion of marketing actions and entertainment media (Arnould & Thompson, 2005;2018). Within the context of the blockchain and taking place in a shared global market, NFT consumption occurs in many cultures as the market is decentralised granting access to anyone with an internet connection around the world (Perwej et al., 2019).

2.5.2 Marketplace culture

The second theoretical domain is marketplace culture which addresses the distinctive features of consumer characteristics and motivation (Arnould & Thompson, 2005; 2007). These authors argue that consumers are seen as culture producers that can reconfigure cultural blueprints within marketplace cultures. These marketplace cultures include brand and fan communities (Schouten & Alexander, 2005), consumer microcultures (Belk, 2013), consumption subcultures (Leigh et al., 2006), consumer tribes (Cova et al., 2007), marketplace as mediator of social linkages (Wu, 2008) and social relationships (Soares et al., 2012). Furthermore, Arnould and Thompson (2005) state that the common consumption interest of consumers can create feelings, self-selected consumption, transient and fragmentary cultural worlds of subcultures of consumption. More recently, Arnould et al., (2023) discuss how organisations should enable consumers to strengthen communities to foster a sense of tribal belonging. This can be linked to NFT communities where subcultures can spawn from the parent company as discussed earlier. This will be further elaborated on in Chapter 5.

In addition, Hungara and Nobre (2021) inform that marketplace cultures grant consumers the ability to build their own identity around commodities as symbolic resources. Another point to consider is when Bamakan et al. (2022) explains how NFTs allow consumers the ability to sell, make a profit, use and obtain copyright over the digital product which in turn alters digital marketplaces. Arnould et al., (2023) argues that it is this legal copyright of ownership that not only changes how ownership is viewed but creates discussions around art and valuation in digital marketplaces. This grants a power to digital commodities and assets that leads to further ‘Customer Engagement’ (CE) (Garanti & Berberoglu, 2018; Goulding et al., 2013) within NFT communities of shared consumption and can create a collective identity where the consumers take an active stance (creation of a subculture) within

the marketplace in relation to the NFT brand (Colicev, 2023). Through these examples it is clear to see that CE around NFTs influences consumer characteristics and creates further motivation to purchase NFTs within NFT market cultures.

The influencing factors of subculture and consumer tribes examine a point of view between consumers and a brand. Hungara and Nobre (2021) describe subcultures as derivatives of oppressive consumer culture that are held together by experiences and activities. This is similar to the online brand communities of NFTs which have existing fan bases that create emerging subcultures through shared rituals, traditions, and a sense of moral responsibility to the parent company (van Slooten, 2022). Extending further from subcultures are consumer tribes (Goulding et al., 2013) that highlight experimental consumption activities and experiences within CE. Consumer tribes differ to subcultures as they have multiplicity of membership, playfulness of consumers within markets and entrepreneurial behaviour of consumers (Goulding et al., 2013, Hungara & Nobre, 2021). NFT consumer tribes consist of popular communities that have strong fandoms (fans of a community or subculture), hype and smart technology integration (Fai, 2021). These modes of media interaction have ultimately led to an emergence of taste regimes that can be specific to these fandoms and platforms (Arnould et al., 2023). These influencing factors of taste in consumer tribes can be linked to deeply personal, idiosyncratic parts of life that are impacted by the culture that surrounds the consumer (Arnould et al., 2023). In these tribes, consumers form a network around their chosen NFT brands such as BAYC, CryptoPunks, NBA Topshots or Rare Pepe (White et al., 2022; Yilmaz et al., 2023). For instance, entire companies' intellectual properties (IPs) and projects have used the image of their BAYC NFT which has created further subcultures and derivatives of the initial brand (Steiner, 2022). It is through this that a unique subculture has emerged around NFT technology expanding on the CCT of digital consumption (Arnould and Thompson, 2005; Lee, 2021; Hungara and Nobre, 2021). Hence, it can be seen within these subcultures and consumer tribes that communities who associate with these NFT brands have symbolic ties to the formed clique in succession bringing consumers together.

Marketplace culture links to mass mediated marketplace and consumer interpretive strategies by market-mediated networks and embedded consumption. Arnould and Thompson (2005) state this linkage has two important concepts which are culture and social actions. In the context of NFTs, the culture is conceptualised around a decentralised blockchain network of connected virtual communities and social media platforms (Rehman et al., 2021; Wang et al., 2021). Social actions are shaped by the surrounding virtual communities and influencers (Yaffe-Bellany, 2022) around NFT brands that are embedded in these social networks. As this social network is comprised of a cyberspace that functions on the decentralised technology of the blockchain, this recontextualises market practices that are currently embedded in centralised digital marketplaces.

2.5.3 Mass-mediated marketplace ideologies and consumer interpretive strategies

The third theoretical domain is mass-mediated marketplace ideologies and consumer interpretive strategies which refers to the way consumers decipher and make sense of cultural meanings within the marketplace. Arnould and Thompson (2005) define this domain as one that examines consumer ideology, the meaning of consumer actions and how commercial media influences consumption. This can also relate to how individuals people can be classified as person brands that attract new audiences such as influencers on social media and virtual communities that shape marketplace ideologies (Arnould et al., 2023). Mass mediated marketplace ideologies and consumer interpretive strategies include discursive, imagistic and material representations of consumerist ideologies in the marketplace (Thompson et al., 1989). It also includes consumers active uses of media (Thompson & Arsel, 2004) as well as influences of globalising mediascapes and consumption scapes (Holt, 2004). It is quite a comprehensive theoretical structure of CCT of which specific parts have some important relevancy to the consumer journey of NFT consumption which will be discussed.

Mass-mediated marketing ideologies and consumer interpretive strategies in NFT markets are observed by Ante (2021) in environments which facilitate consumerism and are transmitted by influencers and campaign marketing. This is done predominantly via social media platforms like X (previously referred to as Twitter) and virtual communities such as Discord (Ante, 2021). The release of an NFT product is built on hype through which influencers can assist in driving up CE which in turn also increases the potential number of sales (Ante, 2021; Ivanova et al., 2020). From this, it can be argued that when influencers hype an NFT brand and use marketing platforms such as Discord and X, consumers can become aware of NFT projects of interest. These NFT projects range from art collectables, smart applications, dApps and protocols to new technologies that seek to solve a problem in our society (Fai, 2021; White et al., 2022). Through this social influence consumers can actively participate, co-create and shape brands within the market (Arnould et al., 2023). The fan engagement within NFT communities brings this to the forefront as consumers have greater control over their digital ownership that allows co-creative participation from active consumer holders. There is no restriction on a NFT owner that wants to create a derivative on their current NFT image, sharing characteristics of the parent company. Alternatively, Hungara and Nobre (2021) highlight the role of NFTs in shaping consumer perceptions and purchase intentions through the impact of social media influencers. These influencers use social media platforms to promote and hype projects they choose to endorse to their followers such as celebrity youtuber Logan Paul introducing cryptocurrency and NFTs to his followers (Yaffe-Bellany, 2022). Thus, these influencers play a major role in shaping the perceptions of consumers as they attempt to share higher product knowledge around NFTs which

promotes consumption (Aalders, 2024). Influencers are just one such way that mass mediated marketing ideologies and consumer interpretive strategies impact NFT consumption.

Mass mediated marketplace ideologies and consumer interpretive strategies links to consumer identity projects by the ideological shaping of customer identity, goals and desires. Here Arnould and Thompson (2005) indicate that identity created through communication can take the form of interactive exchanges or research focused studies. This means that individuals can construct their identity through social interactions, cultural influences and new knowledge. When applied to NFTs consumers identity is shaped by community engagement (Colicev, 2023), global members (Hofstetter et al., 2024) and new technology innovation (Fai, 2021) which aligns with how the surrounding ideology shapes consumers identity. In addition, NFT consumer agency is enacted through ideologies within the surrounding decentralised digital culture. This is supported by Hofstetter et al., (2022) who argue that authenticating NFT ownership leads to status which in turn raises the value of interacting with peers on a given platform. Consumers are now not only influenced by their purchases but by how their purchase influences their status in social circles. Furthermore, more recently Hofstetter et al., (2024) informs how NFTs give rise to social value (well liked NFTs, upvoted or discussed) and the impact of scarcity which further changes ideologies of consumer choices. The discussion around scarcity leads NFTs to be finite and depending on its social value and influence can lead consumers to higher volumes of speculation. It's possible for consumers that own NFTs of low scarcity and high social value to experience more status in consumer interactions within communities. The ideologies present within NFT consumer culture have an underlying element of authenticity, verification and true digital ownership in a decentralised economy (Howell, 2022). Although as this is still a growing industry and an evolving technology, these ideologies can shift from community to community based on the strength of the NFT brand (van Slooten, 2022; White et al., 2022). By examining consumer interpretive strategies and mass mediated markets for NFTs, marketers can gain insights into consumer identities and develop more effective marketing strategies.

2.5.4 Consumer identity projects

Consumer identity projects is the final key theoretical domain (Arnould & Thompson, 2005) that explores co-productive ways in which consumers interact with the diverse range of marketing brands. This refers to the collaborative and interactive relationship between consumers and marketers which shape the marketing landscape through consumer engagement with brands. Arnould and Thompson (2005) emphasise the pivotal role in shaping consumer identity projects by shedding light on how individuals create and present their identities through possession. These consumer identity products include identity play (Schau & Gilly, 2003), body image and self-presentation (Thompson & Hirschman, 1995), gender performatives (Otnes & McGrath, 2001), symbolic distinctions (Fournier, 1998), extended self (Belk, 1988; 2013), negotiating cultural contradictions (Belk, 1995),

experimental dimensions of consumption (Holt, 1995) and identity embedded in an authentic core self (Arnould et al., 2023).

Belk (1988) argues that consumer identity projects are observed in a co-productive way where consumers interact with marketing practices in which the process of this interaction creates a fragmented sense of self. This fragmented self is referred to as “extended self” and posits a relationship between the consumers brand choices and their self-concept (Belk, 1988). Furthermore, Belk (1988) highlights the construction of self-identity in relation to the procurement of material possessions. Consumers construct narratives of identity to participate in mythic and symbolic creations (Arnould & Thompson, 2005; Arnould et al., 2023 Belk, 1988). This is further highlighted by Arnould et al., (2023) how traditional identity anchors such as family, tradition and place have over time been replaced by aesthetic, affective and temporary neo-tribal communities. Consumers that own NFTs create lore, symbols and community around these digital assets (White et al., 2022). Based on this information, it can be argued that in situations when consumers purchase an NFT and use it on social platforms, they are essentially interacting with the NFT brand and using the NFT as a symbol of their self-identity. Collectively, the research of Belk (1988) and Arnould and Thompson (2005) helps contribute to the understanding of the complex interplay between consumer culture, digital assets and the formation of consumer identity in NFT markets.

Research by van Slooten (2022) illustrates that consumers present their digital identity based around the showcasing of an authentically owned and visually represented NFT such as CryptoPunks or Board Ape Yacht Club (BAYC). Not only do consumers gain authentic digital rights to the NFT and its imagery but also the commercial rights to promote the parent NFT brand (van Slooten, 2022). For example, Brouard (2024) presents the example of the company Bored and Hungry, a company that used their purchased BAYC NFT as the image of their new brand of food truck that operates externally from the parent company. This example highlights how consumers are now interacting directly with NFT brands, essentially co-creating a new consumer experience that extends the umbrella of the existing parent brand. This creates a more personal customer experience as the consumer get rights to utilise the NFT but not the rights for intellectual property (IP) (Kaczynski & Kominers, 2021; Rehman et al., 2021;). Moreover, the research of Grayson and Martinex (2004), which is on the topic of imaginative and fantasy elaboration around digital identities, brings to light how consumers can show off a part of their favourite NFT brand that they authentically own (White et al., 2022). This is supported by Arnould et al., (2023) in how authentic experiences are fostered through product interactions much like an NFT.

In addition, the use of brands and hyperlinks to create cyber identity within NFT decentralised markets is different from centralised markets as consumers can use digital images of NFTs (commonly referred to as profile picture, known as PFP) as their digital representation on social

media (Brouard, 2024; White et al., 2022; van Slooten, 2022; White et al). Expanding on this, Brouard (2024) discusses BAYCs unique online identity that acts as a value hub for consumers to access membership, exclusive club perks, exclusive merchandise (Addidas, Bape and Gucci), gaining of commercial rights and potential to unlock future opportunities within the BAYC ecosystem. In addition, recent CCT studies have discussed memetic identities where consumers reproduce meme posts which is relevant to how NFT members in meme NFT communities (owning meme NFTs) express their identity of dialogue between users (Arnould et al., 2023). Arguably, as the consumer has access to these commercial rights, any owner of a BAYC NFT could theoretically choose to take on the traits, looks and emotional attachment of this new digital identity while also sharing the characteristics of the brand wherever they choose to go in the digital world. In tandem, NFTs provide a virtual hub of co-creation (for both creators and NFT owners consumers) of authentic digital ownership that can be shared on social media platforms to represent a digital identity.

Consumer identity projects also link back to the socio-historic patterning of consumption by structure-agency tensions. Arnould and Thompson (2005) explain that this relates to how consumers can use consumer culture to transcend their orientations (class, gender, ethnicity) where generic fusions can create new identities. NFTs allow consumers to construct identities through digital ownership, engage in virtual communities and in Web3 marketplaces. However, structural limitations and tension exists in the form of centralised systems in marketplace, regulations, economic barriers, risk, volatility and speculation (Peres et al., 2022; Hofstetter et al., 2022) which impact consumer orientation in how identities are formulated. As the purchase of NFTs are decentralised and wholly owned by individuals, there is already an added sense of distinct ownership that previously was not possible (White et al., 2022). Due to the many functions of smart contracts (Fai, 2021), NFTs have a series of functions that influence and can even become digital identities in social mediascapes. It is here that the habituated orientations of class, gender and ethnicity can be reproduced due to how NFTs can create wholly owned new digital identities.

Hence, it is through these four theoretical domains by Arnould and Thompson (2005) that this study presents an update of new symbols, consumption patterns, identities, communities and experiences within digital cultures and subcultures on the topic of NFTs. The research explores this as an attempt to understand the consumer journey of NFT consumption.

2.6 The consumer journey of NFT consumption

The full consumer consumption cycle is a cornerstone to this thesis as it focuses on all stages including pre-purchase, purchase and post-purchase. This consumption cycle has been documented by scholars over the last 20 years such as the research by Arnould and Thompson (2005), Lemon and Verhoef (2016) and has evolved through the research of consumer engagement journies by Jaakkola

and Alexander (2024). The consumer journey is a dynamic process that chronicles consumers' engagement with products. This journey is composed of multiple stages that vary across frameworks (Arnould and Thompson, 2005; Lemon and Verhoef, 2016; Arnould and Thompson, 2018; Jaakkola and Alexander, 2024) generally consisting of the consumers purchase of the product to end of product life which leads to financial impacts for organisations. Along the journey consumer motivations, brand loyalty, perceived value and purchasing decisions are shaped by various experiences.

To better understand the consumer consumption cycle, it is important to explore how the consumers journey operates. Lemon and Verhoef (2016) identified three stages of consumption that can be related to the NFT consumer journey as pre-purchase, purchase and post-purchase.

2.6.1 Pre-purchase stage

The pre-purchase stage occurs right up until the point of acquisition. This stage is explained by Lemon and Verhoef (2016) to include all aspects of a consumer's interaction with the brand, environment and categories of products that take place before the actual purchase. Also, Klein et al. (2020) informs that consumers face difficulties in assessing the quality of complex products and services (Voorhees et al., 2017) due to lack of information and ability to try the product. This is particularly pertinent to the complexity of NFTs and how information and knowledge are crucial to a consumers pre-purchase of digital assets. It is during this stage that consumers familiarise themselves with NFT terminology (Wang et al., 2021) and dApps (Fai, 2021). This consumption stage focuses on consumers initial exposure through perceived risk, consumer motivation, digital branding (Colicev, 2023) and exposure to community (van Slooten, 2022) which will be discussed in the following sections.

2.6.1.1 Perceived risk

The concept of perceived risk was introduced by Bauer (1960) and centres around how consumer behaviour can embody risk-taking and risk-reducing behaviour. As the NFT market is extremely volatile (Kong & Lin, 2021), the concept of perceived risk plays an important role in the pre-purchase stage of consumers. This is important as the perceived risk consumers experience in this early stage impacts their intention to purchase and their association to future interactions with NFT technology. Laroche et al. (2004) discuss the different types of risk that exist which includes financial, social, psychological, time, performance and physical (Havlena & DeSarbo, 1990). These different types of perceived risk can be used to understand NFT consumers during their pre-purchasing experience of NFTs to help identify factors that impede or improve consumer risk. It is important to discuss how each of these dimensions of risk contributes to consumers progression to the next stage of consumption.

Financial risk relates to how consumers can lose money with a purchased item (Laroche et al., 2004). This strongly relates to NFT purchasing as the market is volatile and full of both risks and rewards. This is especially so in the pre purchase of products as consumers gather information to decide on their purchase. For example, consumers seeking high returns such as the returns from BAYC (van Slooten, 2022) could lose money (Kong & Lin, 2021) when they purchase an NFT. Performance risk occurs if a purchased product or item fails to work after purchase (Laroche et al., 2004). NFTs that promise exiting new protocols or features that do not deliver on their promise or have broken functionality or even scams (Gilbert, 2022) fall into this category. Murray and Schlacter (1990) explain social risk as a loss of respect, esteem or even friendships to consumers by influencers or other individuals. For NFTs this is particularly relevant as influences can come from social media influencers (Yaffe-Bellany, 2022) and even family or friends that form a loss of respect towards the consumer. Time risk refers to the loss of time and effort that results from a purchase (Murray & Schlacter, 1990). As NFT technology is relatively new, consumers are trying to understand unfamiliar functions (Wang et al., 2021) whilst researching and learning this new technology which can result in purchasing the wrong products. Lastly, psychological risk relates to the loss of self-concept or self-image that results from an item purchase (Murray & Schlacter, 1990). When purchasing NFTs consumers can be influenced by family and friends negatively which results in a negative self-image or negative self-concept after they have purchased an NFT. Performance risk, social risk, time risk and psychological risk all play a crucial role in consumers early purchasing decisions as they shape consumer decision making to ultimately progress to the next stage of consumption.

This is further expanded by the risk involved in NFT purchasing involves an opportunity cost for new entrants that affects the consumer's motivation to purchase. Yurtkuran (2022) links the risk-reward nature of NFT purchasing to a casino where consumers can either make millions or go bust extremely quickly in these volatile markets. In observing this comparison, it is arguable that not only do consumers need to be careful of the lottery-like nature of purchasing in NFT markets, but they must also be cautious of losing the NFT altogether. Nogueira et al. (2023) discusses the danger for consumers of losing new NFTs in start-up brands that exist on centralised websites run by third parties; here, there is no guarantee of digital asset integrity nor maintenance of the digital artwork, collectable or utility to which the token should link (Nogueira et al., 2023). In addition, consumers face another risk of losing access to their digital wallets and keys (discussed shortly) by losing their "seed phase" (also discussed shortly) which makes the NFT impossible to access. There is also yet to be a retrieval system for seed phrases and keys of digital wallets without interrupting the blockchain network (Valeonti et al., 2021). This danger of losing assets can hinder consumers from progressing their NFT journey in the pre-purchase stage as they fear a lack of retrieval system that is common in centralised systems. Hence, the potential for asset loss, lack of guaranteed integrity, ability of denied access to wallets and third-party interference all adds to the risk nature of the NFT marketplace and

therefore contributes to consumer motivations to purchase into the NFT marketplace. The next section builds on the topics of motivation by discussing digital branding of NFTs.

2.6.1.2 Digital branding of NFTs

In understanding the digital branding of NFTs, its first important to discuss the literature surrounding branding, brand loyalty, brand equity and brand identity. The branding of products is discussed in the seminal literature by Kotler & Keller (2016) as the process of providing products or services with the power of the brand. Here, branding that resonates with consumers offers the concept of brand loyalty which allows organisations benefits that result from repeat purchase recommendations of the brand from relatives and friends (Lau & Lee, 1999). One such way brands are able to gain brand loyalty is through brand equity which Keller (2003) explains is the added value to a product based on past marketing activity. This leads to the evaluation of successful brands taking on real, genuine and authentic perceptions in what they sell (strong brand identity), where the brand establishes itself as a crucial part of the consumers lives (Kotler and Keller, 2016). In a rapidly evolving digital world where ownership of digital assets is decentralised, scarce and intangible, branding can assist in contributing to the desirability of digital assets. This is important as consumers during the pre-purchase stage are assessing the NFT branding, observing NFT brand loyalty, current brand health, value and the identity of the NFT in social media and virtual communities.

The value of digital branding of NFTs has influence over all three stages of the consumer consumption cycle from pre-purchase, purchase and post-purchase. However, It is within the pre-purchase stage that consumers first confront the digital branding of NFTs. The pre-purchase stage is a way for NFT brands that launch projects to generate brand awareness and brand equity to a new audience of cryptocurrency and social media (X and Discord) users. Chohan and Paschen (2023) provide examples of how NFTs can be used by marketers in campaigns to raise awareness, desire, action and recurring action through rewards and brand loyalty. Additionally, Colicev (2023) views NFTs as standalone brand components which function as community building aspects of that brand. Essentially this means that NFTs can become entirely new products for brands and contribute to brand equity (Colicev, 2023). Hence there are limitless possibilities for NFTs to have various functions for brands and consumers which are inherently discussed by consumers in the pre-purchase stage as they assess their options. Ultimately, the ability for consumers to purchase NFTs first requires them to obtain a digital wallet which is discussed in the next section.

2.6.1.3 The digital wallet

A major feature that differentiates the consumer journey when purchasing NFTs as opposed to the majority of other products is the need for a digital wallet to make purchases (Kräussl & Tugnetti, 2024). The digital wallet is a disruption to traditional physical wallets in that it grants the ability to trade and buy cryptocurrency and NFTs on the blockchain which physical wallets cannot (Deshpande et al., 2022). Thus, consumers at this stage must obtain a digital wallet to progress their acquisition. This is different from traditional pre-purchase consumer journeys as the digital wallet utilizes cryptocurrency (Hussain et al. 2022), is intangible and requires consumers to be in direct control of their finance. Deshpande et al., (2022) states two forms of digital wallets exist; cold wallets which are purely digital and exist only online, and hardware wallets that are physical USB devices that provide a more secure method of storing NFTs and cryptocurrency. Hussain et al. (2022) cites the most common single device wallet on the Ethereum Network is Metamask. This wallet provides unique security granted in a 16-word password known as a seed phrase that allows ultimate security of a consumer's funds (Hussain et al., 2022). This ultimate security is a double-edged sword as failure to remember this seed phase will result in being unable to access the funds (Rezaeighaleh & Zou, 2019). The PayPal system provides users with the ability to make Fiat transactions through a centralised third-party platform (Grabianowski & Crawford, 2005). Although, the findings of Preibusch et al. (2015) discuss an issue of PayPal through privacy breaching as consumer transaction details are exposed to a third-party tracker. On the other hand, digital wallets on the decentralised blockchain are not controlled by a third party that can steal user data. Thus, when comparing the digital wallet of MetaMask to the payment platform of PayPal, the flexibility and security of digital wallets is unmatched. Due to the many steps in order to purchase NFTs, consumers can be overwhelmed to try this new technology.

Consumers who do not have an internet connection, access to a computer or a digital wallet cannot purchase NFTs (Wang et al., 2021). In addition, the consumer needs to have an understanding of cryptocurrency (Oh & Nguyen, 2018) and how to purchase it with Fiat currency so that the cryptocurrency appears in their digital wallet (Kräussl & Tugnetti, 2024). This can be considered a current barrier to entry where consumers who do not have enough understanding of the technology do not move on to the purchase stage. Consumer behaviour in a traditional sense argues that consumers have already established well-defined preferences for their consumption (Miller, 2006). In order to adopt decentralised technologies for NFT acquisition, new challenges would be present for consumers to address that would not commonly be found within traditional financial data systems (Cho et al., 2023). This is especially true for consumers that are more traditionalist and are likely accustomed to the current centralised system where unfamiliar challenges may arise whilst adopting the new

technology. It is through the functionality of a digital wallet that consumers move into the purchase of NFTs.

2.6.2 Purchase stage

The purchase stage follows pre-purchase and is the process of acquisition and possession of the digital asset. Here, consumers 'mint' NFTs directly from the source or purchase an NFT from secondary marketplaces (Wang et al., 2021; White et al., 2022). In this stage, consumers have researched and have interacted with dApps (such as a digital wallet) and can make their first acquisition of an NFT. Fai (2021) and Wang et al. (2021) both identify the acquisition of an NFT by using a digital wallet with digital currency and then connecting that digital wallet to a website to mint the NFT (which will be discussed shortly). Another way they identify NFT acquisition is through connecting the digital wallet to an alternative website to obtain the NFT on a secondary marketplace like OpenSea or Blur. This acquisition is simply not possible without a digital wallet, indicating that consumers are on a different consumption journey when purchasing NFTs compared to other digital products. Hence, the purchase stage enables the possession of the NFT in a digital wallet.

The purchase stage is described by Lemon and Verhoef, (2016) as covering all the customer interactions (such as payment and choice ordering) with the brand and environment in relation to the purchase event itself. This stage has received a considerable amount of research such as the theories of marketing mix (Kotler, 2012), influence of purchase decision making (Yogesh & Yesha, 2014), and service environment (Lovelock & Patterson, 2015). As consumers consider which brand to select, they continue to face a myriad of alternatives leading to information overload (Lemon & Verhoef, 2016). In addition, assortment research has been well document by Iyengar and Lepper (2000) and Patall (2012) where concepts such as choice overload, decision satisfaction and purchase confidence can induce customers to stop searching for, deter, or not complete their purchase. This is no different in the NFT marketplace where consumers navigate numerous NFT projects and brands until they are satisfied or dissatisfied in their decision around purchasing the asset. In order to understand consumer satisfaction around purchases in the NFT marketplace, it is imperative that an understanding of minting and NFT purchase on secondary marketplaces is addressed.

2.6.2.1 Minting and secondary marketplaces of purchase

The rise of NFTs and digital assets has altered the way consumer consumption takes place in digital markets. Essentially, the change is a paradigm shift in how products are purchased in consumer journeys. This is partly due to the unique aspects of the minting process. This new form of digital consumption known as minting provides organisations with a new area of digital e-commerce (Chohan & Paschen, 2023). Mekacher et al. (2022) describes 'minting' as the act of obtaining an NFT for the very first time. White et al. (2022) explains how NFTs flow through the marketplace in four

steps: Firstly, the digital asset is created where its metadata is stored within a smart contract which runs on the blockchain. Secondly, the digital asset is minted on the blockchain, meaning a new block is now created and validated on a relevant network; this adds to the existing blockchain which is then sent to the unique digital wallet address of the owner. Consumers can then choose the quantity they want to purchase (Mekacher et al., 2022). Thirdly, once the NFT is on the blockchain, it can be compatible with dApps such a OpenSea where the NFT can be listed, bid on and purchased as part of a collection (Pinto-Gutierrez et al., 2022) but cannot be re-minted (Nadini et al., 2021). This purchasing and bidding is quite similar to buying products on e-commerce sites such as eBay and Amazon (Bland et al., 2022) but is recorded on the blockchain for more security. Finally, once any sale of an NFT is triggered, a new block is created and validated on the blockchain as the NFT ownership moves to the new owner's wallet address (White et al., 2022). Thus, this experience of minting helps to distinguish NFT consumption from other digital product consumption as consumers are able to become refutable first owners of an asset which is recorded on an undeletable blockchain. It can be further argued that consumers who mint NFTs have a closer, personal connection to their digital asset as they are the first person to create these NFTs on the blockchain.

Pawle and Cooper (2006) state that a customer can exhibit deep emotional attachment to a brand. This emotional bond was previously theorised by Bowlby (1982) as a critical concept which can influence consumer behaviour. For consumers that had an active hand in the creation of the NFT upon minting (van Slooten, 2022) they created visual appearance of the digital asset that will continue to exist after any sale of the asset. Hence, it's possible for consumers that purchase or even assist in creating NFT brands to develop a deep bond and attachment to their digital assets.

Consumers can also be known to place a higher valuation on the NFTs to which they are emotionally attached for a few reasons. For one, unlike centralised consumer purchases, NFTs grant the usage rights (or in some cases IP rights) on purchase (Bamakan et al., 2021). NFTs valuation by consumers is also determined by various factors, including control over transactions, transparency on decentralised networks, and the ownership of each unique digital asset (Dixon, 2024). Online brands and social media platforms influence the valuation placed upon NFTs by creating digital assets specifically for consumers to use as personal resources for social interaction, co-creation and to encourage peer purchasing (Wu et al., 2022; Zalan & Toufaily, 2024). The next section discusses the possession and digital ownership of the NFT.

2.6.2.2 Possessing and digital ownership

The purchase stage of the consumer journey also consists of possession and the digital ownership of the NFT that is granted to the purchaser. Within day-to-day life, possession and ownership are paramount, as nearly everything humankind does involves some aspect of possessory relationships to an asset (Watkins, 2015). The concept of possession has been subject to significant consumer research

(Bardhi & Eckhardt, 2012; Belk, 1988; Richins, 1994). Four decades ago, Grey (1980) created an understanding of ownership as a 'bundle of rights' that include legal relations and property rights to an object for the parties involved. Expanding on this, Bardhi and Eckhardt (2012) defines ownership as a special relationship between a person and an object. The most cited work is by Belk (1988) who defines possessions as things we call ours, linking our sense of self to the possessions we obtain and keep. Odom et al. (2010) and Watkins (2015) argue that some possessions lose their material integrity meaning that they no longer require physical format to exist, such as books, photos, music and movies. Here, these authors point out that possessions are changing from physical things to matterless objects that are consumed through different channels, abiding to new laws of ownership which provides a new area of enquiry addressed by this thesis. This gradual change towards the possession of matterless objects poses a symbiotic relationship for consumers and digital markets around ownership of digital assets.

Chirtoaca et al. (2020) argues that possession refers to ownership over a product by consumers, such as the physical ownership of a car or computer. According to Chirtoaca et al. (2020), an NFT is the digital ownership and purchase of digital art, virtual land or digital assets with a unique IP code on a blockchain network. In this network, a consumer is not just buying the visual media, be it art, land or asset, they are buying the underlying intellectual property (IP) rights of the 'code' of the digital asset. (Chirtoaca et al., 2020). The preservation of an NFT by consumers in a digital wallet is incentivised with several reasons which include community, prestige, airdrops, and possible physical products (Lee, 2021; van Slooten, 2022). In addition, the verifiability allows any person to look up the blockchain to see who owns the asset at any given time (Popescu, 2021). Unlike the ownership of a car or computer, an NFTs code makes the asset far more secure due to this verification of ownership. While the ownership of a car can be searched, it is a process that is rather time consuming to get through the required information. For NFTs this can be done with a simple click and search on the blockchain to find a history of previous owners (Houser & Holden, 2022). It is through these arguments that NFTs show technological potential that is vastly superior to centralised digital products as users can be granted these perks by holding the specific NFT.

Watkins (2015) argues that there are three types of digital property ownership. First is the ownership that offers full unrestrictive rights (e.g. ownership of a computer). The second is fragmented ownership which bundles rights to an object (e.g. the cost of an asset is split between multiple consumers). Finally, the third is access which provides no ownership (e.g. streaming platforms). Here, NFTs once purchased provide an innovative approach compared to the fragmented and access-orientated models in favour of a license that shows exactly who owns the digital asset on the blockchain (Raman & Raj, 2021). The disruption of NFT technology replaces overextended services such as Amazon and Microsoft platforms that require a subscription, which are fragmented or access ownership types of services. NFT ownership can be divided due to tokenisation therefore the

consumer can purchase different value stores of the same asset. It can thus be argued that NFTs take on the properties of both the first and the second types of digital ownership described by Watkins (2015). Consequently, the rise and growing changes to technology bring forward a re-evaluation of what consists of digital items and digital assets that are purchased and owned by the customer. This is one such facet of NFTs that this study seeks to clarify.

2.6.2.3 Customer engagement

It is during the purchase stage that Customer engagement (CE) occurs when customers enjoy the interaction they have with services or brands and develop a positive experience to the service or brand (Hollebeek et al., 2021). Scholars in marketing have since explored the relationship between CE and digital assets in creating customer interactions and shaping their experiences. The research of Barrett et al. (2024) emphasises the importance of CE being viewed as a multi-dimensional concept that includes cognitive, affective and behavioural dimensions reflecting an individual's engagement with objects. Similarly, Yilmaz et al. (2023) explains the types of CE that result from interactions with NFTs, which includes the provenance of authenticity, automated royalties, utility-driven NFTs and NFTs held for emotional and logistical purposes within creative communities. The findings of Serada (2023) indicate that the changing roles of affect and mood influence subjective feelings which can override logical information. This is particularly important within the purchase stage as consumers become more familiar with their products, the active community and ultimately their attachment. Moreover, Colicev (2023) highlights the CE between the customer and the brand which extends to the product, logo and image represented as the NFT. It is evident that CE plays a pivotal role in shaping consumers NFT purchases in these digital marketplaces. Finally, it is important to follow with a discussion regarding the drivers of engagement in order to understand consumer's interactions with NFTs during the purchase stage.

2.6.2.4 Customer drivers of engagement

The customer drivers of engagement for NFTs exhibit differences between consumers that see utilitarian and hedonic services as evidenced by Barrett et al. (2024). Within the purchase stage it is these utilitarian and hedonic services that shape the course of where consumers progress with their purchase to the next stage. Customers within a utilitarian setting are encouraged to engage with NFTs by functional needs and goal orientated pursuits (Novak et al., 2000). NFTs can have utility that allow functionality of membership to a group and/or providing the consumer with additional tokens as long as the NFT is held in their digital wallet (Ardavanis, 2022). Hence, the NFT is assisting the customer in a function, task and goal. Similarly, Chang et al. (2015) elaborates on the utilitarian engagement of consumers to be characterised by efficiency and instrumental outcomes that grant pragmatic benefits to the customer. This is much like the power of instantaneous tradability that NFTs grant to the

consumer (as discussed previously). In addition, research by Fai (2021) describes NFTs as being smart collectables where utility can function as several variables. These variables can be endless in their potential as the discussion of smart contracts have shown. This takes on a utilitarian stance. Alternatively, within hedonic service contexts CE comes from different sets of drivers being enjoyment, entertainment and emotional fulfilment (Babin et al., 1994). The purchase of an NFT with this driver has CE that links to collecting (Kuijten, 2016), gaming (Drachen et al., 2016), and social media sharing (Ante, 2021) where the engagement can be experimental and emotionally driven. Correspondingly, van Slooten (2022) states there is emotional connection when purchasing an NFT as part of a community and NFT collection. This takes on hedonic properties. Thus, NFTs share both utilitarian and hedonic service factors.

Individual features are another form of customer drivers of engagement which are explained by Barrett et al. (2024) as a unique set of characteristics per individual customer. Individual features can vary greatly within consumers and could include traits such as being prevention-focused rather than promotion-focused (Hollebeek et al., 2021), or variety-seeking versus non-variety-seeking (Menidjel et al., 2023). To correlate with the consumers individual features NFTs can be customised and made personal to the purchaser (Ante, 2021; Yilmaz et al., 2023). So, when consumers buy an NFT, they have a more personalised CE experience. In addition, for specific generative art NFTs, a customer plays a hand in the NFT creation, thus becoming more personal and customised to the customer experience (Loi & Tang, 2022). Essentially, this makes every minting experience unique to the consumer and driven by their individual features, separate from purchasing NFTs on secondary marketplaces. In situations where organisations choose to customise minting experiences, they will further incorporate the customers individual features into this purchasing process and make it more exclusive for each individual.

The outcome of CE connects with the results and consequences of CE. Positive outcomes of CE lead to repeat purchase behaviours and customer life value (Harrigan et al., 2018). There is a link between repeat purchasing of NFTs as a result of positive CE which stems from positive communication of NFT brands and perks/rewards offered to consumers (van Slooten, 2022). This has a striking similarity to the repeat purchasing of card collecting for rarer cards (Toups et al., 2016) where in parallel, the existence of NFT collections encourages repeat purchasing as consumers strive for a better mint or better traits and rarity. Conversely, negative outcomes of CE can arise in consumers that feel inundated, overwhelmed or exploited by engagement efforts (Brodie et al., 2013). Harrigan et al. (2018) states this sense of over engagement may lead to disengagement or even brand aversion. It is here that consumers may decide to no longer engage with the service or brand. Ultimately, this leads into the post-purchase stage of consumption.

2.6.3 Post-purchase stage

The post-purchase stage concludes the consumer journey and is generally to do with consuming, holding and disposal of assets. Lemon and Verhoef (2016) define this last stage as post-purchase which is the culmination of customer interactions with their surrounding environment and the brand after the actual purchase. It is within this stage that behaviours such as usage and consumption, service requests and post-purchase engagement are observed. Existing research has focused on service recovery (Tax et al., 1998; Bacile, 2024), consumption experience (Hirschman & Stern, 1999; Chaney et al., 2018), customer decisions and returning of products (Lemon & Verhoef, 2016), online repurchase intention (Wen, 2011), seeking variety (Kahn, 1995) and word of mouth in online communities (Brown et al., 2007). The perspective on the post-purchase stage in regard to NFTs has been said to create stronger brand attachment (Colicev, 2023), community building (Lee, 2021), authentic digital ownership (Tapscott, 2021), creative storytelling around brand identity (Kosmas et al., 2023), holding for additional rewards (Chohan & Paschen, 2023), customer satisfaction (Hill & Brierley, 2017), financial investment and repeat purchasing (Kong & Lin, 2021; Yilmaz et al., 2023).

A key difference with NFTs compared to physical assets is that as they do not wear and tear (Wang et al., 2021). Hence, what is known as the disposal stage of consumption with physical products becomes the post-purchase evaluation and behaviour stage in this study for NFTs. Within the post-purchase stage consumers choose four options in evaluating their NFTs as outlined by the following authors. The first is holding the NFT asset for potential future value; this can come in the form of NFT brand satisfaction (Zhang et al., 2022), potential airdrops (Allen et al., 2023), increased utility (Fai, 2021) or community benefits (Koolen, 2022). The second is selling the NFT asset for either a profit or loss, tax loss purposes or to transfer it to a friend as a gift (Cong et al., 2023). The third option is to simply ‘hide’ the NFT, which means the NFT will now be unseeable to everyone but the owner who will still be able to see it in their digital wallet (Weyl et al., 2022). The last option is to ‘burn’ the NFT, which is sending the digital asset to a burn address which makes it no longer exist on the blockchain (Das et al., 2022). This blocks the token and makes it unusable or tradable however it is possible to access the pre-burn NFT ownership and trading data from the Interplanetary File System (IFPS) server (Cantu Moreno, 2022). This essentially means its image and transaction history are still searchable. This rather complex post-purchase evaluation process provides new ways for consumers to interact with products at the end of their consumer consumption journey. Once this stage is completed by the consumer, it can ultimately lead to a pattern or cycle (Jaakkola & Alexander, 2024) where consumers return to the pre-purchase stage. They either start the journey from pre-purchase (hence restarting the cycle of consumption) to replace their digital asset with alternatives or are satisfied with the NFT, brand, community and valuation and keep the NFT. It is worth noting that the

disposal of NFTs is very different from traditional asset disposal and thus is a new area of discussion that needs further attention.

NFT disposal as suggested by Weyl et al. (2022) provides NFT owners with three options if they wish to dispose of their NFT. These options are to either sell it on a secondary marketplace such as OpenSea, send it to a burn address that destroys it, or send it to their hidden folder. To dispose of an NFT the consumer must select the process of burning. Weyl et al. (2022) discusses burning as sending an NFT to a burn address that is irredeemable on the blockchain on the zero address (e.g. 0x0000000000000000000000000000000000000000) to permanently remove the NFT. Ultimately these outcomes are impacted by the branding and community, value creation and cognitive dissonance theories discussed in the next section.

2.6.3.1 Consumer perceived valuation of NFTs

The post purchase stage of NFTs can be evaluated by observing how the valuation of NFTs stems from consumer perception of value. Gummerus (2013) argues that value creation perceptions arise from two standpoints which include value creation processes and value outcome determination. Value creation processes deal with activities, interactions and resources used to create value; while value outcome determination examines how customers make value assessments (Gummerus, 2013). Therefore, the value of NFTs is based on both their characteristics and market trends as it is with many products, and also on individual and collective consumer opinions and feelings about them. This consumer perception can be shaped by factors of rarity, utility, cultural significance and market demand. In the post-purchase stage of NFT consumption, consumers and creators determine the valuation of an NFT by either disposing of or keeping the digital asset based on both value creation processes and value outcome determination. So, the consumers interaction with the NFT after purchase provides a series of factors that need to be examined. These factors include brand extension, airdrops, authenticity and the creator's journey which will now be discussed in the four categories of value: functional, economic, emotional and social.

2.6.3.2 Functional: Practical benefits

The functional and practical benefits of perceived valuation can come in the form of brand extensions, easy authentication, establishes digital scarcity and the use of NFTs in real-world environments. Brands can get extended due to their existing members passion for the NFT brand. Kaczynski and Kominers (2021) discuss how value can be created by NFTs around successful established brands. Here, it's possible to leverage successful Web2 communities that have congregated around popular NFT brands such as CryptoPunks and BAYC. It's possible for these popular parent NFT brands to create sub-brands (Chohan & Paschen, 2021). Research by Brouard (2024) highlights how a brand extension from BAYC led to the creation of the restaurant Bored and Hungry, extending the

characteristics of the parent NFT brand. This element of brand extension brings new value to the consumer as selling the NFT would now be similar to selling their own new brand. Essentially this factor leads to consumers holding the NFT asset instead of selling it as there is considerable value in the IP rights within the new sub-brand. Ultimately, this impacts the consumer consumption journey, particularly the post purchase stage tremendously as consumers are becoming an extension of the parent brand by purchasing an NFT, in turn creating a sense of value where consumers identify their own business with the NFT. Zhang et al. (2021) also explains that the value of NFTs lies in the ability to authenticate digital ownership and establish digital scarcity of digital assets in a digital world. It is important to note that using NFTs is not just limited to the digital world. There have been reports of restaurants using NFTs as reservations (Weyl et al. 2022) and even ticketing events (Dev et al., 2022). These tokens of authenticity offer a major shakeup and disruption towards purchase incentives by providing practical benefits which create consumer perceived value.

2.6.3.3 Economic: Cost saving or financial benefits

The economic and cost saving benefits of NFTs can lead to consumer perceived value creation in the post purchase stage. One such way is how NFTs allow for the unique ability to give all holders of the asset airdrops. Airdrops are sent directly to consumers who are holding the NFT (Fan et al., 2023) in their digital wallet address and can be used as marketing promotions (Guidi & Michienzi at al., 2023). The research of Suchow and Ashrafimoghari (2022) states the power of airdrops leads to an extension of loyalty programs and exclusive offers for the holders of NFTs. Here, consumers are more likely to hold an NFT that is promising them rewards, which is a brand-new way for providing brand loyalty, rewards and value to customers. Airdrops can essentially come in the form of additional tokens (that can be traded and cashed out for Fiat currency or held for future purposes) or additional NFTs that are given to holders as a reward for continuing to hold the brands asset.

Allen et al. (2023) discusses two relevant key differences of Web3 airdrops in comparison to the sharing economy of the Web2 Uber service. Firstly, the Web2 sharing economy uses Fiat as opposed to cryptocurrency, where tokens are airdropped and have more in common with equity (or stocks) than cash. Secondly, the structure of Web3 airdrops, where a connection exists between using the product and gaining a benefit, is fundamentally different than Web2. An example of a notable airdrop was in early 2022 where BAYC released “$APE”, a cryptocurrency which was given to all BAYC NFT holders before the coin was released to market exchanges for everyone to purchase (Suchow & Ashrafimoghari, 2022). Van Slooten (2022) explains that this airdrop was estimated to be valued at between USD $100,000 and USD $200,000 and was given to every holder of the community. Thus, this opens a cutting-edge area of consumption as consumers are rewarded for their purchases by holding their digital assets, creating further consumer valuation of the NFTs held. It is within this

post-purchase stage that community building (relationships) and rewards (through airdrops) can be given to holders of NFTs to incentivise purchasing of new product releases (Yu et al., 2024).

Another way value is created through cost saving or financial benefits is through creator royalties. Sharma et al. (2022) notes that secondary sales of NFTs provide benefits to the artists (or creators) who in turn gain a royalty from each re-sale (which is engraved into the smart contract). Essentially, this is a binding contract upon purchase that automates itself (Hofstetter et al., 2022), Once a consumer decides to sell their NFT on a secondary market, the original creator is still directly impacted and rewarded with royalties as a percentage of that sale (Madine et al., 2023; Murray, 2023). A comparison can be made to Spotify which pays royalties (currently at $0.00437 per stream or $4.37 for 1000 streams) to creators by way of a middleman who controls contract agreements (Gupta & Agrawal, 2024). Royalties paid out from an NFT however are binding on the smart contract set by the creators of the NFT brand allowing those creators resale royalty rights (Murray, 2023). This technological change is revolutionary as creators and companies have had to deal with third-party contracts where creative accounting could take a large percentage out of their respective funds (Caves, 2003; Sharma et al., 2022). This seamless integration of rewards direct from consumer to creator within the smart contract incentivises organisations and marketing teams to utilise NFT technology and create digital assets that can act as a financial store of value where they are rewarded without third-party interference. Ultimately, airdrops and creator royalties provide organisations and consumers with a variety of value creation processes through new and exciting methods by providing cost saving to reward its consumers and financial benefits in the form of tokens and rewards.

2.6.3.4 Emotional: How the product makes consumers feel

NFTs provide value by affecting how consumers feel and their emotional states through providing security measures, and unique and personal purchasing opportunities. This consumer emotional state is particularly important in the post-purchase stage as consumers make a decision to keep, sell or remove the asset. Sazandrishvili (2020) discussed how the technology which NFTs resides upon ensures that sensitive data is kept safe. The technology also pursues fraud and scalper prevention, and provides ease of access to records, proof of status and a possible permanent digital memento (Howell, 2022). Through these security measures, NFTs can grant consumers with an increased sense of security. In addition, the purchase of NFTs can lead to an engagement that is experimental (Ante, 2021) via the unique minting process which can be catered to be emotionally driven through connecting with consumers' personal milestones. Consumers can also be known to place a higher valuation on the NFTs to which they are emotionally attached. This can be further argued through how some NFTs grant IP or usage rights upon purchase (Bamakan et al., 2021) which has the potential to shift emotional states within the consumer. This ultimately provides value creation

through the perceived positive emotional feelings that the consumer experiences upon purchasing NFTs.

2.6.3.5 Social: Value derived from social connections or community

Consumer value may also come in the form of social connections or community (discussed shortly). Upon purchasing a BAYC NFT, consumers are granted membership like status within its exclusive community and network (van Slooten (2022). The social interactions around successful NFT brands provide NFT holders with a strong userbase of loyalists that can assist in consumers holding their assets within the post purchase stage. Through this network van Slooten (2022) states that the community acts as a key driver for the success of the NFT brand as the members have a huge influence on how the value of the NFT is perceived. In addition, Sharma (2022) discusses how community interaction around art leads to the enhancement of consumers experience, engagement and learning. It can be argued that consumer perceived value is derived from functional, economic, emotional and social concepts and can be weaved in at all stages of consumption, through pre-purchase, purchase and post-purchase evaluation.

2.6.3.6 Cognitive dissonance in post-purchase evaluation

A concept first introduced by academic Festinger et al. (1956), cognitive dissonance proposes that pairs of thoughts act as elements of knowledge that can either be relevant or irrelevant to one another. In the events that the pairs of cognitions are opposite to each other, then there is a dissonance that leads to avoidance of information. The findings of Harmon-Jones and Milles (2019) extend Festinger's et al. (1956) work by expressing the belief disconfirmation paradigm, which states that dissonance emerges when people are exposed to information that is inconsistent with their beliefs. Zafar (2011) and Chou (2012) argue that cognitive dissonance is when the beliefs and behaviours of a consumer are not in alignment, a state which can impact rational decisions which result in a feeling of regret. This is particularly relevant to the post-purchase stage of consumers who hold NFTs that have to juggle new knowledge and information that could be misleading or even lead to purchasing a digital asset that does not hold up to the speculative nature of the intended purchase (Schaar & Kampakis, 2022; White et al., 2022;). It is possible that consumers face contradictory beliefs about the NFTs they have purchased based on a series of factors that include the volatility of the market, the NFT brand value, airdrops and rewards, loyalty to brand and the value they see in the NFT itself. There are even consumers who have purchased NFTs which end up being a potential scam (Gilbert, 2022). In addition, there are multiple causes of cognitive dissonance which will be discussed.

Cognitive dissonance can be relative to NFT consumption in the post purchase stage of the consumer journey as consumers have to deal with a multitude of information that can impact their beliefs and behaviours. When consumers are looking to purchase NFTs, they have to process information around

which NFT marketplace to use, choosing a blockchain, and community persuasion as well as a range of different cryptocurrencies that can influence their purchasing decisions (Pawelzik & Thies, 2022). Another factor of cognitive dissonance was discussed by Bose and Sarker (2012) as socio environmental factors that impact past and present experiences. In NFT markets the consumer is coming into an alien environment where cognitive dissonance could occur during their purchase making decisions. As consumers are experiencing different customs, values and culture that deviate from the norm within a digital marketplace, cognitive dissonance that occurs can have an impact on the consumers opinion of a product (Bolia et al., 2016). Ultimately, consumers in these circumstances would regret not doing enough research within the pre-purchase stage, leading to regret in the post-purchase stage. A big impact on consumers during each stage of the consumer journey is their interaction with communities and virtual communities which is discussed in the next stage.

2.6.4 Community and virtual communities at each stage of the consumer journey

Virtual communities have seen individuals come together to form online communities around topics of interest in the form of fandoms, forums, chat rooms and social media applications (Preece et al., 2003). It is important to note that not all virtual communities require their community members to own NFTs. When observing virtual communities and the reasons many people congregate towards a shared interest, it's significant to look at other community structures to find similar styles of behaviour that have existed before NFT communities. This will help to explain the existing phenomenon of NFT virtual communities as it became clear communities, and virtual communities play an important role at each stage of the consumer journey,. Table 3 observes different types of communities that are related to NFTs.

Table 3
Types of virtual communities

Type of community	Explanation and link to NFT communities	Source
Fandoms	A fan group is an online setting where fans come together and are known as a fandom. A fandom involves a collective that have a shared appreciation of an object or pop culture. Some of the earliest forms of fandom on the internet were Star Trek and Grateful Dead fans that discussed topics within a community. Thus, a similar contrast to the NFT market can be traced back to the fandoms created and attended by consumers around fiction. It can be argued that NFT communities provide an evolved form of fandom where consumers can directly interact with the brand components through the consumer journey.	Baym (2007) Colicev (2023) Obst et al. (2002)
Forums	The internet introduced a number of bulletin and forum websites that created online virtual communities, this allowed interconnectivity of written posts on virtual boards of discussion. One of the most common modern online virtual communities is Reddit which presents a social framework platform that is driven by its community. The popularity around gaming subreddits that exist around The Elder Scrolls, Fallout and Civilization which date back to their creation in 1994. These communities thrived on the knowledge of fans, the commercialism and nostalgia that derives from the community, setting a framework that seeks to assist in understanding NFT communities. In direct contrast, NFT brands and communities can be linked to popularity around these gaming communities and how dedicated forums on older games still exist.	Anderson (2015) Bergstrom and Poor (2021) Weninger et al. (2013)
Gaming communities	Virtual communities and the selling of digital avatars, items, and odd trinkets can date back to massive online multiplayer experiences where consumers used Fiat currency within a game like RuneScape or World of Warcraft. These online virtual worlds allowed users to use real-world money to purchase game time, and in-game digital assets trading systems. Digital communities that were fostered in these popular MMO games came in the form of guilds which acted as factions of people banding together to take on quests. The NFT market has similar aspects to the digital e-commerce of these MMO gaming worlds where NFTs can take on the properties of gaming assets as digital assets. These digital assets are tradable, verifiable and not locked to a singular gaming platform.	Drachen et al. (2016) Watkins (2015) Yilmaz et al. (2023)
Memes in communities	Memes are cultural texts that convey messages or meanings created in a community that are easy to understand through social networks. In these social networks language through abbreviations such	Fai (2021) Howarth, (2022)

	as FOMO (fear of missing out), FUD (fear, uncertainty and doubt), GMI (going to make it), WAGMI (we are going to make it), GM (good morning) and GN (good night) are used frequently in online chat rooms. Memes garnish a new era of cultural engagement that impact hype cycles with humour and pop cultural references on social media. During market hype these memes help to generate interest and reposting through the technology orientated crowd and Gen Z Discords and social media.	Nepul Raj (2021) Wang et al. (2021)
Social media applications	Chat rooms can be considered one of the earliest forms of social media applications that brought people from like-minded interests together. Social media provides fans with additional means to engage with sports teams and organisations such as how Facebook allowed the National Basketball Association (NBA) to understand their fan motivations and help to strengthen their fan relationships. These chat rooms show early findings of communities that share similar traits towards NFT communities within Discord (which combines chatrooms, instant messaging, and forums all in one) and X.	Deller (2016) Manna and Ghosh, (2018) Stavros et al. (2014)

During the pre-purchase stage consumers observe communities around NFT brands. To better understand this phenomenon, Sarason (1974) coined the sense of community theory which explores why consumers form communities around shared interests. Expanding on this theory, McMillan and Chavis (1986) propose four elemental aspects, the first of which is membership and refers to being part of a collective with a feeling of belonging. Hence, community is established when acquisition of an NFT leads to membership access within an exclusive group (Brouard, 2024). The second element is influence where a group that is attractive towards an individual must have some form of control over the community to influence the individual member. Across NFT communities, influencers are able to shift market sentiments in the pre-purchase stage as consumers gather information on popular platforms such as X to provide positive reinforcement to the NFT brand (Yaffe-Bellany, 2022). The third is integration and fulfilment of needs; this means that in order to keep a group together and maintain a positive sense of community, there must be a reward for individual members. Within NFT communities, early adopters and holders are rewarded with additional NFTs or tokens via airdrop direct to their digital wallets that provide consumers with positive reinforcement towards staying within the community (van Slooten, 2022). This generates FOMO in consumers that are in their pre-purchase stage The fourth dimension is shared emotional connection which relates to the shared history and identification as a member of the community where a high level of interactions can lead to the possibility of forming close relationships (McMillan & Chavis, 1986). In NFT communities, people from all over the world are able to connect with other likeminded people that can go off to create additional communities, and they can even use the NFTs from a parent community in another brand-new NFT project (Howarth, 2022; Yilmaz et al., 2023). Ultimately, this links back to how consumers first came across this new digital asset class. NFT exposure occurs through communities by engagement, competitions to win free NFTs and free incentives for using blockchain technology (Fai, 2021). Thus, the pre-purchase stage is the entry point for consumers to learn about NFT technology, build lasting relationships and act as a gateway for digital purchasing in virtual communities.

During the purchase stage consumers can form strong bonds and networks within NFT communities (van Slooten, 2022; Yilmaz et al., 2023). The NFT purchase also grants access to exclusive networks and strengthens consumers resolve on a digital asset as they form closer relationships with the community members and team behind the project. This is a fundamental change from centralised institutions as consumers are able to directly interact with employees and owners of the community. Gilchrist (2000) explains that strongly built communities are created by the well-connected people and feelings of inter-locking relationships, wherein these communities sustain and shape the social dynamic of the environment. The symbolic attachment to communities can be related to the iconic example of Harley Davidson motorcycle clubs where communities have been formed such as the Harley Owners Group (HOG) (Schembri, 2009). A striking similarity exists in the consumer culture

of HOG and NFT ownership within virtual communities. It can be argued that this similarity exists between the ownership of a tangible Harley Davidson motorcycle and the intangible ownership of a CryptoPunk or BAYC NFT to become part of an exclusive community. Furthermore, the community and networking that takes place around Apple smart gadgets and products (Marzo & Tramontana, 2019) can also be comparable to networks which are created around NFT technologies. Catulli et al. (2017) states that proof of ownership is a necessary condition to be accepted into these marketplace cultures. Thus, links can be made between intangible assets of NFTs that share traits in common with physical assets within communities providing exclusivity and emotional attachment. The ultimate benefits of this networking can lead to longevous and potentially beneficial relationships between consumers which transcends these virtual communities of NFT brands. It's possible that during bear markets (and decline in NFT price) that NFTs holders will continue to have faith in the NFT project based on their relationship with the community and its members depending on relationships formed much like the members of HOG (Schembri, 2009).

As consumers evaluate their NFT purchases, they observe the functionality of the NFTs digital brand and community. In the example of BAYC, consumers that purchased these NFTs enabled them to be part of an exclusive club that provided several perks (van Slooten, 2022). These perks ranged from additional NFTs, token drops (granting consumers free tokens for holding the asset) and networking that allowed consumers to interact directly with the digital brand (Allen et al., 2023). It can be argued that this direct interaction is what can lead to more positive post-purchasing evaluation from the consumer when attempting to choose what to do with their NFTs. Rewarding consumers for holding NFT assets can provide a possible catalyst for forming strong brand loyalty between organisations and consumers. Hence, this can be witnessed as a nexus for a potential future which benefits organisations who choose to reward their dedicated consumers. Especially during bear markets when market sentiment on a project is at a all-time low, consumers that where heavily rewarded (van Slooten, 2022) and created strong relationships may choose to hold on to their NFTs. This type of reward for creators may not be possible with physical products or even digital items purchased from eBay or Amazon. This is because the technological powers of the NFT allow for the payment system to provide rewards directly to its consumers.

2.6.5 Consumer motivation at each stage of the consumer journey

Sobh and Martin (2011) discuss consumer motivation as a drive to purchase products which is impacted by marketing. The authors argue that consumer motivation theories add to CCT research by analysing the intrinsic identity of the consumer and how this impacts their purchasing experience (Sobh & Martin, 2011). Hence, this is a relevant discussion for assessing consumer motivation at each stage of the consumer journey. Thus, this study focuses on two main approaches of consumer

motivation, which include Maslow's (1943) and McClelland's et al. (1953) theories that can be prominently identified in the pre-purchase stage of the consumer journey.

Maslow's theory provides insight into consumers' need requirements in the eight Hierarchy of Needs (Maslow, 1943; McLeod 2007). These needs are presented in an ascending pyramid which, in order from bottom to top, includes physiological, safety, belongingness, esteem, cognitive, aesthetic, self-actualisation and transcendence. Maslow's theory argues that higher needs, such as self-actualisation and transcendence, are long term psychological needs rather than lower-level survival needs. In particular, self-actualisation (McLeod, 2007) has a strong connection to the motivation to purchase NFTs and can be argued to influence long-term self-fulfilment personal growth and peak experiences that can be obtained from NFTs in the form of digital identities. This also relates to middle order needs on the hierarchy such as belonging (McLeod, 2007) as the motivation towards part of community engagement and brand creation (Wang et al., 2021).

A suitable companion theory in the pre-purchase stage is the concept by McClelland on Achievement Motivation Theory (McClelland et al., 1953). McClelland's theory observes how the consumer is motivated by three predominant factors, which are the need for achievement, affiliation or power. McClelland et al.'s (1953) theory, specifically around achievement, is relevant to NFT consumption, which can suggest a consumer is trying to do better in relation to an accomplishment or goal. These consumers are partly driven to gain higher profit or benefit from a better NFT. Fai (2021) as well as Bsteh and Vermeylen (2021) have found, the quest for NFT consumers to seek out better quality traits and rare artifacts in the digital marketplace are linked to the achievement or goal setting established in McClelland's work. Colicev (2023) relates NFT value to the uniqueness and rarity of collectables that are driven by hype cycles (Howarth, 2022). Ultimately, understanding the volatile nature of hype cycles around bull and bear markets (discussed in Chapter 5) may lead to new research for appreciating the consumer journey of NFT consumption. For instance, a current hype cycle generates a lot of interest from consumers and Web2 brands as there is a lot of interest in new technology and financial returns. This can set the course for consumer motivation within the pre-purchase stage as NFTs are a new area of consumption providing profit and technology disruptions. In some cases, iconic brands (such as Gucci) collaborate on their NFT launch with an already successfully established NFT brand (such as BAYC) (Colicev, 2023). Although, this hype cycle is not without volatility of risk and reward factors. The current NFT market provides an opportunity cost for new entrants, where this volatile market can be both a risk and reward (Kong & Lin, 2021). Here lies the explanation of McClelland's achievement theory relevant in the pre-purchase stage as consumers are given opportunities at a variety of NFT options, new mints and knowledge. This motivates consumers to strive for better quality NFTs that can have unique, rare features.

The many NFT options are interplayed with a variety of information sources (such as newsfeeds like X and Discord) are used to find the best times to buy and sell digital assets (Mahmoudi, 2022). Naeem et al. (2021) argues that it's possible that X's ability to provide short news tweets is one such reason it is the most used social media platform for NFT and crypto discussion. This is supported with CCT research (Arnould et al., 2023) on fan communities and how consumers find experiencing market objects with friends, congregating with likeminded consumers within these communities. Other social media sites such as Instagram, YouTube and Reddit provide another source of transmitted media that is less utilised in the Web3 space due to increased levels of noise creating uncertainty of information (Ante, 2021). Another platform NFT consumers use is Discord which allow a closed online space of users that can interact without outside interference (Wagenaar, 2024). Within each Discord server, it is possible for consumers to interact directly with fandoms and businesses (Wagenaar, 2024). In essence, the Discord communities act almost like guilds or real-world virtual hubs (Drachen et al., 2016). Potential consumers during their pre-purchase are motivated by these communities, their benefits and members which leads to the next stage of the consumer journey.

During the purchase stage of the consumer journey, the customer drivers of engagement can be categorised further into intrinsic and extrinsic motivations. Hollebeek (2011) argues intrinsic motivations of the customer stem from internal desires, personal interests, values, hobbies and aspirations. Intrinsic motivations for NFTs can include social connection, self-expression, identity fulfilment, expressing opinions on digital platforms, and connecting with like-minded individuals or sharing experiences (Malthouse et al., 2016; White et al., 2022). Alternatively, Brodie et al. (2013) explains extrinsic motivations are driven by external factors such as incentives, rewards and social influence where CE is part of digital marketing campaigns, loyalty programs or exclusive offers. This is important to understand as the purchase stage motivations of NFTs is complex and warrants further investigation.

It is because of branding that NFT collections and digital assets have become a popular commerce product that adds to consumer motivation within the purchase stage. This is evident by the successful NFT collections such as the Bored Ape Yacht Club and World of Woman which are some examples of NFT projects that have tens of thousands of NFTs in turn erupting a large community base (Colicev, 2023). Both of these NFT projects have been linked to major brands such as BAYC with a BMW special edition branded luxury car (Skelton, 2024) and World of Women with production company Hello, Sunshine (Reece Witherspoon's company) to create potential feature films and TV series (Beyer, 2023). Essentially this generates consumer motivation and FOMO into these networks during the purchase stage. As the companies of BMW and production company Hello, Sunshine offer consumers genuine authentic and established brands, it helps to establish the companies of BAYC and World of Women in the lives of customers. This links back to the literature of brand equity and brand identity by Kotler and Keller (2016) which is relevant to how consumers evaluate NFT brands.

This also impacts the post-purchase stage of the consumer journey as consumers evaluate their purchase to hold their NFT assets even during tough times. In addition, partnerships between existing companies such as Adidas and Sandbox have been used as creative marketing tactics to ease existing companies into Web3 environments (AdAge, 2022). This is further enforced by the creative strategies of the company Budweiser which hosted in-real-life events, allowing NFTs holders to vote on the companies next merchandise drops and gain access to partner brand events (Colicev, 2023). These collaborations allow brands to tap into the many use cases of NFT technology and Web3 channels of communication of peer-to-peer consumers. This is especially important in the post-purchase stage of the journey as consumers are actively evaluating their NFTs, these creative strategies help to grant organisations strong bonds with their consumers. One could contend that both companies benefit from this collaboration through on-boarding new consumers and incorporating NFT technology. This can influence the consumer motivation towards emotional attachment and valuation.

The concept of emotional attachment and valuation of consumer motivation in the post-purchase stage can be further explored through self-determination theory. The self-determination theory (SDT) by Deci and Ryan (1980) observes human motivation in social contexts where the motivation is either autonomous or controlled. This is further developed by Ryan and Deci (2017) where they expand into SDT as the investigation of people's inherent growth tendencies and innate psychological needs. Ryan and Deci (2017) signify these needs as competence, relatedness and autonomy that construct growth and integration of personal well-being. SDT is an important theory to assist with understanding consumer motivation and behaviour change in NFT marketplaces as it helps to understand consumers psychological needs and environmental impacts.

As the current landscape of digital society and economies has evolved these motivational theories require re-evaluation to uncover new consumer motivations in NFT markets. Maslow's (1943) hierarchy of needs suggest that beyond basic needs consumers seek social validation and self-actualisation which is a prominent theme in NFT communities (van Slooten 2022). When observed through the theoretical lens of CCT, consumption of NFTs can reshape esteem and self-actualisation for online status and financial benefits of digital ownership (Arnould and Thompson, 2018; Arnould et al., 2023). Furthermore, McClelland's achievement theory (1953) explains how consumers use NFTs as status symbols, social connections and exclusive access to communities. Here, CCT examines the marketplace structures and cultural narratives of community driven projects like BAYC, that is socially constructed by media, influences and brand narratives (Arnould et al., 2023). SDT provides further complexity as consumer engagement of NFTs is overserved as personal fulfilment, financial speculation or cultural. Here, CCT observes purchasing NFTs for 'art' would be broken down in cultural discourse, influencer marketing, speculation that shapes this enigma as authentic engagement (Arnould et al., 2023)

Hence, the motivational process of purchasing NFTs warrants conceptual investigation at each stage of the consumer journey. This is strongly tied to how consumers face a radically different journey in pursuit of their NFTs from traditional product purchases. For instance, consumers in Web3 markets are motivated to find sources of information about NFTs through social media platforms and virtual communities (Colicev, 2023). To assist in understanding the consumer journey in the new phenomenon, of NFTs, motivation theories such as Maslow's Hierarchy of Need, McClelland needs theory and SDT provide a valuable conceptual foundation. When examined through the theoretical lens of CCT (Arnould et al., 2023) customer journeys can be better understood to find why customer experiences are sought, valued or hated. These combined theories assist in explaining the psychological drivers of CE, identity and value in a shifting ever changing market of consumer motivation to purchase NFTs.

2.7 Conclusion

This chapter has reviewed the body of literature around NFTs and the consumer journey of NFT consumption. CCT was used to establish the theoretical framework in which this thesis is situated. Firstly, this chapter established the transition towards digital consumption from the Industrial Revolution to the evolution of the internet from Web1 to Web3. Secondly, the evolution of digital items, assets and tokenisation is explained to give further context to the digital technology that encapsulates NFTs. Thirdly, the product characteristics of NFTs are explained by comparing differences between intangible, tangible, Fungible and Non-Fungible product offerings. Fourthly, CCT is used to establish the theoretical foundation of this thesis with four key structures that include consumer identity projects, marketplace culture, socio-historical patterning of consumption and mass mediated marketplace and consumer ideology. Lastly, this chapter concludes with the consumer journey of NFT consumption, which is documented in pre-purchase, purchase and post-purchase stages. The following chapter discusses the methodology of the study.

Chapter 3: Research Methodology

3.1 Introduction

The previous chapter presented a detailed review of the literature on NFTs as digital assets, the relevance of CCT and the entire consumer journey. This chapter addresses methodological issues that underpin the research to understand the lived experiences of participants in their journey towards NFT ownership and consumption. Specifically, this chapter will justify the adoption of qualitative methodology situated in phenomenology. This is followed by discussion on the use of in-depth interviews, data collection methods, sampling, research credibility, and plan of data analysis. Finally, the last section deals with the ethical considerations of the study.

3.2 Theoretical research paradigm

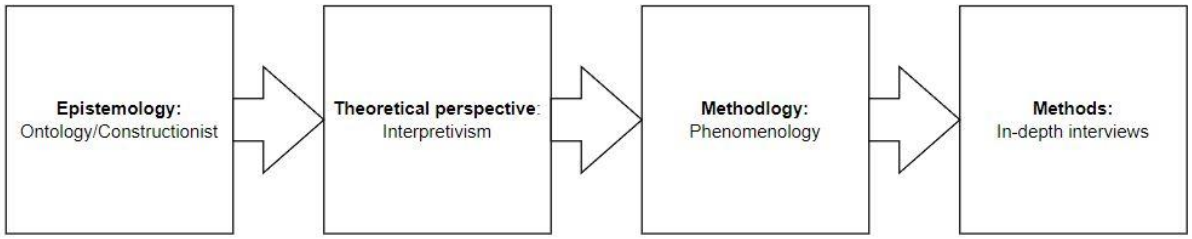
An overview of research philosophy is important to rationalise the chosen methodology of this study. To achieve this, the research aims, the questions used, and methodology chosen should all remain consistent within the grasp of the researcher's personal philosophy (Burrell et al., 1979). Research philosophy consists of two concepts which are ontology and epistemology. As described by Burrell et al. (1979), ontology relates to whether reality is the product of one's mind, specifically observing the researcher's view of reality on the research. Alternatively, Stevens et al. (2010) explains ontology in general terms as a description of things in the world that exist. This study takes a stance in relativist ontology that rejects the existence of any possible correct reality (Crotty, 1998; Dieronitou, 2014). Accepting this mindset, Stahl (2003) states the researcher no longer thinks of objective reality but rather observes signs of meaning and discourses of narratives that share descriptions of ourselves within the world.

The second assumption is defined as epistemology (Rosenau, 1991) which focuses on the knowledge that exists within the world, being the nature, limits of inquiry and validity which lead to gaining knowledge. Epistemology consists of three positions which include objectivism, subjectivism and constructionist (Crotty, 1998). Objectivist epistemology is the meaning of objective truth within reality and things that exist independently of consciousness (Crotty, 1998). The polar opposite philosophical position is subjectivism, described by Crotty (1998) as a postmodernist form of thought that is imposed by the object rather than the subject. Here, Schwandt, (1997) relates this to a personal opinion of feelings, attitudes and beliefs. Thus, objectivism and subjectivism share different views on how phenomena can be explored. For objectivism this relates to the reality of things, and as for subjectivism this relates to the personal opinions of the consumer. This research however adopts a stance in constructivism as its epistemological viewpoint. Constructionists observe what exists within

their surroundings, believing that “meaning is not discovered, but constructed” (Crotty, 1998, p. 9) leading to meaning being created in different ways, regardless of the same phenomenon. Figure 3 presents the theoretical research framework of this study between epistemology, theoretical perspective, methodology and methods. These will be discussed in the following sections.

Figure 4

Theoretical framework of research design (adopted from Crotty, 1998)



3.2.1 Constructivism

The origins of constructivism are defined by Oxford (1997, p. 36) as the “philosophical belief that people construct their own understanding of reality” sharing underlying roots with ontology and epistemology. As outlined by Crotty (1998), the notions of objectivism and positivism contrast in relation to constructivism. While the concept of objective truth and objectivism provides a focus on independent consciousness, constructivism focuses on the individuals concept of knowledge and making sense of the world and their past experiences, all within their mind (Crotty, 1998).

The constructionist stance taken in this research has parallels with the narrative framework of performance, meaning and social positioning (Holstein & Gubrium, 2013). Stahl (2003) defines constructionism as the belief that the world is a social construct where reality is the result of social interaction that needs to be constructed by its observers. Alternatively, Heritage (2013) explains that constructionism examines everyday life and human interactions. Holstein and Gubrium (2013) discuss how the talk and interaction of everyday life acts as an engine that fuels the discourse process where the constructionist researcher not only watches but also listens to further document the reality that is being produced. The narrative framework acts to ‘construct’ aspects of the researcher’s social life and reality in an organised and formulated interaction. As consumers adopt new blockchain technologies and digital wallets to purchase NFTs their decisions in their social networks are affected during the consumption journey. The constructionist stance acknowledges meaning, reality and knowledge are not fixed but constructed through the culture, language and consumer participation which is preferred in qualitative (Heritage 2013) research and fields such as CCT. Thus, a constructionist stance will investigate the consumer through the pre-purchase, purchase and post-purchase stages to better understand the cultural context of their NFT consumption journey..

3.2.1 Interpretivism perspective

The previous section provided the constructionist stance of reality and social world view of which this research adopts. This section focuses on the theoretical perspective of the interpretivist perspective that Blaikie (1993) observes as a social reality that is a product of processes where social actors find meanings for action and situations. Alternatively, Hammersley (2013) describes the interpretivist perspective as a method that separates the understanding of knowledge and physical interpretations which cannot be the same. The interpretivism perspective states how meaning and reality are interpreted by individuals and shaped from their consciousness. Whilst the origins of interpretivism focus on positivism (Crotty, 1998) attempting to explain the social context of individuals, it is also grounded in relativist ontology (Creswell, 2007). Here, interpretivism provides the notion that there are different realities in social contexts that require different methods of interpretation (Crotty, 1998). This research concerns itself with a new phenomenon of NFT consumption that is both complex and unique which requires avoidance of generalising to a whole population (Creswell, 2007). Through the theoretical lens of interpretivist perspective, the behaviour of NFT purchasing participants can be observed as being affected by social pressures which ultimately impact their decisions.

This research aims to explain consumer motivations, unique features of NFT preferences and valuation placed on NFTs by consumers within their consumption journey. The interpretive perspective assists in understanding the complex social processes and social reality that emerges within NFT consumption, making it an appropriate perspective for this study. Furthermore, this research allows these findings to originate from participants that have lived experiences actively purchasing NFTs. The researcher is an active observer of the NFT consumption journey with a focus on questions of 'how' and 'why' which is the basis of how this study operates. These observations can be feelings and emotions or even social interactions; as these concepts are difficult to understand through quantitative research, the use of the interpretivist perspective and phenomenology methodology assist in providing a respectable outcome to this research.

3.2.2 Qualitative research approach

The analysis of the extant literature highlights studies that focus on CCT and the motivation theories that explain consumer purchasing of NFTs. Despite the growing volume of research on NFTs, only a few studies (Colicev, 2023; Yilmaz et al., 2023) have attempted to understand the consumer journey of NFT consumption through quantitative research. This study adopts qualitative research to better understand the motivation and behaviour of consumers in their consumption journey of NFTs. The qualitative approach to research has been chosen as it has advantages by allowing the selection of quality applicants to illuminate subjective meaning, actions, and contexts of those being researched (Fossey et al., 2002). The main aim of qualitative research is to address questions of meaning and

experience related to human lives (Fossey at al., 2002). Good qualitative research is when participants can give subjective meaning through their words, actions and social worlds.

Qualitative research has its focus on three key areas: First is language, being a way to observe patterns of interaction and to understand the communication between social groups. The second is description and interpretation, which are related to subjective meaning and are linked to actions and situations. Lastly is theory-building, which examines patterns and connections in qualitative data (Fossey at al., 2002). Testing methods such as mixed methods as well as quantitative studies of NFT consumption are difficult to conduct due to a lack of empirical research within this new field of study (Colicev, 2023; Fai, 2021; Wang et al., 2021; Yilmaz et al., 2023). The use of qualitative studies helps to explore the area of NFT consumption as currently there is a lack of pre-existing knowledge. By doing a qualitative study it will allow a deepening and solidarity of the research around the topic of NFT consumption. It is important to state that broad research questions are focused upon within the study to both investigate and help identify the initial focus of the research, rather than testing specific hypotheses, which is consistent with the research philosophy.

The aim of this study attempts to understand the topic of NFT consumption from pre-purchase to the-post purchase stage as well as understanding the NFT consumer journey. At its core, qualitative research is made to be flexible; this enables questions within a study to evolve relative to the research setting and how the data has been examined (Tesch, 2013). As the area of NFT research is a new phenomenon it is significant in its own right as relative and interesting.

Ivankova et al., (2006) suggest the types of data collection that would be present in the qualitative phase include in-depth interviews which will be incorporated within this research. This study includes the constructs of consumer culture and motivation theory associated with NFT consumption. These constructs have been critically researched and reviewed to ensure that quality results and relevant constructs are covered during the interviews. While there have been other studies within this field, few qualitative investigations exist that cover the relationship between the entire consumption journey of NFTs and the consumer. A comparison between these two constructs will be explained in detail in this chapter. The next section will discuss the research reliability and validity of the study.

3.2.2.1 Qualitative research reliability and validity

The quality of the research has been assessed using Tracy's (2010) qualitative quality criteria. Tracy's (2010) criteria for quality in qualitative research include worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics and meaningful coherence. Through these guidelines, the criteria assist crafting a path to expertise, especially useful for understanding the new phenomena of NFT consumption. In relation to this study the relevant criteria for qualitative rigor ensuring reliability and validity of the study. First, worthy topic is discussed by Tracy (2010) as one that is relevant,

timely, significant and interesting practically and theoretically. The topic of NFTs and the consumer journey is timely and a culturally relevant phenomenon that warrants further information (Colicev 2023; Peres et al., 2023; Hofstetter et al., 2024) given the growing market cap of 18.29 billion since the growing boom in 2021 (Wang et al., 2024). The validity of the research is strengthened as this research contributes to existing theory, practical implications and addition to knowledge.

Second, rich rigor involves data collection methods, appropriate theoretical constructs and in-depth analysis that supports the research aims (Tracy, 2010). This research demonstrates rich rigor by the 25 in-depth interviews conducted and its hermeneutic phenomenological approach. Richness of the research was further ensured through reflexivity supporting credibility and depth of the study. This ensures reliability which enables the researcher to be consistent and provide stable results that remain relevant. Issues of reliability can arise when accidental changes occur through the measuring instrument. An example of this is when questions are changed due to misinformation. The researcher made sure to keep questions clear and repeat information in the event misinterpretation was presented to increase reliability of the study. Interviews were anticipated to last between 45 minutes to an hour, however there was an opportunity to extend this time if required. To assist the researcher in conducting interviews that lasted for the expected time, it was important not to conduct more than two interviews per day. This ensured that even if interviews went overtime, there was adequate focus from the researcher to document effectively. Issues of reliability can arise when accidental changes occur through the measuring instrument. An example of this is when questions are changed due to misinformation. The researcher made sure to keep questions clear and repeat information in the event misinformation was presented to increase reliability of the study. Furthermore, issues can arise due to fatigue from the conduction of long interviews around NFT consumption, where false changes in documented answers can create inconsistencies (Creswell, 1994). Interviews were to last between 45 minutes to an hour, however there was an opportunity to extend this time if required. To assist the researcher in conducting interviews that lasted for the expected time, it was important not to conduct more than two interviews per day. This ensured that even if interviews went overtime, there was adequate focus from the researcher to document effectively. Ultimately, the reliability and validity of this research provides justification for using a qualitative methodology for this thesis.

Third, the sincerity is demonstrated through honesty, transparency and reflexivity as it acknowledges the researchers influence on the data. This research meets the criteria by its reflexivity documentation which explains the researcher's role in the process of this research. This helps to articulate the validity of the study by ensuring that the interpretations of the researcher are not just preconceptions. Fourth, resonance refers to how emotionally or practically the research reaches its readers to ensures the research is impactful and meaningful. Hence, the findings of this research aim to evoke resonance by presenting detailed narratives of participants to see the nuance and consumer identity in Web3 marketplaces. This was particularly important with the research implications for academic knowledge

and practical use cases where understanding the NFT consumption journey is a paradigm change in our culture from a more centralised industry to decentralisation. Lastly, a significant contribution means that the study adds value to existing knowledge (Tracy, 2010). To achieve this criteria, the research makes a theoretical contribution to decentralised digital economies and practical implications for brands, marketing firms and creators. This enhances reliability by how the research advances the theory and practice of consumer culture and understanding customer journeys for NFT consumption.

3.2.2.2 Justification of qualitative methodology

The aim of this research is to understand the consumer journey of NFT consumption and discover the underlying motivations of consumers in NFT markets. When observing the research problem and aims, it becomes apparent that qualitative methodology is appropriate for this study. Elaboration on other compelling reasons are listed below:

- There are currently scant or few empirical studies that examine the experiences of the consumer journey around NFT consumption (Colicev, 2023; Wang et al., 2021; Yilmaz et al., 2023). Thus, to be able to expand on the topic of digital assets and ownership, qualitative research uncovers meaning through in-depth interviews and probing that may not be available with other approaches.
- The subculture that exists within digital communities around NFT projects requires further clarification and understanding. The globalised nature of these digital communities invites potential consumers from every internet-accessible country in the world, each consumer with their own world views and culture that stands in need of exploration (Barbereau et al., 2022). Hence, the results from the qualitative study can provide richer data and insights from individuals within NFT subculture and community.
- The complexity of this study and how it focuses on exploring ownership of digital assets, the consumer consumption journey, digital and physical culture, and motivational elements surrounding NFTs involves a thorough investigation.

It is important to discuss the strengths and weaknesses that are associated with qualitative methodology within current literature to explain why it has been chosen for this study. A number of advantages exist for qualitative research. Qualitative research produces detailed responses from participants ranging from their opinions, experiences, feelings, and the interpretation of these meanings (Rahman, 2016). Furthermore, Chalhoub-Deville and Deville (2008) argue that qualitative research is designed to acquire deeper understanding and insights into administering, designing and interpreting language that is presented to the interviewer. Qualitative research makes understanding of the human experience in unique settings (Rahman, 2016). The study is focused on a specific setting of digital communities and the digital assets of NFTs which further reinforces the strength of employing

qualitative research. In addition, qualitative research seeks to observe the participants inner experiences and touch on the meanings that are shaped by unique cultures and subcultures (Rahman, 2016). The flexible nature of design that qualitative research allows to be constructed and reconstructed provides freedom to each of the participants to determine what experience is consistent for them (Rahman, 2016).

In light of the advantages of qualitative research, there also exist a number of limitations. Low credibility can also result from policy makers as qualitative research may neglect social and cultural variables previously studied and additionally, interpretations of data may vary between researchers (Rahman, 2016; Silverman, 2013). Moreover, the reduced sample size in qualitative studies may raise issues and generalisations to a broader population and context (Rahman, 2016). Finally, analysis of the research may take a considerable amount of time, as well as be more resource intensive and limited in the feasibility of larger scale studies (Rahman, 2016; Silverman, 2013). Next, the reliability and validity of this study will be explained.

Taking all these factors into account, qualitative in-depth interviews provide the most thoroughgoing research choice for this thesis. The subsequent sections showcase the ethical considerations and methodology of phenomenology in which this research is grounded.

3.2.3 Ethical considerations

Ethical responsibilities play an important part in every research project. The research ethics around participant's behaviour and rights have been established by the researcher in accordance with established rules and standards (Israel & Hay, 2006). The two main ethical issues of this study include confidentiality and informed consent (Corti et al., 2000). Prior to the participants agreement of participation in the study, the researcher is responsible for informing the participant about the research objectives and their protection of privacy and confidentiality. This dates back to the Nuremberg Code of 1947. Shuster (1997) states the significance of The Nuremberg Code as a blueprint for today's science experiments around the world. Shuster explores the significance and authority of the code and how the voluntary consent of human subjects is an essential practice to any experiment or test (Shuster, 1997). In conducting this research study, each participant was informed prior to starting their interview on what this research entails and how each respondent would be anonymous (see Appendix B and C). To assist with this, the researcher encouraged participants to turn off their camera to support anonymity. Each participant interviewed was given a detailed explanation of the benefits and burdens of the research. It is also important to note that each participant was informed of their welfare, rights and how it would sit within their cultural context regarding the testing of outcomes for each in-depth interview (Fisher, 2012). Ethics approval was provided by Victoria University and the approval number is HRE22-148 which is cleared for the study to take place (see Appendix A).

3.2.4 Phenomenology

The methodology of this study is phenomenology. This methodology has its origins in the research of Edmund Husserl (1970; Husserl & Moran, 2012) who explains that within phenomenology, objects in the external world do not exist independently nor are they reliable. Essentially, phenomenological methodology is an attempt to describe a phenomenon in how it appears; it is an attempt to get to the truth and how this truth manifests within human consciousness (Moran, 2002). Van Manen (1984) argues how the phenomenological approach focuses on descriptions of what people experience while analysing how and what they experience. Alternatively, Creswell (2013) defines phenomenology as the essence of an experience that allows for the study of a specific encounter to make meaning out of a person's relationship to the world and their surroundings. Phenomenology requires researchers to remove their own knowledge, theories, and beliefs to obtain the truth of the matter by ignoring anything unrelated (Creswell, 2013). Due to the researcher separating themselves from the data within this thesis, the validity of phenomenology methodology in assisting to understanding the consumer journey of NFT consumption is strengthened. Ultimately, phenomenology will clarify what experiences are influencing consumer purchasing decisions at each stage of their journey.

The literature surrounding phenomenology consists of two types of concepts which include phenomenology and hermeneutic phenomenology (van Manen, 2016). Phenomenology explores and describes lived experiences (Christensen et al., 2017) while hermeneutics describes how lived experiences are interpreted and used to develop practical writings (Sloan and Bowe, 2014). To avoid confusion, this study takes a stance around the hermeneutic phenomenology research of van Manen (2016).

Hermeneutic phenomenology by Max van Manen (2016) explores the approach that language, such as language within interviews, reveals the participants' existence within cultural contexts and exhibits means for research data. Here, the researcher moves in a "hermeneutic circle" (Langdridge, 2007) around the whole text to find the truth by interpretating and discovering new information (Sloan & Bowe, 2014). By moving in this circle, the researcher is providing credible references and more thorough understanding to the individuals relating to the whole document (van Manen, 2016). The phenomenological approach of this study remains descriptive and underpinned by lived experiences (van Manen, 1984, 2016). The experience from the researcher is presented as reflexivity recognising preconceptions and own experiences of the researcher shapes the interpretation of data (Grbich, 2012). while the findings focus on describing participant experiences rather than their interpretation. This will be discussed later in the chapter.

Moreover, hermeneutic phenomenology requires the researcher to reflect upon the examination of each participants experience to assist in adding value to the interpretations of the NTF consumption journey. This is to ensure full transparency between the researcher and interviewees on the topic of

purchasing NFTs and digital assets recognising the researcher's role in the interpretive process. Granot et al. (2012) argue that this enables researchers to understand consumers thought processes, values, aspirations, and life stories within the context of their individual experiences without researcher prejudices. Thus, the hermeneutic phenomenology is adopted by this research to provide a co constructed create greater transparency between participants and the researcher.

Van Manen's (2016) hermeneutic phenomenological approach, which investigates lived experiences and perceptions, provides a framework for understanding the essence of individuals interactions with NFTs. Furthermore, the framework delves into the meanings and reflections of participants personal experiences. Here, qualitative research methods of in-depth interviews aim to uncover the underlying patterns and structures that shape this engagement of NFT consumption. These interviews are beneficial when participants are motivated to express "think descriptions" on their thought paths (Granot et al., 2012) and decisions to gain meaning and obtain a deeper understand of this new behaviour of NFT consumption. Ultimately, phenomenology methodology underscores consumer consumption in a digital age, illuminating the phenomenon of NFTs that both shape and are shaped by the individuals who consume them. The next section discusses the methods of in-depth interviews that will be used in this study.

3.2.5 Methods: In-depth interviews

In-depth interviews are defined by Minichiello et al. (2008) as face-to-face meetings that are repeated between the researcher and participant with questions directed at understanding the participant. In-depth interviews require careful planning, a comfortable setting, and an understanding of recording the data and transcript (Adams & Cox, 2008). The main purpose of an in-depth interview is to understand the feelings and emotions of the participant and use appropriate questioning that enables the researcher to get inside the participants head (MacDougall & Fudge, 2001). In-depth interviews investigate open-ended conversation (Minichiello et al., 2008) with the purpose of discovering the motivation of consumers' consumption of digital assets, specifically NFTs. The in-depth interview takes a question-and-answer format to obtain reflective accounts of interviewees. This enables researchers to think of both their perspective as well as the interviewees perspective and in turn tailor the interview as a natural and organic conversation. Thus, in-depth interviews greatly enhance this research, where the researcher attempts to understand the participants' degree of disparity between specific purchasing methods and traits (Adams & Cox, 2008; Ivankova et al., 2006). The decision to use in depth interviews aligns with the hermeneutic phenomenology (van Manen, 2016) and ensures the study is grounded in the lived experiences of the participants. Given this new field of NFT consumption, in depth interviews allow participants to be free of social pressures that may occur in focus groups (MacDougall & Fudge, 2001). In addition, to capture the experiences and motivations of consumers in depth interviews provided this direct access rather than observations, which are more

useful for understanding consumer behaviour (Ivankova et al., 2006). Furthermore, textual data on Discord and Twitter can generally be driven by community and expectations (in group chat rooms), where in-depth interviews provide richer engagement with participant experiences (Adams & Cox, 2008) and an opportunity to discuss all aspects of the journey that is best derived from a one-on-one in depth interview. The interviews of this study were initially aimed to be 30 to 45 minutes in length, although when conducted participants ended up talking from 45 minutes to three hours. Interviewing stopped once saturation was reached. In alignment with many consumer studies on complex topics involving in-depth interviews generally have smaller sample. Guest et al (2006) discusses how 60 in depth interviews where conducted where saturation occurred at 12 in-depth interviews, hence a large sample size does not necessarily bring greater insight.All interviews were recorded via Google Meets and transcribed accordingly with Microsoft Word Online.

The in-depth interview questions have been inspired by Watkins (2015) research into digital possessions which sought to understand consumers' technological attachments. Watkins (2015) has provided insight into digital possessions for this qualitative study as the subject of NFT consumption can be related back to her findings. To complement this, the next section will discuss the researcher's journey and bracketing techniques that help to set a foundation for strong in-depth interviews completed for this research.

3.2.6 Researcher responsibility

The goal and responsibility of the researcher, as discussed by Johnstone (2004), is to observe within the realm of reality a possible outcome to an existing problem that is causing an issue within the scope of the study. The researcher is responsible for constructing the entire research design in correspondence to the concepts and variables before the study can commence (Johnstone, 2004). Thus, a relationship exists between the researcher and what they are researching. Creswell (1994) states that it is important that the researcher is able to detach his or her assumptions from the study at all times. This follows the constructionist approach where the research is free and unbiased, showing a detachment from the researchers' personal values and partiality. It is thus the researcher's job to ensure that an objective viewpoint is established on their interpretation and a reflexivity provided. The outcome of the study should be based on the facts that are presented (Creswell, 1994; Patton, 2005). This leads to the notion of what constitutes truth within research and how it is implemented.

3.2.6.1 The researcher's background

I consider myself a collector that at times has an urging desire to purchase, consume or collect various objects of interest that are a combination of tangible and intangible objects. Thus, this topic is remarkably interesting to me as I believe NFTs held as digital assets provide a unique area to explore

and are an alternative to physical assets. Leading back to myself and my desire to purchase and collect objects is a very personal matter that I want to explore and understand on a deeper level. I hope that others would also benefit from this research where I aim to find important and significant factors that shape the consumer journey of NFT consumption and ownership.

Growing up on a farm away from the city made my childhood a lonely experience, where having material objects kept me from being bored. From a young age, to alleviate that boredom, I enjoyed purchasing objects to entertain myself. I liked to collect items of interest, starting with stickers, music in the form of records, tapes and CD's, cards, posters, and games amongst other things. I have subsequently taken these traits into adulthood. I find satisfaction in collecting books, exclusive collector edition sets, digital objects and media - I feel there is a need to explore this satisfaction with the acquirement of digital assets.

As time progressed, I realised the way I consumed was changing. A digital space had been created where digital media, storing movies and video games had created another more complex environment where I no longer interacted with a physical object. Having witnessed the change of digital collecting and this digital environment evolve throughout my life, it has become important to me. In my late '20s, I discovered the ground-breaking technology of NFTs. A benefit of NFTs is that they provide significant improvements to the world of digital consumption and how organisations implement digital assets into their businesses. Aside from academia, I have a great passion for film making and working within Web3 infrastructure.

I consider myself a film maker at heart, having grown up with a strong passion to create striking visuals within the art of cinema. Web3 and the power of NFTs dramatically changes the current trend of entertainment media and art in which this study aims to explore. I believe that NFTs can acts as items of true digital ownership; for example, an NFT could be a movie where consumers can ultimately access a film library of their own that will not be tampered with and which they will be able to retain outside of third-party interference. I hope that this research better demonstrates the prominence of NFT consumption, and that individuals and organisations realise the current and future potential of this technology.

Whilst I have been connected to working within Web3 companies and have a passion for NFT brands, I made certain that I remained detached from the research and any biases to better understand the NFT consumption phenomenon. To assist in detaching myself, I used bracketing techniques of memos and journals to enter interviews with a neutral position towards each of the questions. My intention was to probe further into keywords conveyed by participants that covered the aims of this study while remaining objective. I attempted to ask about both the positive and negative aspects of NFTs, and I did not intentionally show any bias towards the NFT technology, rather I let the participant talk.

3.2.6.2 Reflexivity

I acknowledge my role as an active participant in NFT consumption and researcher in the process of this thesis. As someone with prior experience in the field of digital assets, cryptocurrency and NFTs my initial assumptions where shaped by my personal experiences working for NFT communities and my role as an academic student of marketing and business. Through this, I remained attentive to my experiences that may influence the data collection and analysis of this studies methodologies.

Throughout the course of this study, I engaged with continuous self-reflection by keeping a reflective journal, which allowed me to critically examine my changing interpretations. I embraced hermeneutic phenomenology, which focused on preconceptions that assisted my understanding of this emerging new digital field of NFTs. My interactions with participants were shaped by careful consideration of framing research questions as both a researcher and interpreter. This also allowed me to reflect on myself, my own purchasing and trading of NFTs which I consider to be a very big part of my life. Finding NFTs, communities and interacting on virtual communities around popular NFT brands set me on a new path and frontier of the power of digital assets.

Once I began the analysis stage of this research, I remained mindful of my background, culture and theoretical understanding when identifying themes. Here, I reflected on my journal for insight in challenging my assumptions and meaning. This made me approach the findings with interpretations that remained grounded in participants lived experiences that were consistent in thoughts and feelings felt during the interview process. I realised that participants' experienced differed and hence thought that there may be a need to identify the types of consumers that were actively purchasing NFTs. As an active participant myself, I saw the future benefits to organisations and marketers. This sparked my desire to verify the codes of data from my lengthy transcripts. In addition to my reflective journal which assisted my feelings at the time I was able to create detailed themes based on discussion and similarities that multiple participants spoke about. As I grouped the data, I found myself reading over transcripts multiple times and finding 'golden nuggets' of passages and information that aided and assisted my own journey. I was able to document discussions in my reflective journal on topics that participants did not feel comfortable sharing.

3.3 Data collection

The interviews were conducted via the online communication service of Google Meets for several reasons. Firstly, as NFT brands take place in virtual communities, it made sense that the study interviewed participants using a virtual platform. Secondly, this allowed participants from all over the world to be interviewed. The outcomes of this research can assist organisations and Web3 companies in understanding the motivation and purchase intentions of NFT consumers. The participants would be able to access their interviews by emailing the researcher and a copy of the transcript could be sent

to the participant. As the researcher is hard of hearing, the closed caption option of Google Meets provided the best method to ensure nothing was missed during each interview. The chosen participants were selected from digital communities (such as Discord) where all participants had experience with NFT purchasing. These interviews were conducted over the timeframe of two months from November to December 2022, and included participants from around the globe, ensuring a geographically diverse sample.

The interviews were semi-structured, with 17 open-ended questions that each had between one to two prompts (See Appendix D). As the interviews were taken from virtual communities, pseudonyms were created to make all interviewees anonymous. In some of the interviews, the researcher went beyond the scope of the listed questions to develop key constructs that the researcher felt needed to be explored further. This is also partially due to the emerging field of NFT ownership and how new themes and constructs can come out of free-flowing discussion in a semi-structured interview. This enabled the researcher to explore many avenues of discussion that would otherwise not have been discussed within this research. The researcher remained within the scope of ethics by explaining to each participant that this could be a possibility before interviews began.

3.3.1 Interview guide

Semi-structured interviews allowed the researcher to create questions around the beliefs of the participants and then branch out on keywords that arose from the discussion. The interview questions were separated into four categories (sections) that were connected to the CCT theoretical structures of Arnould and Thompson (2005). This connection was enacted in the thesis to provide a better understanding of each of the stages of the consumer journey that link to the CCT framework. While each stage of the consumer journey has been aligned with a CCT structure, the couplings are not rigid or exclusive (and may provide multiple overlapping) which the interviews would unravel. These couplings were initially made in a non-exclusive manner to simply assist in digesting the concepts explored within the thesis. These couplings allows the study to highlight conceptual linkages on consumer culture evolving at each stage of consumer journeys in NFT marketplaces. The first category is the pre-purchase stage and is coupled with the social historic patterning of consumption. The interviews consisted of three questions with two to three prompts each. This coupling was made because consumers are shaped by historical and cultural consumption patterns which are vastly important to consumers decision-making during their pre-purchase stage.

The second category is acquisition and possession and is coupled with marketplace culture. The interviews consisted of four questions that each had between one and four prompts. While marketplace culture is a broad category that discusses the entire consumption journey, it was linked with acquisition and possession for a few reasons. Firstly, once acquisition and possession of an NFT is obtained, it gives the consumer a much larger span of access into digital marketplace culture

(Colicev, 2023), including exclusive digital communities. Secondly, because of the nature of digital assets, marketplace culture has shifted greatly in that the properties of these digital items have the potential to provide limitless functionalities that cannot exist in the same way as centralised and physical marketplaces (Fai, 2021). This encompasses things such as brand interaction, peer to peer interactions and basic transactions all in a digitalised space.

It is important to note that in the preliminary stages of Appendix D, there were initially four categories where acquisition was separate from possession. However, during the formation of this thesis, it was discovered that it made more sense to combine acquisition and possession into one stage, thus creating only three categories. This decision was made based on the specific patterns of NFT consumption as identified through research and the interview process. The last category is post-purchase evaluation and behaviour and is coupled with consumer identity projects. The interview consisted of six questions with either one prompt or no prompt if it was not required

This coupling was linked for a few reasons. Firstly, within digital NFT communities the individual consumer is strongly encouraged to make a post-purchase evaluation of using their owned NFT as a visual representation of their consumer identity. This visual digital identity encompasses their digital status (van Slooten, 2022). Secondly. consumer behaviour is also affected through consumer identity projects involving smart collectibles (Fai,2021) such as in NFT brand communities (Colicev, 2023). Consumers use these resources within NFT platforms to construct and express their digital identities in online communities. It is also important to note that this category was originally called the post-purchase stage and was updated to be called the post purchase evaluation and behaviour stage as the thesis unfolded.

All interviews were recorded and transcribed with Microsoft Word Online. The researcher ensured that each participant could turn off their webcam if they desired for the duration of the recorded interview. This enabled participants to be relaxed in an environment where they felt safe and were able to discuss topics with the option to be visibly anonymous. Each of these participants were informed that the interview would go for 45 minutes to an hour. Of the 25 participants, 4 participant interviews were between 45 minutes to an hour, 11 participants interviews went for over an hour, 5 participants interviews were over an hour and a half, 4 participants interviews went for over two hours and 1 participant went for nearly three hours (due to the participants extreme passion for NFTs).

Patton (2005) explains the importance of a research guide for a list of questions in order to make interviewing a number of different people more comprehensive and systematic, in turn stream-lining new experiences that emerge from the interviews. This allows the researcher to make use of limited time in some interview situations. Furthermore, Adams and Cox (2008) explain the rules for eliciting different types of questions. Thus, for this study, simple factual questions of ‘yes’ and ‘no’ responses were excluded to encourage more in-depth responses from participants. In framing interview

questions, the use of complex factual questions, opinions and open-ended questions were used to obtain large amounts of data that were specific to each participants world view and behaviour regarding NFT purchasing. Each interview was kept as semi-structured to ensure the flexibility of probing questions and thus gain a better understanding of the new phenomenon of NFT consumption. The researcher ensured not to interrupt the participants, however in a number of situations, due to cultural and language differences for example, there were extended pauses where the assumption by the researcher was that the interviewee had finished their response, when they actually hadn't. This was also impacted by the fact these interviews were conducted online with the camera off so the interviewees' facial expressions could not be gauged. In these few instances, the researcher made sure that the participants could explain in full what they were going to say.

The researcher adhered to follow this interview guide to assist when questions were asked to participants. However, a few exceptions were needed to be made. Firstly, in some interviews, participants answered questions in too much detail that resulted in the next question being explained. Here, the researcher felt he did not need to ask that specific future question to avoid repetition. Interviews went on for longer than the initial 40 minutes in most cases as the participants responded to questions in detail. While this exceeded the initial duration, the researcher felt the responses were detailed and decided to let each participant finish talking. Secondly, in some of the interviews there was a language barrier that led to rewording or further clarification of some questions. In addition, it was found that some questions required detailed answers, therefore were broken up as separate questions to better assist the researcher. This also allowed the introduction of new themes when participants responded to the reworded questions. An example of the full list of questions presented to participants by the researcher is in Appendix D. The researcher used three main interview techniques to assist with the in-depth interviews which included the long interview technique, probing and the laddering technique. These techniques are explained in detail below.

3.3.1.1 Long interview technique

McCracken's (1988) long interview technique is one such way this study has provided structure to the in-depth interviews. The four-step technique observes the following: gaining an awareness of the current literature, understanding and awareness of the research question, creating an opportunity for participants to tell their story, and identifying and analysing emerging themes (Hunter, 2006; McCracken,1988). This technique allows researchers to initiate a "grand tour" of questions in a non-directive manner that enables the interview to create substance and provide in-depth reflection towards the interviewees' purchasing behaviour (Hunter, 2006; McCracken, 1988). Floating, which means asking a question and planned prompt questions which are defined as prompts thought of in advance, are positioned to provide branching points and specific end points within the conducted interview (Hunter, 2006; McCracken,1988). This study used a number of prompts for the 17 questions

and at times branched out by probing deeper into discussions around the participant's NFT consumption. The researcher achieved this by planning prompts based on existing literature and gave opportunities for participants to express their story on their experiences of NFT consumption.

3.3.1.2 Probing technique

Probing questions were also used within the interviews to further investigate key issues that had been identified. Two specific probing techniques were used. The first was when respondents agreed on a key issue and the agreement was tested by other respondent questions (Jepsen & Rodwell, 2008). Thus, it was important to probe to see if questions needed to be elaborated on due to a short response, or if a keyword needed to be explored in more detail. The second was when respondents disagreed on the question asked, hence it was required to probe to find the point of disagreement (Dick, 2000). The researcher used probing in areas when the participant felt uncomfortable, did not understand the question or provided short responses. In this situation, the researcher probed by asking the participant to "explain in more detail" or provided an alternative sentence by which the participant could expand upon their answer. Alternatively, when participants disagreed on issues or questions presented by the researcher, it was important to probe and separate the biases of the question to find out why the participant(s) disagreed.

3.3.1.3 Laddering technique

Additionally, the technique of laddering is used within in-depth, one-on-one interviews to develop an understanding of consumer attributes that are meaningful as well as to understand the concepts and beliefs of consumers (Hinkle, 1965; Veldudo-de-Oliveira et al., 2006). This technique was further developed by Bannister and Mair (1968) who devised laddering as a method of modelling peoples' belief structures in a simplistic, systematic way that established personal constructs. The technique of laddering is used within the in-depth interview to understand consumers' belief systems within digital communities and to understand the relation of concepts within a domain (Corbridge et al., 1994). This is to ensure that the constructs are recorded in a simple structure that is easy to understand. The researcher used laddering to understand keywords and concepts stated by the participants which needed more clarification. In these instances, the researcher remained unbiased and used laddering where belief structures were broken down and understood in relation to NFT purchasing. The next section discusses sampling of the target population, sample techniques and the sample size of the study.

3.4 Sampling

The target population consisted of males and females selected from across the globe who are active in NFT marketplaces and virtual communities. This was to ensure that the phenomenon of NFT consumption was explored by observing participants that have lived experiences with NFT purchasing. Primary data was collected through the researcher's network on various Discord groups and X.

This study used a mixture of purposive and convenience sampling in the selection of the participants. A purposive sampling technique (Acharya et al., 2013) selected participants based on their characteristics. This was to confirm that the best possible participants with experience in buying NFTs were selected for the qualitative study. In addition, the convenience sampling approach was used as the target population was a specialised segment of consumers. The geographical proximity, availability, and willingness to participate in the study made it more difficult to gain specific groups and a balanced gender ratio. Ultimately this sampling technique provided easy accessibility of participants for the researcher (Etikan et al., 2016b).

The technique called snowballing (Naderifar et al., 2017) was used for inclusion criteria that helped to shorten the time taken when selecting participants of a specific group or subsegment. Snowballing allowed a convenience sampling method to be used when it was difficult to access the required number of participants or target characteristics within a new industry (Naderifar et al., 2017). It was important to note that female participants were harder to recruit for this study, with three potential female respondents choosing not to participate or not wanting to be recorded (even with their camera turned off). This made it challenging to obtain female participants (another two had declined even with the study being completely anonymous). The researcher was able to get more females by a snowballing sampling technique. Whereby, one of the female participants by the pseudonym 'Belle' made a call out in one of her Discord groups containing only woman which enabled the researcher to gain three additional female candidates for this study. Snowballing (Etikan et al., 2016a; Streeton et al., 2004) provided the advantage of targeting specific NFT digital community groups and aided in getting additional females to participate in the study. Hence, this sample size was representative of a typical NFT community in line with statistics from Bhattacharya (2025). These statistics show that men are three times more likely to purchase an NFT than women, which is reflective of the sample size. In addition, the top leading NFT nations include the United States, the United Kingdom, Germany and India, which were selected in this sample along with other western countries. This study consisted of a sample size of 25 participants who were acknowledged as consumers of NFTs. Creswell (2013) stated that 25 in-depth interviews were necessary (or until saturation of data has been reached) to meet adequate requirements for credible qualitative research. The participants of this study were chosen through volunteering and recommendations from other participants. The researcher

also informed the participants of information involved in the research (Appendix B) and provided a Consent Form for participants involved in research (Appendix C). The majority of participants were male, which was consistent with the majority of NFT buyers and traders. Respondents ranged in occupation, including entrepreneurs, Web3 community managers and consultants, software developers, community moderators (MODs), and data scientists (see Table 4). The age of participants ranged between 22 (Harry) and 54 (Belle), and the mean age of participants was 35. The distribution of interviews between countries was as follows: Australia (7), United States (11), India (1), Germany (3), Austria (1) and the United Kingdom (2). The most common theme between all participants was their love of technology and this was demonstrated by their passion for NFTs and their technical backgrounds.

3.4.1 Participant demographics

The majority of participants were male which is consistent with the majority of NFT buyers and traders**.** In this context, some participants were anonymous as they participated under the identity of their social media profile username. Participants predominantly came from technical jobs, such as Sally who is a data scientist, or participant Moe who is a sound engineer. In addition, the majority of participants were highly educated, and some specialised in business and marketing backgrounds such as participant Neo and participant Belle. Some participants had experience within corporate enterprises such as participant Dom. A few participants came from different occupations such as psychiatric nurse Dean, and film crew members Stan and Micky. Participants Harry and Kayla are students. The interviews were recorded from the order they were conducted in by date.

Table 4

List of participants

Number	**Interview Name**	**Age**	**Position**	**Gender**	**Country**
1	Dean	27	Psychiatric nurse	Male	Australia
2	Brian	42	Film and television	Male	Australia
3	Dom	30	Military	Male	United States of America
4	Salman	24	Entrepreneur	Male	India
5	Harry	22	Undergraduate **s**tudent	Male	United States of America
6	Jimmy	32	Web3 community manager	Male	Australia
7	Miles	29	Brand manager	Male	Germany

8	Ken	26	Software developer	Male	United States of America
9	Belle	54	Commercial photographer	Female	United States of America
10	Neo	45	Commercial services	Male	Australia
11	Peterson	42	Community moderator	Male	United States of America
12	Ness	28	Full time NFT trader	Male	Austria
13	Stan	38	Film industry	Male	United States of America
14	Kevin	25	Artist/designer	Male	Australia
15	Kayla	26	Web3 community manager	Female	Australia
16	Moe	33	Undergraduate student	Male	Germany
17	Vin	32	Sound mixing engineer	Male	United States
18	Lee	50	Operations and Web3 marketing	Female	Germany
19	Karen	42	Independent researcher (self-funded)	Female	United States of America
20	Micky	39	Director of operations	Male	United States of America
21	Sally	45	Film industry/art department	Female	United States of America
22	Billy	25	Data scientist	Male	United Kingdom
23	Lady	48	Marketing and public relations	Female	United Kingdom
24	Jenny	38	Web3 consultant	Female	Australia
25	Travis	33	NFT gallery owner	Male	United States of America

3.4.2 Documentation

After the principal interviews were completed, further findings were obtained through the technique of documentation (Saunders & Townsend, 2018). This was due to the recorded data that was collected for the qualitative study where the reports indicated information that may have been dismissed or unheard (Saunders & Townsend, 2018). Data collected from documents or recordings was considered a valid form of data collection in qualitative studies (Saunders and Townsend, 2018). Each of the transcribed interviews was edited in accordance with the recording to ensure nothing was missed and

new themes were found. The researcher processed and analysed the data to present and interpret the collected data to be made meaningful in line with the literature on Cresswell (2013). The documentation steps taken by the researcher are as follows: data, coding and analysis.

3.4.2.1 Data

All the interviews were recorded from Google Meets and transcribed with Microsoft Word Online which created a completed file after each interview. This resulted in 571 pages of transcribed interviews. Before analysis began, the collected data from the in-depth interviews was both organised and cleaned to check for errors and any missing data (Miles & Huberman, 1994). Once the data was cleaned, it was checked in alignment with the interview audio recording to confirm its authenticity. In addition, after each interview, the researcher wrote notes and memos to highlight specific keywords taken from these interviews. This assisted in reflection and linkages to the theoretical themes of the study. To obtain the most out of the data, the researcher read the transcripts in their entirely several times. With this, the researcher has then transcribed and imported the data to NVivo software to transcribe and code the collected data. This assisted in describing, classifying and interpreting the data into themes (Creswell, 2013). The voice recordings and transcripts of the interviews were stored on the researchers Dropbox drive. In accordance with the Australian code of responsible conduct, they were additionally stored in a secure R-Drive which was provided by Victoria University.

3.4.2.2 Coding

Once the qualitative data had been processed effectively, it was analysed into themes and categories to identify patterns and meaning from the data (Miles & Huberman, 1994). The researcher developed a coding key to assist with the theoretical framework of this study in relation to the in-depth interview questions stated (see Appendix D). During this process, as participants expressed more of their experiences, additional themes and concepts emerged. A total of 40 codes were found which where categorised into six core themes. These core themes were created based on the emerging patterns in the data (Patton, 2015) that showed relationships that existed between the generated codes. This coding process allowed the researcher to aggregate the data into categories for evidence within the database. This enabled the researcher to provide themes that formed common ideas in the selected dataset. It is important to note that the interviews were all audio recorded with video cameras turned off which prevented non-verbal behaviours being used for communication by the participants. To compensate for this, the researcher has followed Patton (2015) by writing notes, and observations were written as a reflection after each interview and imported to NVivo.

An example theme that was used in coding was ‘Motivation towards NFT purchase’ This came under the category of Community and included codes such as Like-minded peers, tribalism, access gated content, entertainment, exclusiveness, in real life events, friendships. An example of the Nvivo code is listed in Appendix E.

3.4.2.3 Analysis

The data was interpreted into abstract themes for the larger meaning of the data, thus linking research literature through the researcher’s interpretation. This is in line with the literature of Cresswell (2013) and Patton (2015). To attest to the reality of NFT consumption phenomenon, the researcher has defined the three stages of pre-purchase, acquisition and possession and post-purchase evaluation and behaviour. The researcher used the literature of Arnould and Thompson (2005) and Lemon and Verhoef, (2016) and Jaakkola and Alexander (2024) to frame the analysis. This approach to understanding the consumer journey of NFT consumption allowed the participants recollection of their journey to evolve as they elaborated on their memories of purchasing NFTs. During this analysis, participant quotes from reflections of their consumer journey were given labels such as risk taker, pioneers, Tribal, portability and digital identity. After reviewing the 40 codes used, patterns emerged leading to themes of high risk/high reward, forward thinkers, community, gamification, innovative technology and emotional attachment. In essence, this thoroughly documented the participants journey of NFT consumption in accordance with the reflection and notes from the research which were also analysed to support the findings. In finalising the data, a conceptual model was made to represent the research through boxes and arrows which constitutes the information taken from the themes of this study (Miles & Huberman, 1994).

3.5 Conclusion

This chapter focused on the methodology chosen for the study which acts as an important component in this research. It also took the current literature and research problem presented and defined a suitable methodology for this study. Also discussed is the research design and data collection methods. This chapter has explained the philosophy of this thesis which is grounded in phenomenology. This research adopts a qualitative methodology using convenience and purposive sampling to interview consumers who are active in NFT markets. In line with similar studies by Fossey et al. (2002) qualitative research approach involves the analysis of reviewing, synthesising, and explaining data to decode and decipher the phenomena being studied. The section also provided a detailed interview guide with data analysis techniques. This explained the importance and justification of qualitative in-depth interviews with documentation and the reasoning behind the selection of the

participants. Research findings and discussion on data analysis are explained in the following Chapters 4 and 5.

Chapter 4: Research Findings

4.1 Introduction

The previous chapter described and justified the methodology selected for this research. This chapter presents the findings of this research which have been obtained from data collection through a series of comprehensive in-depth interviews (MacDougall & Fudge, 2001; Minichiello et al., 2008). These interviews were conducted with an international sample of participants whom all are active in NFT markets. The research objective of this study is:

> What are the motivations and ownership intentions of consumers in NFT markets?

To answer this question, these findings will discuss the four research aims of this thesis that are listed herein:

1. Investigate consumer motivation towards the purchase of NFTs along the consumer consumption journey.
2. Identify the unique features of NFTs which influence consumer purchases.
3. Research the value consumers place on NFTs.
4. Profile the psychographic characteristics of NFT consumers.

This chapter presents the findings and themes observed from an analysis of the participants' reflection on what piqued their interest in NFTs and the journey towards ownership. Participants gave detailed responses to the questions asked, however, when participant responses were incomplete, a laddering technique was used to achieve more organic and thorough responses. The analysis focused on the four theoretical structures adapted from Arnould and Thompson (2005) and the consumer journey outlined by Jaakkola and Alexander (2024). The following sections address the research aims through the consumer journey of NFT consumption of pre-purchase, acquisition and possession and post-purchase evaluation and behaviour. The chapter concludes with profiling the NFT consumer. As the research has utilised a phenomenological approach, the focus of the study is to ascertain the lived experience of consumers upon their NFT consumption journey.

4.2 The pre-purchase stage

Pre-purchase is the first stage of the NFT consumer journey. The following section focuses on the experiences from the participants within their pre-purchase stage. Within this stage, there is a link to the CCT structure of social historical patterning of consumption as NFT phenomena is observed.

While it can be argued that the genre of CCT research can be witnessed at each stage of the NFT consumption journey, the evolving marketplaces of NFT consumption demands each structure of CCT to be observed to highlight complex findings on this particular digital consumer culture. The shaping of consumption through the institutional structures of class, gender and ethnicity (Arnould and Thompson, 2005;2018) provide a strong link towards understanding consumer motivations throughout the entire consumption journey (Arnould et al., 2023).

This linkage of historic patterning of consumption to the pre-purchase stage is isolated within this study due to the fact that web3 decentralised ecosystems (Arnould et al., 2023) are relatively new, and the way consumers are purchasing digital assets is rapidly changing even in contemporary times. For instance, entrance into the NFT marketplace is dictated by demographic, psychographic and geographic constraints which all include class, gender and ethnicity. In relation to this, it's difficult to enter the NFT marketplace; a variety of knowledge and information is needed which may only be accessible to some of these social groups. This study suggests that it is more important within current digital consumption practice history for brands and companies to be aware of these groupings of people which are able to enter the market within the pre-purchase stage, as these will be the consumers throughout the remaining consumption process of NFTs. To note, the isolation of this particular CCT structure is not to suggest that it is exclusive to the pre-purchase stage.

Pre-purchase is associated with perceived risk, information search and motivation to purchase NFTs. The pre-purchase stage acts as the first point of awareness of NFTs by consumers. Consumers absorb up-to-date information about blockchain and dApp knowledge to eventually obtain a digital wallet which enables NFT acquisition (Stublić et al., 2023). Participants raised themes of perceived risk, information search and motivation to purchase NFTs.

4.2.1 Perceived risk

Perceived risk forms a part of the consumers consideration on whether or not to purchase a product. Bauer (1960) defines perceived risk as "any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant" (1960, p. 24). The statement by Bauer is reflected in the majority of participants who noted risk as a big part of their intention to purchase NFT assets. This extends towards how participants interacted with their family and friends who may have had different appetites for risk. Six types of perceived risk were identified in Chapter 2. The findings of this research highlight three dominant themes which were identified as financial, social, and psychological risk.

4.2.1.1 Financial risk

All participants selected had some understanding of and experience with risk and reward; this was particularly true among the older demographic and subsequently more affluent participants that were more comfortable with their investments and able to risk portions of their income as they were equipped to withstand losses more easily. Many participants shared similar views regarding NFTs being a risky asset.

Financial risk was identified as a dominant theme among participants as there was a likelihood of losing money on NFT investment decisions. Participants noted an adrenaline rush of financial reward when they chose successful NFT projects that returned a profit that was similar to the consumer experience in the dot com bubble of 2000 (DeLong & Magin, 2006) and the ICO bubble in cryptocurrency of 2017 to 2018 (Stolbov, 2019). This provides some explanation of the similarities of the participants in this study and the experiences of successful consumers in digital markets. In other words, participants that had a positive attitude towards risk-taking value NFTs greatly due to the financial gain obtained if they chose a successful NFT brand. Billy provides a supportive statement:

> If you see something you know on social media, it's like oh cool … let's look it up … Let's just buy it now whenever I want. It's a bit like gambling in that sense that you can gamble on anything at any given time at any moment of the day. (Billy)

When the researcher asked participant Dom what led him to the right financial decisions when purchasing NFTs, his response highlights that he conducted a significant amount of research prior to his financial purchasing decision which eased his financial risk. His response is as follows:

> I think the way that I come to making … the right financial decisions … First off, understanding … the current technology of blockchains and crypto. Second, understanding the historical context of these markets. The historical context of collectables of physical and digital asset ownership and then evaluating what the team that is launching an NFT project is offering … reading research from … Vitalik Buterin, the founder of Ethereum and other smart people who have the ability to kind of parse out where the future of blockchain technology may or may not go. (Dom)

Participant Jimmy explains the financial risk of Web3 digital wallets and holding NFT assets as being unique and vastly different from purchasing products on Web1 and Web2. Jimmy responded, “I mean not many other things in the ... financial [world], at least tools [such as digital wallets] where you can lose hundreds of thousands of dollars … with the click of a button.” It is also possible that certain types of consumers who show more risk-taking tendencies are being drawn to elements of NFT technology. Participant Moe explains his financial risk mindset compared to others. Moe states, “I like trying out new technology and I'm definitely ready to take risks or more than [most] people.”

This is supported by Kong and Lin (2021) and Yurtkuran (2022) who both state that the high risk/high rewards of these markets can lead to extreme wealth or bankruptcy. Participant Lady is a Web3 consultant in her ‘40s and works within the digital asset space. This individual skill set influences her perceived risk and gives her the knowledge, time and resources to assess and analyse digital assets. This is consistent with Chen and Bellavitis’ (2020) statement on the volatility of digital markets and the risks associated with digital assets and cryptocurrency. Furthermore, this is supported by participant Belle who also states that NFTs are a high-risk asset. Belle is the oldest participant within the sample (at 54 years old) and works as a commercial photographer. Belle and Lady share a similar lifestyle where they both have a strong attitude towards risk-taking and are prepared for their investments to go to zero. When asked, both responded with similar statements. Belle’s response affirms, “I'm in a situation and I'm in a period of my life where I'm ok using a certain amount of [money] to invest in a high-risk investment. So, I kind of treat [NFTs] as high-risk investment.”

This strong attitude towards risk is apparent in younger and older people that tend to accept high risk and is even desired by some participants. In addition to this positive association to risk, participant Miles explains his rationale for higher risk-taking activity as exciting, and like an adrenaline rush akin to gambling. Participant Miles shares a similar approach to Billy who used the word ‘gambler’. Here, Miles highlights the high he obtains from NFT trading and draws parallels towards gambling at the casino. His response reveals, “It's exciting as you can see how the market reacts in an instant … to make or lose money with it. It's an adrenaline rush that you get from casinos as well and this is something that is fascinating.”

4.2.1.2 Social risk

Social risk comes from the interactions around the community that influence consumers. This type of risk comes in the form of resistance from family, friends and peers, and social media influences upon their immersion into this technological change. A common concern among most participants was that there was a clear divide between themselves and their family and friends regarding digital assets. When participant Billy was asked what makes him separate from his family in his NFT purchasing, he responded:

> I think I'm a bit more of a risk taker than family and friends. A lot of my friends are … well, some of them are very traditional, conservative, straight by the book. Whereas myself, I like sports gambling, and I just like taking more risks and trying to get that extra reward. (Billy)

Many of these sociographic groups in connection with the participants were considered to be traditionalist consumers and resisters of NFT technology. This notion is supported by participant Belle’s experience in how her family reacted to her purchasing NFTs: “They all think I'm crazy. My friends are like, ‘Wait, you're on Discord? My kids are on Discord.’ You know there's a lot of

confusion about it." This is also similar for participant Ness who is 28 and was made fun of by his peers for purchasing images: "When I first got into it, they made like fun of me." Similarly, Harry faced significant humiliation and resistance at home for his initial purchase of an NFT:

> When I started and I spent a couple hundred (USD) on a picture, they all called me stupid. They said, 'This makes no sense... Why would anyone spend this much on a picture? I can just screenshot it, [and] now it's mine' … Everyone was trying to crack the same joke … (Harry)

This sentiment from his family was quick to change when Harry started to make money. Family and friends that where traditionalists and showed initial resistance and risk-aversion started to observe the new technology at a deeper level when money was being made. This financial aspect also leads consumers to gain better education around NFT technology and purchasing reasons. Harry discusses the way his family reacted to his financial success in NFT trading:

> … My parents changed because they knew that I never worked a day in my life, and I had just made $1000 [USD] out of thin air. I guess money changed their perception as well because … by the end of 2021, they were asking me about NFTs constantly and they still currently ask me about the NFT market. (Harry)

In a follow up question, Ken also speaks about a virtual group on Discord that discussed cryptocurrency assisted him on his NFT journey. The virtual group assisted in minimising his risk through social interaction and provided him with knowledge that enabled him to purchase NFTs: "I joined a Discord community of likeminded people who were all kind of doing the same thing, all looking into NFT's and trading them, and we all lived in different areas."

In similar situations to both Belle and Harry, the opinion of Ness changed when he became successful in NFTs:

> The opinion from people changed … from, "have fun staying broke" or something like that to "yeah show me what you did", but then people don't realise that it took like time, you know, for myself to get into this position to make that much money. (Ness)

Participant Dean explains how he initially encouraged friends to purchase NFTs, though his attitude changed when he saw the risks associated with NFT purchases: "I encouraged some friends at one point. But when I understood how risky the market was, I no longer encourage them. It's very risky and volatile."

When it came to being influenced to purchase NFTs, Lady discusses how she trusted the influencers that lead her to purchase NFTs:

> I don't think they realised they were being influencers; they were just starving artists [that] came to sell their art, and I happen to like their art … The other thing I liked was that if I'm investing in any company, like, say I bought shares in Tesla or something, I would want to know that the people running it were … actively promoting and innovating. (Lady)

Not all influencers showed good intentions, where some used the consumers as exit liquidity (Wilkoff and Yildiz, 2023). Participant Jimmy explains how he was in fact influenced by a lot of negativities initially. His response confirms this: “I was influenced negatively by a lot of people in this space that I just realised were in it … just to make a buck …”

Participant Ken discusses how he initially joined a group that all got scammed at the beginning of their NFT journey. Ken explains:

> We all ended up … on OpenSea, just searching for different projects and all found the same project that ended up being [a scam], … the founder disappeared, … and we all jumped into our own Discord … We each had traded these back and forth between each other multiple times and we all just at some point realised this is a scam and stopped and joined up and started talking to each other and we ended up finding a lot of really good projects together. One including Bored Ape Yacht Club. (Ken)

Ken goes on to explain that this experience of getting scammed helped him with ameliorating his social risk in the future as it made him reconsider his approach. This is in line with the concept of resilience (Rutter, 2012) that can trigger behavioural reactions. In this situation, Ken’s resilience was rewarded when he successfully landed on the BAYC NFT project.

4.2.1.3 Psychological risk

Psychological risk was a dominant theme that related to the psychological state of consumers negativity towards NFT consumption. It appears that a negative association exists between what separates risk-averse participants from their peers or family. This comes from the participants understanding of NFTs and digital wallets, and their technological functionality. Participant Harry discusses how he understands the technology of digital wallets compared to his peers and family:

> Yes... [digital wallets are a barrier to purchasing NFTs] because not a lot of people know how to use them or are scared to use them … I've talked to friends who have tried, and they've all tried to get me to buy [for them], they're like, ‘Oh, it just seems very confusing to use Meta Mask or Ledger. Can you just do it for us?’ … They see it and it's a bit confusing to use … And they just shut down. (Harry)

In a follow up question, Harry discusses his research in purchasing NFTs and how he started to understand the technology and functions of NFTs. His response highlights this:

> Yes, uh, I think I did more research in this than I've done in anything in my life. I spent hours in front of the computer researching but I wouldn't say it's the typical research of going onto Google. I would say it's more sitting in front of the marketplace and just watching the traits. Analysing the traits, learning what and then moving over to Discord. The research was very much based in three things; Twitter, Discord and OpenSea. I didn't really spend any time on anything else. … I would go [to]... OpenSea and analyse the prices … It felt like I was playing a video game. (Harry)

Harry's response informs that his research allowed him to have a deeper understanding of NFTs and its technological functions which eased his perceived psychological risk. As Harry was also active in communities, he found it fun (as an introvert) to meet like-minded friends and saw emotional benefits that came from his time researching for NFT projects.

Participant Vin explains the complexity involved with digital wallets and technology which has an impact on consumers who purchase NFTs. This is especially true for casual purchasers who can get overwhelmed by the UI and technology of digital wallets and NFTs that can create psychological risk. He elaborates on this in his response:

> There are a lot of people that are not as familiar with the technology, or the risks involved or the social engineering aspects and so that's where a lot of the risk is inserted into the equation. There were a lot of casual people approaching the space that maybe didn't have the appropriate level of respect for what it was they were [associating] with or that there's no … number on the back of the card you can call to try and get your money back. There's no CEO of Ethereum to call and complain to. (Vin)

The risky and tentative nature of NFT assets can also be linked to the decentralised environment in which cryptocurrencies exist and how mass speculation is surrounding these new technologies. Cryptocurrency acts as a volatile and risky asset which means NFTs have similar levels of volatility and uncertainty in line with research from Klein et al. (2018) and Emikönel (2022). All participants were aware that NFTs were a risky venture before purchase. This attracts and gives rise to participants that have a high tolerance and optimistic attitude towards risk-taking compared to their non-NFT-consuming peers.

The perceived risks of financial, social and psychological play an important role in shaping NFT consumers initial pre-purchase journey. As consumers respond to these risks consumers develop an identity and value starts to form and develop as they continue to search for more information. The next section discusses the difficulty in sourcing information around NFTs.

4.2.2 Information search

The findings of this study clearly highlight the difficulty in obtaining information regarding entering NFT markets and how this creates an impediment to purchase. NFT purchasing entails a lot of complexity which arises when consumers venture into their market research. The participants stated that there is a vast amount of knowledge required to purchase NFTs. This connects with the complex notion of going through four steps outlined by Kräussl and Tugnetti (2024) of (1) selecting a digital wallet (2) selecting a marketplace, (3) minting and (4) technical understanding. This complexity around digital wallets is presented by participants Dean and Dom who both discuss the intricacy around the functionality of digital wallets and purchasing NFTs. Their following responses illustrate this argument:

> The first time I purchased an NFT was this skeleton called Wicked Craniums. It was difficult because first, you need to go to OpenSea, then you need to set up a MetaMask, then you need to buy Ethereum. You [then] need to transfer the Ethereum from exchange to MetaMask. Then you can't buy the exact amount you need to compensate for gas fees. (Dean)

> [The technical systems] are a barrier to purchasing an NFT. You have to create the wallet; you have to fund the wallet. You have to connect the wallet to the website that you want to purchase an NFT from. You have to click the transaction to purchase then you have to sign the transaction to approve it and then you have to wait for the purchase to go through. (Dom)

Participants also placed a great emphasis on obtaining credible information from online media sources. Most participants expressed that the sources of information available to them were limited to the social media platforms of X and Discord. Peterson goes on to explain the difficulty in gaining information on search engines. His response is as follows:

> Just the lack of information … you just can't jump on Google and check it out ... It's not even that much of a help … there's this whole other layer of the internet that you have to discover first to find out [about NFTs]. (Peterson)

This complexity to obtaining relevant information around understanding NFTs is further magnified as many participants explained how early in their consumption journey, they found difficulty in setting up a digital wallet. There seemed to be a motivational drive within each of the participants to gain a greater understanding of disruptive technology and knowledge of the unknown. This inner drive motivated participants to want to explore digital assets and improve their use of the decentralised technology. This could be seen by the majority of participants expanding their understanding of the technology through trial and error. Participant Mickey supports this claim as he explains that while he is fairly good at using digital wallets now, he had an extremely difficult time using MetaMask in 2021:

> I had no clue what I was doing with the gas settings … and I didn't use the hardware wallet back then, even though I had bought one … previously I had just been using exchanges and buying coins, so it was buying NFT's that forced me to figure out how to use [digital wallets]. (Micky)

Navigating the new technology and dApps during this early stage in the consumption journey can be an impediment to anyone interested in purchasing NFTs.

4.2.2.1 Navigating decentralised technology

Understanding the literacy of decentralised technology emerged as an important aspect within the pre-purchase stage. Participants reported how they acted as pioneers for a new digital age in their pre-purchase journey through their navigation of this new decentralised technology. In the case of Belle, while her family and friends had a low understanding of or tolerance to the adoption of decentralised technology, they were capable of categorising her as a pioneer of this new field and acknowledging what led to her becoming successful. The business operations disruption theory discussed by Chohan and Paschen (2023) is quite present in what Belle is doing by her forward thinking in learning how to navigate decentralised technology. Belle replies:

> You know there's a lot of confusion about it … my little sister, who knows me very well, she's like, 'you're such a pioneer', so there's all sorts of … definitions of what people think I'm doing. Most people don't understand, and they just think it's crazy and I'm fine with that. (Belle)

In a follow up question, Belle continues by making a contrast to her creative, artistic side which explained her understanding of commercial and artist rights within decentralised technology. Belle's response also touches on the notion of intellectual property (IP) rights which is a grey area in the current NFT market that will be discussed later in this thesis. She makes mention of smart contracts and how being able to navigate this specific part of decentralised technology can bring about great benefits such as royalties to artists like herself. Belle notes:

> I've been an artist my whole life. I love that the creators can get a residual whereas you think about selling a [physical] painting for $25.00 and that's all they get. You know artists don't get usage rights for their artwork and so that is definitely one thing that drew me to NFT's and people doing artwork … the artists are getting something, some residuals back, for a long time. You as an artist, as an NFT artist, can actually make a living. (Belle)

The ability to navigate the decentralised technology of online ledgers to immediately find who owns an NFT (as well as a history of consumers who have previously claimed ownership, thus preventing fraud) on the internet is a breakthrough in not only digital ownership but a worldwide improvement to

authenticity (Fai, 2021; Wang et al., 2021). Currently, Peterson works as a Web3 community manager for an NFT brand. Peterson responds:

> The reason you know an NFT is what it is, is because you can look on a website and see when it was created, where it's been, who holds it. These are secure transactions that cannot be duplicated … (Peterson)

This allows marketing or development teams to directly connect with a massive database of user accounts. These comments are supported by Faqir-Rhazoui et al. (2021) and Wang et al. (2021) on the removal of middlemen within infrastructure towards NFT ownership.

However, there are also issues that have arisen from navigating the complexity of NFTs within decentralised technology. Participant Brian states the difficulty in getting his friends to purchase or mint NFTs is not a two-click simple process as people are used to within the centralised technology of Web2 such as creating an email and password. This new process of digital navigation within Web3 can be complex and cumbersome to new users (Hussain et al., 2022). Brian's response is as follows:

> I got my friends to mint the POAP … I had to get them to create a MetaMask or create a digital wallet. We use MetaMask on the phone and then … they had to find a pen and paper. … to set up a [digital] wallet, you [have] to write down your passphrase on paper and not lose it. I can guarantee one of them probably already lost it. So therefore, can't use that wallet anymore. (Brian)

Participant Neo brings up security and how digital wallets and NFTs are impacted by this new technology. The decentralised nature of digital wallets and NFTs means one wrong click can mean the digital assets within the digital wallet can be drained. Neo explains this security issue:

> It's so easy just to basically sign such open … permissions [when using digital wallets]. You're off your game for a second and suddenly you've made some … tragic mistake and you lose everything. Obviously, the technology itself is secure, but the interface and those problems are major. You know [people are] willing to sign open-ended permissions that then makes their [digital wallet] vulnerable. Is a fundamental systemic problem that that needs to be sorted out. So yeah, that's the security issue. (Neo)

It is evident from the participants responses that having a strong knowledge base of how to navigate decentralised technology is of paramount importance when it comes to NFT consumption. This in turn starts to unravel a new digital consumer that has an understanding of decentralised digital ownership and the value this brings to consumers that wholly own digital assets.

4.2.3 Motivation to purchase NFTs

The motivation to purchase NFTs includes a range of factors which are expressed by the participants. This was particularly prominent in the pre-purchase stage of the consumer journey as it was important to understand why participants were drawn to certain NFTs. Purchase motivation themes that emerged include money, technology, hedonic (gaming), use cases and utility, network and relationships, digital ownership, authenticity, digital identity and collecting. Some of these themes also emerged within the acquisition and possession, but they are established first in the pre-purchase stage, as this was the first instance consumers witnessed and participated with motivation and FOMO factors as consumers entered into NFT brands and communities. Hence, the themes of technology, gaming, digital ownership, digital identity and collecting are discussed more in the following stages but can be seen to have their genesis as motivations to purchase NFTs. Participant Harry highlights his main two motivations to purchase NFTs as monetary and network and relationships. Participant Ken and Vin discuss their financial motivations to purchase NFTs; they like the potential of NFTs within technology, gaming and use cases and utility in that these digital assets can have value and be sold. Vin particularly saw promise in how NFTs can be owned within decentralised games, can be collected and create a digital identity that can be transferrable which is not possible on Web2 gaming platforms. Purchase motivation discussed by participants Sally and Peterson highlight the benefits of digital ownership and the authenticity of NFTs that help to cut out the middleman.

Purchase motivation of NFTs is explained by Schaar and Kampakis (2022) who compare the similarity of CryptoPunks NFT brand to gaming and digital communities such as Runescape and World of Warcraft marketplaces where consumers in both situations purchase digital commodities worth real-world (Fiat) value. This is supported by participant Ken who found interest in NFTs due to his video game participation in the online gaming communities of Hearthstone and Magic: The Gathering. Ken responds to what ultimately motivated him into purchasing NFTs:

> I think NFTs and video games make a lot of sense because it's a technology that can be used within games and I see [NFTs] as in-game assets that actually have value to certain people and can be sold. (Ken)

Alternatively, participant Jimmy states the hype he experienced around NFTs initially and how his vision during hype cycles did not coincide with the long-term NFT brand vision. He responded by saying:

> I probably would have … liquidated some of my holdings like learning those … hype cycles, like the human psychology behind investing. … I guess miss out on a lot of good opportunities because of my altruistic vision towards NFTs in the future, whereas a lot of the price doesn't align with … that essentially. (Jimmy)

This is supported by participant Ness who discusses his hype around joining the NBA Topshots NFT project which inspired his interest to purchase:

> I think [for me] the big hype [NFT brand] that I wanted to join was [NBA] Top Shots … and it got, like, so [much] hyped around it that you couldn't register. You know they had … a waiting list, so [there] was, like, [so] much hype out of it. (Ness)

On the other hand, participant Harry was motivated to purchase by just two aspects of NFTs: "One was the money that I could make and two was the sense of community." In a similar vein to participant Harry, 45-year-old participant Neo's interview shows what his family and friends think of NFTs after seeing his growing success in NFT trading. Neo states, "I've taken most of them down the hole with me and they're all collecting and love the opportunities it presents and then I have one parent who … doesn't really get it."

Whilst gaming, although technology and monetary value remained a consistent purchase motivation factor for participants, other motivations soon arose which explored the notion of digital authenticity. Participants who expressed their interest in gaming also stated that an appealing aspect of NFT ownership is how it provides authenticity of asset that was previously non-existent in video games. This is supported by participant Lee who expressed that her motivation to invest into NFTs is based on the concept of ownership of digital goods: "It's really because I think [NFTs] bring the concept of ownership to digital goods because … any [fungible] digital file is something that you can replicate infinitely, and they are exactly the same."

In addition, participant Sally discusses her purchase motivation being decentralisation and digital ownership as she can't lose an NFT like a traditional asset and has more control of her asset. Sally states that, "NFTs are decentralised. I feel more secure with NFT ownership than if I had a physical asset."

Here, participant Jenny adds that her motivations around NFT purchasing came about from her awareness of the potential it gives to artists on digital scarcity and the real-world use cases that NFT technology can provide:

> Real world use cases [are] where we are going to see a huge amount of adoption into the space … there's a lot of brands coming on board … and utilising NFT [functions]. If you own it, you're the only one that owns it, or at least you're the only one of … a certain number. (Jenny)

Furthermore, Peterson states that his biggest purchase motivation point of NFTs is "direct ownership and benefits without little infrastructure and [a] middleman in between."

Some participants took advice from social media influences and financial experts whom they deemed successful. When asked what influenced their NFT journey, participant Karen states she took advice from people she deemed worthy while making sure to do her own research prior to purchasing:

> I would say just probably community members. You know anybody who's pretty much well known in an investment [industry] from an investment standpoint, you know I would obviously follow some of their advice. I do my own research you know; I don't just take anything as anybody says, obviously, and jump in. (Karen)

This is consistent with participant Harry who shares similar views on the people that influenced his decision to purchase NFTs. Harry states the three key people that influenced his decisions to purchase NFTs:

> There were three main people. Beanie helped me a lot when he had around 10 [to] 15 thousand followers and then Debussy helped me when he had barely any followers. And the other one was, … I'm running blank on his name. But it's the guy who had 7 Alien CryptoPunks. (Harry)

Participant Neo has a similar experience to participant Harry where a user of the technology helped him to understand blockchain and NFTs:

> There was one particular user called Helene who opened up the door to the Counterparty Bitcoin NFTs. That sort of was my just exposure to the Counterparty platform … you could basically trade Bitcoin NFT[s] so that was sort of an eye opener. (Neo)

It is through these motivational factors of money, technology, gaming, use cases and utility, network and relationships, digital ownership, authenticity, digital identity and collecting that external influences can also be seen around NFT purchase which impact the participants in the pre-purchase stage of their journey. This impact ultimately shapes the consumers identity trajectory in decentralised markets as they become familiar with the stimuli that influences their actions. In addition, consumers social class (Arnould and Thompson, 2005;2018) is witnessed to be more transparent in Web3 economies due to the anonymity nature of participants in the pre-purchase stage. From this, specific types of consumers exist that purchase NFTs that will be further explored in the purchase stage of consumption.

4.3 The acquisition and possession stage

Acquisition and possession are the second stage of the consumer journey. It is within this stage that consumers interact with their NFTs. Within the purchase stage there is a link to CCT with marketplace culture and mass mediated marketplace ideologies and interpretive strategies. It is possible that both

of these CCT structures could be used to assess the entire consumption cycle, however in evaluating this new area of consumption both these links to CCT show strong associations to the purchase stage. For instance, marketplace culture helps give context to online communities of NFTs, shared consumption practices and rituals that take place on NFT marketplaces and co-creation of branding that occurs during purchasing (minting) that are embedded in subculture that forms (Arnould and Thompson, 2005;2018). As for mass mediated marketplace ideologies and interpretive strategies, the acquisition and possession stage strongly observe brand narratives, communities and symbolic meaning (Arnould et al., 2023). These are concepts which ties strongly with this CCT structure and helps to understand decentralised consumption practices in Web3 marketplaces. This is also due to this stage emphasis on culture where symbolic imagery and consumers interact directly with NFTs in decentralised markets. Consumers can even utilise elements of the utility presented within NFTs such as exclusive community invites or additionally granted NFTs through the airdrop system, or even as a way to have IP over NFT images which they own. Participants explained that the sense of belonging to a bustling community like BAYC provided the benefits of brand network relationships and additional perks in the forms of tokens, additional NFTs and physical world events. Within these communities, consumers were confronted with new technologies and functionalities of NFTs that participants related to game world economies. In addition, virtual communities had strong elements of tribalism as consumers congregated around projects that had grand visions that showed potentially disruptive technology to centralised industries.

The stage of acquisition and possession can be split between the four themes of 1) digital ownership 2) gamification, 3) innovative technology and 4) the power of virtual communities and tribalism. These are discussed below.

4.3.1 Digital ownership

NFTs provide their consumers with true ownership of their digital asset (Schaar & Kampakis, 2022). This is supported by Rafli (2022) who concludes that NFTs can be interpreted as a solution for copyright issues as the digital asset itself also acts as a certificate of ownership for the consumer. Many participants mentioned digital ownership as a notable part in their acquisition and possession stage of NFT consumption. The digital e-commerce and trading marketplaces are an evolution to virtual consumption practices as they are decentralised and authentic digital assets can be wholly owned. The flexibility of NFT technology provides gaming platforms with the ability to yield digital game assets which can leave the game program with the consumer (Ante, 2023; Yu et al., 2024). Participant Stan supports this by discussing verifiable ownership of digital assets which can be sold at a later point in time. Stan explains:

> Say a game skin was an NFT but it's still locked within, say, Call of Duty, … and if Call of Duty shuts down, you know, maybe I spent two grand on all those cool skins and battle passes

> … now [I've] got to buy the new one and start all over. It's like, well, what about all that money I just spent and the last three years? [As NFTs] I can just sell all my old skins, or there's some cool perk where I get all those skins in the new game, or I can trade and do whatever I want with these assets that I purchased. (Stan)

Furthermore, digital ownership of assets that act as a financial store of value have not yet been implemented (Watkins, 2015) in Web2 gaming economies where they effectively allow players to cash out their financial investment. While there have been successful attempts in video game virtual markets to sell digital products, the video games of Counter Strike Global Offensive (Taylor, 2022) and Dota 2 (Ghazali et al., 2023) reveal communities of consumers that are motivated to buy in game assets such as skins and weapons. However, by the nature of these centralised applications on which consumer purchases operate, these gaming assets are still essentially locked to the gaming platform and cannot be a sellable or transferrable asset; once the game is no longer supported the assets cannot be withdrawn. The Diablo 3 money action house is one such example of a gaming economy that has since shut down. When active, this platform allowed players to use real money to buy rare weapons and gear within the game (El-Shagi & von Schweinitz, 2016). One such complaint by consumers around buying in-game digital products is how paying for game items is comparable to 'pay to win' game designs or microtransactions, which is evident by reviewing a study on Diablo Immortal by Zhang and Liu (2023). Participant Lee argues that NFTs can actualise the concept of true digital asset ownership which was previously non-existent in the gaming economies of World of Warcraft and RuneScape (Drachen et al., 2016). Lee states:

> I think it's a really beautiful characteristic of [NFT] digital files. There [are] also really good things connected to the concept of ownership and with NFTs you can create a different type of ownership which is not the same as … physical ownership. (Lee)

Moreover, participant Brian discusses that the power of digital ownership is what drives his desire to purchase NFTs. As the world becomes ever more so digital and living spaces are increasingly smaller, the appeal for digital assets has much greater significance for participants who rent their abode, such as Brian. Brian's response:

> Digital ownership just appeals to humans; we like to own things. As the physical world becomes more expensive or more constrained, or … if we end up with smaller living areas because of high density living, you can't have as many physical items. (Brian)

In addition, participant Billy relates this proof of ownership to a sports car: "Let's just say, for example [for physical products] there's no way to really prove real [ownership] unless you went somewhere to a shop and, you know, show it somewhere … whereas [for] digital assets, it's all in the blockchain". It is here where Billy argues that NFTs provide a much easier method for finding who owns digital assets over physical assets. To reinforce this statement, participant Jenny states that

digital asset ownership is part of a movement in technology where consumers gain power over their possessions. Jenny explains, “[Digital ownership] is more than just a picture. It's more than just a token. It's more than just code. It's like saying that you support something, and you're interested in being part of it.”

The decentralised nature of NFTs and the benefits of digital asset self-custody put these financial stores of value into direct consumer ownership rather than centralised entities such as certain gaming platforms. As discussed previously, many of the participants expressed positivity towards decentralisation of NFTs compared with traditional centralised services. This is put into perspective by participant Miles as he speaks about being in total control of these digital assets:

> I think, in my opinion, it's that you are in control of your assets. That you can buy them, and [you] can do whatever you like with them, without someone else taking them away, as I stated earlier with the PlayStation example where you can buy things, but they're still hosted on [PlayStation’s] site, and if they take it down, your money's gone. (Miles)

4.3.1.1 Portability of NFTs

The sub theme of portability emerged due to the technology of NFTs requiring no physical space to exist. This was important to most participants as they could easily move their digital assets around with the ease of a click of a button or store them on a new digital wallet by instantaneous transfer (Popescu, 2021). Participant Lady speaks on the benefits which NFT portability provide: “… with these [NFT] marketplaces, certainly for the artists, they can sell their work to people on the other side of the world, so it's very liberating for them, and for me it's created a buying and selling market …”

Participant Jenny was questioned on how NFT ownership compares to other assets that she held. In this case, Jenny runs an art gallery focusing on the sale of NFTs. In her interview, she states that physical artworks can be especially cumbersome to move around. Jenny highlights a contrast between physical paintings and digital (NFT) paintings: if she wants to showcase catalogues of work the process is longer with physical paintings, however digital paintings can be compiled into a completed catalogue within a couple of minutes. Jenny replies:

> [NFTs are] not as heavy to move, they're not as delicate and fragile. I mean, that's definitely a factor for me. I have a lot of prints. I have a lot of artworks that [are] just stored in a drawer. That I can't see, I won't be able to see it. I don't have time to go there and slip through 100 prints … We've done exhibitions of physical artwork with 160 pieces. It's incredibly time consuming; it could take two weeks to organise a show. It could take two weeks to bring a show down … (Jenny)

A similar response is given by participant Sally, where she too highlights the portability of NFTs compared to physical paintings. Her response is below:

> … sometimes I would see some paintings I would want to have in my house. I just didn't have space for that … [With NFTs] I don't have this limitation. I can have … many, as long as I can pay for them. (Sally)

This is also supported by participant Brian who prefers to own digital investments over physical investments due to space limitations. Brian raises the topic of consumers who rent and their constant search for space to store their physical assets vs consumers who own a house to store their physical assets. NFTs provide a positive alternative to physical asset investment and storage for Brian as he doesn't own a house or have any physical investments other than a car. All of his investments are NFTs. Brian explains: "… I've got a couple of like nice guitars and stuff, but I wouldn't really call them investments. I found crypto is a good way to [invest] because you can kind of be your own bank."

In addition, a common topic of discussion raised by participants was how sharing digital assets was made almost instant by the technology of NFTs. The nature of NFTs allows users to instantly share their artworks and collectables with the click of a button, creating quick portability of assets. This is supported by participant Dean who discusses the differences between physical paintings and NFTs. The discussion is about a physical painting being seen only for people that visit your home. This is where the power of the NFT comes to the forefront through its accessibility on a worldwide scale. As the world becomes more digital (Oh et al., 2022), many people from all over the world could potentially see the ownership of a painting if it were an NFT. This delves into the emotional impact of the purchase. Dean states:

> So, the physical painting you'd put in your room, or you'd put it in some place in the house. You know, no one would really know that you have it. Whereas with a digital collectible it's available to view on your wallet. It gives you access to the community so other members of the community have the painting and you can show online that you've got the painting. It's more accessible. (Dean)

The digital ownership and its ability to be transparently portable creates strong value for consumers that adds to their new identity in decentralised markets. This is because the functionalities of portable NFTs transcend the capabilities of centralised products. Moreover, the flexibilities to modify the smart contract of NFTs (Fai, 2021) opens up digital assets to be used and traded in game like economies essentially becoming a gamified platform of commerce represented by a NFT.

4.3.2 Gamification of the internet

A number of participants discussed how the blockchain and NFTs help to solve a particular problem around digital ownership of both games and game assets. Gamification is the creation of adding the processes of fun video game activities and elements to a digital reality or ecommerce platform (Huang & Soman, 2013). Innovative technology observes technological changes which have advanced or increased new methods of operations (Küng, 2013). Fai (2021) argues that within a decentralised environment, NFTs can function as digital assets or virtual keys within games. Video games such as RuneScape, World of Warcraft, and Magic: The Gathering are games with active virtual economies (Drachen et al., 2016). The digital revolution that NFTs can bring to these types of games is discussed by participant Neo. Neo saw NFT technology creating a value proposition to gamers by providing gaming assets that are transferrable and interconnected between platforms. Neo states, "Engine is very focused on providing a scalable sort of platform and opportunity for onboarding … games and using their digital assets within games in the form of NFT's."

The interconnectivity and scalable solutions of NFTs as discussed by Neo reinforces the findings of Watkins (2015) on the difficulties companies face that have tried to implement and create digital currencies and marketplaces. This difficulty is discussed by participant Vin who states how NFTs provide true sovereign of digital ownership for gamers of digital assets. He is a lifelong gamer and has a strong association to digital downloads within gaming platforms. Vin expresses how he is perplexed by the fact he did not own the centralised games he was playing or any of their in-game assets. Vin's assessment on current games and digital downloads is that he is essentially leasing game access from the developer or publisher where there is no true ownership of assets. An uncommonly recognised similarity can be made between these centralised gaming systems and streaming services such as Netflix, house-sharing such as Airbnb and car-sharing such as Uber services in a society that has created a sharing economy as discussed by Park (2017). Vin's response is as follows:

> When I first found NFTs, … the concept of true sovereign [in] digital asset ownership clicked for me and that was game over because I saw … truly independent ownership of in-game items as a very real, tangible application of this technology. (Vin)

Thus, it can be articulated that consumers with gaming experience can relate elements of gaming systems and interfaces to NFT markets. This is supported by participant Ken who highly regards his prior knowledge of digital game asset trading which allows him to apply this knowledge to NFTs within the physical world. Ken explains how he was big in the gaming community of League of Legends, and Magic: The Gathering which all have purchase options for the cards that can be used within the game. These games also have a selling community which are locked to the platform. Ken has a lot of experience playing in tournaments where he has won and sold digital cards. However,

there was a glaring issue with one of the games, as the cards he would win were not tradable. Ken explains:

> I kind of started looking into what sort of ways are there for you to own assets within games and I kind of started to stumble upon NFTs. I dove into a game called Gods Unchained that I stumbled upon whenever I started that search, and [in] that game you end up owning NFT[s] as the cards. (Ken)

This theme was further examined by participant Harry who has played games since he was young which has enabled him to better understand the current NFT market. In Harry's instance, he played the video game FIFA (Federation Internationale de Football Association), which he states is shown to have attempted their own in-game economy. However, with no blockchain integrated into the game this in-game economy was simply locked to FIFAs platform. It should be noted that this is a common constraint with all pre-NFT digital products, where gaming products are locked to the digital realm in which they were created and therefore provide no liquidity or exit for consumers that purchase these products. Harry compares buying and trading NFTs to a real-life video game. Harry was obsessed with the trading economy within video games and has spent 10 years playing FIFA – not for the soccer component, but for the card collectability component. He says:

> I would always buy the game not to play the game. I would do it to trade and I always compared NFTs to that marketplace on FIFA the video game because they were very similar. The difference between trading and video games, for example, the reason it looked like a video game to me is because … on video games you can see everyone listings, right? NFT was very much the same … You could trade another NFT plus trade for [the] cryptocurrency of Ethereum. (Harry)

During the acquisition and possession stage of the NFT journey gamification shows one element of the innovative technology that can be embedded into NFTs and the surrounding communities in shaping the consumers identity. In essence, consumers face a number of innovative technologies that surround their use case of NFTs which are explained in participant responses in the next section.

4.3.3 Innovative technology

A recurring theme throughout each participant interview was their understanding and love for innovative technology. This passion seemed to be prominent in all participants, although younger participants that grew up around technology found NFT technology easier to digest and understand than older participants. Participant Salman is 24 and discusses his love and passion for technology and what ultimately led him towards trading and using NFTs. He explains, "I've always been passionate about new technologies, about just new ideas, whether they be scientific, whether it be philosophical, theoretical, practical, whatever. You buy with emotion and justify with rationalisations."

This theme suggests that a common denominator among the current consumers of NFTs is that they are well versed in technology, and this is supported by participant Harry. The interviewer asked Harry if his history of being around computers helped him understand NFT technology compared to other people. He responded by saying, “Yes, for sure. There is absolutely no way someone in my father's generation can do this. Like there is, but they'd have to sort of have an interest in tech.”

Similarly, participant Lee emphasises how she is drawn to NFTs because of their technological aspect. Lee comes from a research background and was driven to understand more around this phenomenon of innovative technology and how it can assist artists. Her response highlights this:

> Well, the thing is I study technology and then around 2010 or … 2011, I started looking into blockchain as a technology – how it can be used by artists as mostly conceptual art pieces. Then I started researching, let's say, alternative economies, and then cryptocurrency came into my field, and then NFTs. (Lee)

These such responses created an awareness of the connection between the consumption of NFTs and consumers who have a deep understanding and affiliation towards innovative technology. This relates back to Belk (1988) who states that consumers adopt products and practices that are in synergy with their personality or sense of self. The next section discusses the sub theme of technology and video games.

4.3.3.1 Technology and video games

Themes around technological advancements and video games emerged from the interviews as many of the participants noted synergies between blockchain technology and video games. Participant Stan shares his experiences playing various types of gaming genres such as F2P games like Apex Legends and Fortnite, as well as MMOs (massively multiplayer online games) such as World of Warcraft. Stan states that in these games micro transactions are rampant, where these platforms are actively selling rare skins and other game assets. Stan’s states:

> I can play the game, and I have the basic level stuff and it's fine. It's fun, but it's like, “oh, they're selling this rare skin. I'm going to get that before it's gone. Now I have this cool thing!” or there's, like, ‘limited time’ drops and … we've already been kind of doing this in our gaming entertainment. And so, NFT[s] to me felt very [much] like the logical next step. (Stan)

Stan’s response testifies to the power of NFTs that allow for customising product offerings to each consumer. This essentially provides consumers with unique digital items and assets which are made possible by the power of NFTs.

Similarly, participant Neo expressed that his interest in both technology and gaming provided a major value point towards NFTs which satisfied existing shortcomings in current Web2 gaming platforms. Specifically, it is how he saw gaming models ultimately benefitting from NFT technology. Neo's response is as follows:

> One of the things that resonated strongly with me early … when you start thinking about what is the use case for blockchain, what is the use case of this technology? It seemed pretty evident to me that gaming was an area that was going to have a major use case and value proposition for the cause of the problems it solves for gaming. (Neo)

Supporting Neo further, participant Vin states that gaming is where he saw the potential of NFTs and how it helps to solve the current restriction of digital leasing. Vin's states:

> Honestly, it was gaming. I've been a lifelong gamer, and it was really the concept of, like, a fortnight skin or a digital download. When I go and buy a digital download of a game, I don't really own that game. I'm leasing access to it. (Vin)

Additionally, participant Dom discusses the potential benefits that NFTs would provide to consumers once gaming companies incorporate this asset class into their available in-game microtransactional purchases:

> … gaming obviously is a huge sector … Companies make their money off microtransactions and so the ability for users to own their assets and then be able to profit from them … as well as be able to use them across games or platforms, I think it's going to be huge as well. (Dom)

Similarly, participant Kevin delves into how NFTs allow consumers to show off their digital gaming assets to their friends and family. One such new game world he discusses is Nifty Island: this is a gaming platform which allows interconnectivity and NFT asset tradability (which games such as World of Warcraft or Minecraft do not provide). Kevin's replies:

> … so [Nifty Island] were building a Web3 game where it's basically an open world where you can, like, show off your NFTs, build … a house, put your NFTs in it … it's [similar to a] World of Warcraft type game, or you know, even similar to Minecraft in a sense: [it's] somewhere where you can show off … all of your digital assets and trade them. (Kevin)

The merging of these technological worlds is curiously noted by participant Miles, who discusses how the combination of NFT technology and video games are more understandable and acceptable to consumers of a particular era. This is particularly relevant for consumers that were born into a world where video games were commonplace from a young age. Miles had an instant connection to digital assets and ownership, which has been reflected in the video games that he plays:

> I immediately understood what NFTs could be, because if you play a game and you really like it and you want to indulge more, you play for, you know, 1000 hours or something. To get the most out of the game … you bought a skin for five euro or something, and you immediately had, like, a different experience. (Miles)

Furthermore, Miles discusses that he is able to understand NFTs due to his gaming past, which is relatable to the Gen Z consumers (Puiu, 2016) who grew up around digital products:

> Yes, definitely. It's 100% more easy because [of] the transition from video games. It's just natural to me and I think that's the reason why Gen Z, which are or who are growing up, like, as 100% digital native, everything they do in the online world is just natural to them. (Miles).

Miles continues to speak about how traditional games do not give him the benefits or potentials that NFTs have given him. Miles relates this to how he has put so much money and time into Web2 video games with no real-world benefits for the future:

> After transitioning over to a different [Web2] game … or different iteration of the game, everything was gone … I put so much money into this and so much time, but now nothing of this gets me any benefits in the future. (Miles)

Here, though speaking on the limitations of assets locked to separate platforms in Web2 based games, Miles paints a picture of the potential of NFT technology and video games: NFTs can become skins that can be reused in different platforms, and which provide interconnectivity and real-world value. This technology innovation of NFTs is exacerbated as consumers join virtual communities and NFT brands (Colicev, 2023) that share insights around technology, gaming and ownership. The next section discusses virtual communities and tribes which are potentially formed around NFT brands.

4.3.4 The power of virtual communities and tribalism

Virtual communities and tribalism were shown to be major contributing factors during the acquisition and possession stage of the consumer journey. While it can be gauged that virtual communities and tribalism can be a prominent factor throughout the consumer journey (Colicev, 2023; Yilmaz et al,. 2023), it is during this stage that participants were shown to be shaped by their associations with NFT brands and communities. It is during the acquisition and possession stage that participants have their identity curated by the experience of virtual community, its members and influencers that made it a dominant aspect of this stage of their consumption journey. All of the participants main use of virtual communities was predominantly shown to be a combination of websites, Telegram, X and Discord, with most interviewee's referring to using these specific digital platforms. It is not surprising that social media platforms were used the most commonly by participants as the platforms provide news which strongly affects digital assets as raised by Naeem et al. (2021). However, participant responses

went into personal experiences which gives a rationale on why these social media platforms also work for building virtual communities. This insight also builds the consumer identity around NFT projects which can have big impacts on participants value perceptions. Here, Peterson discusses why this is the case for NFT projects. Peterson explains these social media platforms allow NFT consumers with like-minded interests to chat together and build strong communities around the NFT brands which they support. Peterson responds:

> You can have threads of conversation on Twitter. Discord … [is] like a hub where the [NFT] project, much like a website, can post their information and keep people involved that way, and then those people are in the same … chat server. (Peterson)

Leading from this, participant Vin talks about early day NFT communities developed before 2021. In these early days of the technology, there was not a lot of emphasis on the money being made. Vin responds, "Most of the people that were there were there because they were curious, or they were exploring, or they saw the benefits of the foundation of the technology." Furthermore, Vin discusses how this community led to a healthy environment where people could both teach others and also feel safe to draw critical attention to any community members who provided misinformation. This held people accountable for mistakes and added a mutual layer of understanding and respect which created value for consumers within the community. People within these virtual hubs were essentially increasing their network as well as gaining valuable information from each other. Equivalently, participant Ken speaks about the benefits of being part of the BAYC NFT community. Ken notes that the BAYC community is his favourite community that he purchased into early after minting his first BAYC NFT and purchasing a second BAYC NFT from the secondary market. Joining the BAYC community permitted him exclusive access to in-real-life events. It also granted him community access to meet people of similar interests, some of which he had only known as an anonymous virtual community member prior to meeting in person. Ken responds:

> I picked out an [BAYC] Ape [NFT] that I thought was particularly cool to me and I wanted to have that as my identity on Twitter and [also] in the Web3 world. I'd have that Ape because I liked kind of what this project was trying to do … They ended up having an annual Ape Fest and I missed the first one, but they had a lot of different meetups in different cities, and I was in Denver for one of them and met a whole bunch of people from that Discord channel [and] I recognised their name. (Ken)

However, it must be noted that there is essentially an element of financial benefit by being part of a popular NFT community. The majority of participants explained their valuation of community came from the financial benefits of gaining additional tokens, NFTs or tickets to exclusive in-real-life event parties. This is supported by participant Sally who has notably interacted with major brands and labels, and recently sold her traditional investments of stocks to purchase NFTs. Sally wastes no time

in identifying that she is part of BAYC community and how advantageous it is for her to hold one of these digital assets from an investment point of view. Sally's states, "I had, like, regular traditional investments stocks for these companies, but I sold everything and invested everything in NFT's … and also Ape coins, because one of the NFT's that I hold is an [BAYC] Ape."

In a follow-up question, the researcher asked Sally why she had so much conviction to sell her traditional investments for NFTs. After achieving some success in getting into the exclusive BAYC NFT brand, as well as obtaining airdrops and additional tokens from holding her BAYC NFT, Sally raises the curtain by stating that there is more than just art or community, in that while buying the NFT was initially risky, the returns are like nothing she has witnessed before.

> I got my Bored Ape [NFT], and I was still not sure what was going to be of this, but I saw people talking about it. My husband got his and I thought … 'this is cool ape art so maybe I'll get one', and then I got one and I think when they dropped their [NFT] dogs … this came as an Airdrop, so I didn't buy anything. I was not charged anything and a week or so after that, I think those were worth like $5000 [USD]. (Sally)

The community around BAYC provides extensive valuation and speculation around how the NFT brand gives back to its asset holders. This is supported by participant Belle who discusses what the BAYC community gave her by being a part of this community from their genesis. These rewards came in additional NFTs that were airdropped to Belle's wallet as a reward for her brand loyalty by holding the BAYC NFT. Belle's response:

> From your one single Bored Ape you've received a [NFT] dog, a [NFT] serum that would make a Mutant Ape. Ape coin [cryptocurrency] that I can't remember at its height, it was worth like $100,000 and then you get airdrops and [the NFT game] Otherside Deed, and so from one asset … you've made money. Unless you were someone who bought a Bored Ape at 500K, then yes, you have not made money, but for the people who were like the original buyers who bought [it] under 5 Eth or who minted, the club has made everybody a lot of money. (Belle)

In comparison to the BAYC community, many additional NFT brands are bustling with communities that showcase various valuations and utility for consumers. The value of these communities to consumers varies from participant-to-participant and included the values of Intellectual Property (IP) ownership, NFT related game worlds, ticketing systems, PFPs and authentication services. PFPs are another way of identifying NFTs that can be used as social media profile pictures. Due to these avant-garde functions of NFTs, a common occurrence was that participants became fixated on certain NFT brands. This fixation and conviction of brand has created tribalism among consumers of different NFT communities. Participant Brian discusses this by stating this type of tribalism and community attachment was not just limited to the BAYC community. Brian is part of another community that

sparked his interest due to how they imagined IP, ownership, and licencing. This community is called Pixel Vault (PV) and was created around the digital ownership of a comic book that incorporated game theory (Sung et al., 2023) leading to multiple NFT options (holding or burning the comic) for potential buyers. This community of PV strives to create games and recreate digital IP ownership within the Web3 space. Brian comes from an industry where he is aware of the problems surrounding IP ownership rights and thus as an affinity for the current issues within the digital asset marketplace. It was also quite common amongst all participants to be involved with a series of projects and communities, and not just one. Brian's response shows:

> I really liked what they were doing with reimagining what IP was in this new kind of world of Web3 … NFTs are giving ownership … [and] creative licensing, of the PFP character to the holder. … I thought [this] was a really interesting way forward for what I saw as a lot of issues in the traditional IP world. (Brian)

These NFT communities assist consumers in understanding what type of utility and preferences they want to experience from their NFTs. The combination of digital ownership, gamification, innovative technology and virtual communities shape the foundation of the acquisition and possession stage of the consumer journey. Each of these themes have a lasting impact that can determine the consumer motivation once the asset has been used and evaluated by the consumer. From this, the post-purchase evaluation and behaviour stage is what consumers next experience. This next stage covers value, cognitive dissonance, and the behaviour of burning or disposing of NFTs.

4.4 The post-purchase evaluation and behaviour stage

The last stage of the consumer consumption journey is the post-purchase evaluation and behaviour stage and can be associated with consumer identity projects in CCT (Arnould & Thompson, 2005), as consumers start to form a strong connection with their NFT. This connection was linked to the post purchase evaluation stage as there is a focus on understanding symbolic meaning and status in the creation of consumer personas of NFTs. What this means is that as the consumer goes through their consumption journey, it is within this post-purchase stage that consumer identifies NFT projects most relevant. As by going through pre-purchase and acquisition and possession, consumers have now started to create an identity with a strong connection to the NFT, community and utility leading to a specific type of NFT consumer. As the NFT brand becomes embedded into the consumers lives, the consumer may take on the properties of the NFT brand image to essentially extend the brand product line (Brouard, 2024). During this stage, participants evaluated their NFT acquisition based on the factors of community association, utility of digital assets, monetary valuation, credibility of asset, sentimental and emotional attachment, additional benefits and rarity. Ultimately there would come a decision for participants to either hold their NFTs or burn (dispose of) their NFTs. The interesting

takeaway from the disposal questions in the interviews was that participants expressed confusion, misinformation or even neglect over burning as a method to dispose of their NFTs. Many participants assumed the question was asking if it was a gamification move as some NFT brand projects incentivise consumers to burn specific NFTs to gain a separate and new NFT as a result. Since consumers currently need to pay cryptocurrency to burn an NFT, participants determined that this would only be done in extreme circumstances. Some examples of these extreme circumstances were projects that ended up being scams or the NFT brand no longer aligned with the consumers beliefs and values. Many chose to either hide their NFTs or send their NFTs to a tax harvest protocol so as to burn their digital asset so that it acts as a loss for tax time. Hence, within the post-purchase evaluation and behaviour stage of consumption consumers observe the valuation of their NFTs and evaluate their purchase decisions. These topics will be discussed in the next sections.

4.4.1 Valuation of NFTs

Value regarding NFTs broadly relates to understanding how consumers that purchase and hold NFTs perceive the worth of these possessions. In this context, factors of value refer to the tangible and intangible value that participants personally give to these digital assets. The participants listed several distinct benefits which NFTs granted to them. These benefits came in the form of money, additional airdrops of NFTs or tokens, and access granted for asset holders to attend in-real-life events. Valuation of NFTs was also determined by the emotional and sentimental attachment of participants to their NFTs. All of these factors determined the valuation placed on NFTs by each participant. Through this valuation, in some instances the mentality and perspective of a participant that was originally only a physical asset collector become a digital asset collector. In some extreme cases, some participants were not physical asset collectors before they started their NFT journey, but subsequently digital collectors. Participants that also had rare digital assets with exclusive traits showed an even greater perceived increase in value towards their NFTs. This also allowed these participants to use their NFT as a ‘digital flex’ (a term used within some NFT communities) to show off their digital asset on social media. This idea runs in digital parallel to how physical luxury goods such as a Rolex watch can be flaunted in the material world (Kasztalska, 2017), and also links strongly with the theory of conspicuous consumption (Bagwell & Bernheim, 1996) as these particular participants are using their NFT to showcase their social status. Participant Lee discusses how she assesses the valuation of certain NFTs and how her personal preferences and beliefs matter when it comes to her purchase choices:

> So, if I buy an NFT, it is because I see some value in it. Maybe personal, you know like I said, that it has like a meaning, a connection to me [where] I enjoyed it. I might have a connection with the artist or the person on the project that created it. If, let's say, someone just gifted me

> an NFT … [it] will probably, you know, have an emotional value because someone that I know gave me a gift … (Lee)

The four prominent valuations of NFTs themed by participants can be summed up into the following categories: financial and utility benefits of digital assets, emotional and sentimental attachment, rarity of assets, and digital identity which will be discussed next.

4.4.1.1 Financial and utility benefits of digital assets

A major component of valuation of NFTs specified by participants is the financial and utility benefits which their NFT digital assets provide. These financial and utility benefits came in various forms ranging from monetary benefits, additional free NFTs from airdrops including tokens or tickets to in-real-life events, accessibility of assets, proof of asset authenticity, relationship networking and community access. This is supported by the literature of Fai (2021) who labels NFTs as smart collectables, and the authenticity rights of NFT technology raised by Colahan and Perske (2020). Harry describes how he felt when he received a free airdrop which eventually provided him with monetary benefits, made possible to him by holding an NFT from the brand:

> You would get a gift, kind of like an airdrop of a dog companion of your [BAYC] Ape, and at the time Apes were 3 Eth, 4 Eth … I got my golden dog and the golden dog I sold for 12 Eth, which was what I had saved up for the previous year. (Harry)

Lee is another participant who comments on the benefit of NFTs being a financial store of value which can be sold if required:

> … if there's [an NFT] that does have, like, a monetary value, … if at some point I'm really in desperate need of some money I can choose to part with my artwork and get back some money from what I invested in it … (Lee)

Participant Jimmy also speaks on the utility benefits of obtaining a ticket by holding his NFT: “I received benefits by going to an IRL event … a private concert.”

The accessibility of NFTs is also a utility benefit which participants appreciate. Participant Brian shares his perspective on the utility benefits of NFTs by valuing the accessibility of NFTs over physical artworks. Brian sees immense value in an NFT over a physical asset to the extent that he holds no physical artworks, although Brian has many rare artwork NFTs. Brian states the many benefits and sharing ability of owning NFTs:

> I value the NFT more, it’s cooler. You take it with you wherever you are. I can put it up on the wall at home. Somewhere else I can send it internationally within a second digitally. [I can] send someone a link and they've got it. I can transfer it from wallet to wallet. I kind of think

> that the digital has it over the physical for me and it won't degrade either. It won't get damaged. (Brian)

The topic of relationship networking and community access brings a new layer of utility benefits for consumers. Participant Jimmy speaks on how having exclusive access to a community through holding his NFT provides him with the benefit of being part of a unique clique for relationship building and networking; “I think it depends on what you're looking for in benefits, right? Like even conversing with people like-minded with a common goal is a benefit.” Community access is highlighted as a strong utility benefit of NFT consumption as having an NFT affiliated with a particular brand is what ultimately allows access to certain virtual communities and exclusive Discord chats. A good example of this benefit is presented by participant Micky, who explains his descent into the BAYC community through his purchase and excitement over their NFTs:

> Like, you need to buy the NFT to chat in here … I was like, well I need to get in this chat and so at the time, you know, move[d] some things around and figured out a way to buy one. I get in there and I’m kind of checking this community out and it was definitely like a lot of excitement and, you know just, it felt definitely like just a very vibrant hangout atmosphere and … it seemed like there were lots of smart traders in there. (Micky)

In comparison, participant Travis brings up the many use cases (music, fashion and art) for NFTs that drives him to hold his NFTs. The utility benefits which Travis discusses goes beyond monetary valuation and connects with how NFT brands can create fandoms that tie directly to the creator and also authorise access to real life events. Travis states:

> I'm really interested in music, fashion, art and creating new culture, and I hold many NFTs with projects that I believe … have a long-term vision and are here for the right reasons. Big fan of what of Avenged Sevenfold is doing here in the space with their Death Bats club. I think that is going to be the future of fandoms, of major bands, bringing their fandoms to the Web3 … The Wicked Craniums [NFTs] being an all-access pass to live music and experiences to in-real-life … I think that's going to be a huge deal. (Travis)

4.4.1.2 Emotional and sentimental attachment

The findings clearly show that the majority of participants stated that they had some form of emotional or sentimental attachment towards their NFTs, especially in the form of their PFP/digital identity NFTs that represented them in virtual communities such as X and Discord. The concept of PFP will be discussed more in digital identity. It can be argued in this instance that there are sentimental triggers and feelings that arise from owning NFTs. Participant Micky discusses his sentimental valuation on NFTs in response to how he plans to hold these digital assets for the long term. Micky states that some of his favourite owned NFTs are ones which he didn’t pay much for and

are on display in his home, leading to sentimental valuation towards these digital assets. This sentimental valuation leads to an emotional attachment that transcends monetary valuation because Micky has a powerful memory associated with his acquisition of the NFT. He shares the rationale of how his sentimental attachment to a specific NFT is linked to the date in which he minted the NFT on the blockchain, and how this connects to a milestone in his real life:

> One [NFT] is related to the date of the birth of my son, and so it's a piece that was interesting for me to find this alignment with it … So, I mean, just from a valuation, if you think it'll keep value or go up in value, I'm always reassessing that. And then there's … some pieces that you just like, because they're not even worth very much money, or you didn't pay much money for them … It's cool to just own it and know you have it. (Micky)

The topic of emotional and sentimental attachment is reinforced by participant Neo who adds in the notion of how the length of time a digital asset is owned by the consumer plays a part in the valuation of its worth. Neo' comments:

> I think it differs depending on what it is and how it's been used. So, if you've used it [for] a long time – your PFP – there's a bit of an attachment … so, your identity and your asset, sometimes those assets can have a status attached to them. So, by selling [the NFT] you're effectively relinquishing that status as well … But, you know, most people collect stuff they love. (Neo)

To complement this, Miles states that for him, there exists an immediate emotional connection towards the NFT directly upon purchase. As the history of ownership of NFTs cannot be falsified, this certitude adds an additional layer of emotional attachment to consumers who first purchase a digital asset as their name will forever stay on the purchase. Here, participant Miles explains how consumers can bond to that initial purchasing experience:

> The moment you buy an NFT, you immediately have an emotional connection to it somehow, which is totally different to stocks. You have, like, funny pictures here and a different community … and that's why it's very different to buying other things. It's just emotional and you feel more connected to it immediately afterwards. (Miles)

Although community access and relationship networking are a utility benefit of holding NFTs, participants also stated these aspects created an emotional attachment to their NFTs that came with bonding with NFT community members. The exclusivity of community was highlighted by participant Ken, who states the many benefits of holding his BAYC NFT which transcended to trusting and being connected to like-minded people within a virtual community. This example is a direct connection to the middle order needs of love and belonging within the Hierarchy of Needs that is discussed by Maslow (1943). Through reviewing the participant's experiences here, it can be

determined that emotional attachment is fostered for NFT holders who are surrounded by like-minded people within a community that understands the latest Web3 technology. Ken explains his emotional attachment and connection to BAYC:

> I liked having access to these Discord channels with people with diverse knowledge sets who all owned Apes, so we all kind of trusted [each other] … it was just kind of a really cool community where everyone was instantly kind of connected. (Ken)

4.4.1.3 Rarity of assets

Rarity of assets within the NFT marketplace is important to discuss, as many of the participants made mention of this theme as a large contributor to the value they placed upon their NFTs. The rarity of assets in the NFT collector space may have many similarities to other traditional asset collection markets such as Pokémon cards (Ward & Clark, 2002), gaming skins (Toygar et al., 2013) and physical artworks (Toups et al., 2016). Initially, rarity has been a common theme in physical collections such as books (Teper, 2011) where rarer books lead to increased exclusivity and valuation placed upon them by the consumer. This theme was highlighted by participants Neo and Peterson who respectively reported their desire to purchase rare NFTs. Neo responded to how rarity is an important aspect to him:

> There are some things I'll collect just because I like them and so rarity doesn't apply, and so you know, I think that's a really cool piece of art. I just like the art or I like the concept that was put into it. But if I'm looking for investment stuff … rarity particularly is important. (Neo)

This mindset also links to collector mentality (Kuijten, 2016; Lévi-Strauss, 1966) as discussed by Peterson who elaborates on how rarity and collectors go hand in hand in many industries and that NFTs are no exception. Peterson explains; “So, if you're talking about rarity, you're talking about something that would be considered a collectible. … like … there's few of this, and so demand would be higher, probably because there's less of them …”

Subsequent participants shared this view, and this suggested that participants see value in the rarity of an NFT. It is here that McClelland’s Achievement Motivation Theory (McClelland et al., 1953) may explain why participants who are trying to mint a rare NFT do so as they thrive off competition and are striving to achieve their desired goal (in this case, that goal is to obtain rare NFTs). Participants Micky and Salman delve further into their desire to purchase rare NFTs. Micky discusses how observing the different rarity of these digital assets started his collector’s journey:

> They had different rarity classes going from uncommon, rare, to epic and so, with that, the art would change from being like a static image to the most rare, having sort of the appearance

> of, like, a hologram. It was … animated as well, and the supply was much lower, and that project was my introduction to NFTs. (Micky)

In addition, Salman expresses rarity as something of importance within NFT collections. Salman replies: “Rarity is a big part, especially if you're buying it as a trader and investor. Then you know that those are going to be valuable …”

Participant Stan discusses the exclusivity that NFTs provide where some situations bring on mass demand. It is within these situations that the power of digital scarcity can increase valuations of popular NFT mints. Here, consumers do not want to miss out and thus rush to buy the asset on secondary marketplaces. Stan comments:

> I mean going back to the start with Beeple … [when] he did a drop … I think he made like $5 [million] or $6 million like in 5 minutes or something crazy right … and the people that bought that were able to flip it and make like 100 grand in a second … it definitely created a fever … (Stan)

The next important theme of valuation of NFTs expressed by participants is digital identity.

4.4.1.4 NFT Digital identity

NFTs can present the opportunity for consumers to showcase a digital identity where an NFT can simultaneously represent the asset owner on social media sites. Participants that used NFTs as their digital identity noted that they are recognised by their NFT image on virtual communities. There exists an overlap between these two concepts however, the NFT digital identity is ultimately shaped in the post-purchase and evaluation stage as consumers have a better understanding of the community they are in and how it is reflected in social media. This image that the NFT represents is how consumers were identified and how they associated with each other in online communities. Participant Peterson supports this notion by stating that his identity within Web3 and on social media represents the company he is committed to and his current employment. Peterson concisely explains what his digital identity allows him to connect with in the Web3 workplace: “To own a digital asset that is verifiable in a public way which can allow me to connect directly with a creator or company …”

This theme was shared in consecutive interviews where participant Stan discusses his association towards his digital identity. This digital identity allowed Stan to have direct access to the creators of an NFT company. Stan comments:

> … with PFP's, we have [them] as our online profile pictures and it kind of becomes an identity. I didn't take it as far as some of the others where maybe they created a character around their art and were kind of almost like role-playing as this character. (Stan)

Similarly, participant Travis shares his rationale for purchasing his NFT to use as his digital identity which represented an extension of his physical world self:

> The first one I ever picked up at the time was wearing a chef coat and had headphones on. I was the chef at the time, so I thought it fit my vibe and I love music. So, I was like, hell yeah, I want that one with the chef coat and headphones on. (Travis)

It's here that the value of self-image arises as Tesser and Paulhus (1983) discuss that people will change their self-definition to protect or to enhance their self-evaluation. This concept can be seen within the participants responses around digital identity and how they focused their self-concept within online communities to revolve around their NFTs. In some cases, participants reported that the NFT profile pictures they purchased helped them build out their profile. Participant Karen explains how she is trying to gain a following, and to do this she purchased a BAYC NFT. Karen uses an online identity that is an alter ego named after a celebrity entertainment talent she admires. Here, Karen has essentially built a brand around the character and identity she has created. Karen explains:

> My online identity is Jane Mansfield which is to credit Jane Mansfield as a Hollywood icon in the US in the 50s, so the previous picture was a female Ape. It has blonde hair and kind of looks just like Jane Mansfield. And I've always been a fan of her … my goal is to gain more of the following so that I can just, you know, transfer or transition or integrate into the Web3 industry [and] create my own thing and … build a brand around another [NFT]. (Karen)

This interesting development continues to emerge here as Lady states her NFT ownership had influence on creating her alter ego. Lady reveals that this shifted her entire personality from being a 'boring banker' to an 'exotic figure'. This raises the topic of the value generated for NFT consumers around being able to create a digital identity and therefore have multiple personas; consumers can live completely different lives in Web3 as their digital identity/counterpart reflects different traits and persona than that of the person living in a tangible reality behind the screen.

Participant Lady provides a relevant example of this through commenting on the contrast between her digital identity and her physical world persona. She starts by stating:

> So, when I worked in a bank, I was just seen as some middle-aged wife and mother who was all a bit boring, but as soon as I got [in]to NFT's, I was Bitcoin Madam! You know, I was quite exotic and glamorous. (Lady)

It is clear from Lady's response that the value created from having a digital identity separate from her physical world life gave her a feeling of being listened to and appreciated which she felt she was not otherwise able to obtain:

> … because I have quite a young outlook, people assumed that I was younger than I am and I really like that because I think that the NFT community is really levelling for people: it doesn't matter what colour your skin is, what you look like … I think a lot of people have been listened to who in normal life, their opinions would have just been written off. (Lady)

The strong form of community access that is linked to NFT digital identity is discussed by participant Brian. He states that the art he has purchased as an NFT shows status, such as how profile pictures on X are a statement. This could be whether the person is showing off a Pepe or Doge to indicate they are part of a special community around a given brand. This digital identity is what ultimately allows access to certain virtual communities and exclusive Discord chats. Brian also speaks about how his son acquired an NFT around IP and gaming which had greater networking benefits; "… for [my son], the Moon [NFT] was just access to the most kind of an exclusive group on gaming." After the process of placing value upon NFTs by participants, they all spoke on further evaluating the digital assets within their collections to decide whether they keep, hide, trade, sell or burn their NFTs. The combined elements of financial, emotional, rarity and digital identity shape the consumers value of NFTs within the post-purchase stage. Essentially this leads to a consumer persona that dictates the type of NFTs consumer and the NFTs they seek. This is discussed within the next section of NFT evaluation and consumer behaviour.

4.4.2 NFT Evaluation and consumer behaviour

The decision for NFT evaluation was considered by participants at some point within their post-purchase evaluation and behaviour stage. This would be to decide whether their digital asset was worth keeping, hiding, trading, selling or burning for various reasons, and at various times, which in turn affected consumer behaviour. This implementation towards their NFT assets varied for participants although common themes emerged. The range of evaluation factors outlined through assessing participants responses can be divided into three subgroups which include cognitive dissonance, the transition to digital collecting, and disposal of digital assets. These themes will be discussed in the next sections.

4.4.2.1 Cognitive dissonance

Cognitive dissonance was a theme expressed by most participants who attempted to re-purchase NFTs which they had previously sold. The participants expressed that they experienced feelings of regret once they parted with their digital asset. Cognitive dissonance was discussed previously in this thesis and observes consumer behaviour and beliefs being misaligned (Chou, 2012; Zafar, 2011), and is a concept strongly supported by the participants stories within the post-purchase evaluation and behaviour stage of NFT consumption. Participant Belle shares her experience by discussing the complex emotions she felt when she disposed of an NFT, only to purchase another NFT from the

same brand only 20 minutes later. Belle explains this is in part due wanting to reclaim the community benefits. She felt it was unfortunate that she was not able to buy the exact same NFT, although she was able to get a different one within the same community. Participant Belle shares her emotional experience on the selling of her BAYC NFT, which raised the subject of remorse. Belle replies:

> So, I listed my [BAYC NFT]Ape, I think for more than I thought it would sell for and someone bought it and it was … a floor Ape, and I immediately was like, "Oh my God, what have I done?!" and so I threw another $500 in, and I've always wanted a pink ape and so that's when I bought my pink ape. (Belle)

The interesting thing about this that extends upon research by Lemon and Verhoef's (2016) on the post-purchase stage of the consumer journey in that the concept of re-purchase is a bit more exclusive as there can only be one owner of each NFT. Unlike when a physical item is re-purchased or stolen, it can be a very time-consuming endeavour to find the person who has purchased or stolen the product and can result in not locating that item again. With NFTs, it's possible to search for a sold or even stolen NFT on the blockchain to immediately find the owner of the digital asset and potentially place a bid on, and therefore attempt to re-acquire the exact same NFT.

Following Belle's initial answer, the interviewer asked what led Belle to putting in the immediate $500 to purchase another BAYC NFT:

> … I just wanted to be involved. It seemed like a fun community, and I just wanted to be back in it … I think I just had the Eth in my wallet and … I just looked for something, you know, that was available at the time within my price range … (Belle)

The immediate regret experienced by Belle links strongly with cognitive dissonance theory around consumer purchasing. It appeared that FOMO was simply overpowering Belle's purchasing decisions in this instance. In a similar manner, during a series of responses, participant Jimmy talks about the emotional connection and the mixed emotions he experienced within himself and from his peers when selling his BAYC NFT that he previously used as his digital identity. His response is as follows:

> … I bought [the NFT] for a few Eth [Ethereum], … based on what each was [valued] at the time … the highest was $400,000 for an Ape and I ended up selling it for I think $200,000. So, I kind of rode it through all the highs essentially and all the lows, you know, up to the culmination of the peak … (Jimmy)

Jimmy goes on to discuss the reactions from people once he sold his BAYC NFT. He states it was almost like selling a part of his digital presence, and because it was no longer his PFP, his peers failed to recognise him on online social media platforms. This is supported by participant Jimmy' response:

> … when I sold it, the reaction … from everyone was like ‘oh wow like why did you sell? Like that was you, that's how I recognised you.’ You know it’s almost like you're in a way selling your soul … I've moved on and don't even think about it anymore and I've adopted a new identity …(Jimmy)

It is clear that cognitive dissonance plays an important role when it comes to both evaluation of asset and consumer behaviour in the consumer journey of NFT consumption. Consumers experiencing cognitive dissonance in this stage of their consumption towards their NFTs can show a shift in their digital identity or persona. This change of consumer type is a shift that occurs through the consumption journey as consumers come to a better understanding of what they are categorised. What this means is that consumer identity can shift their post-purchase evaluation. Consumer motivation needs and wants essentially change based on their experiences from virtual communities and social media as discussed in the findings. Another theme brought up by participant responses was the notion of consumers transitioning into the world of digital collecting. This will be discussed in the next section.

4.4.2.2 The transition to digital collecting

A fascinating insight of the findings in the post-purchase evaluation stage was the shifting identity of consumers in how they perceived digital collecting. The transition to digital collecting as part of consumer behaviour around NFT purchasing can be noted amongst several of the participants. Participants within the study ranged from having zero experience as a collector to being avid collectors of both physical and digital assets. Participant Lady talks about how consumers have always been fascinated with collecting and that NFTs allow collecting for the digital age. Her response highlights this notion: “I mean people have always liked to collect stuff. Whether it was Pokémon cards or models, or football cards … I think NFTs in some ways are like that.”

It is interesting to note that some of the participants had no desire to start collections or aspirations for collecting art or other assets. However, when they saw the potential of NFT technology and what it could provide, an attraction spawned for owning NFTs. A comment is made by participant Jenny who supports this notion. Jenny says, “I’ve always been a traditional art collector, now obviously moving towards the digital art.”

Jenny also comments on the financial benefits of her digital assets over her physical assets: “I mean my physical investment[s] cost me a lot more to store every month than my digital investment[s] because that doesn't cost anything to store.”

The transition into digital collecting was made apparent with some participants who could see both new benefits within the NFT technology as well as useful traits which aligned with more traditional assets. Participant Lee responds:

> You know there's … something special and rare [about NFTs] … so, if I want to sell it only, I can sell it because only I can own it, but everybody can see it. So, I think that's kind of a very interesting characteristic of an ownership connection to a more, like, traditional physical artwork ownership. (Lee)

This also had an impact on participants that were not physical collectors and actually became digital collectors, such as participant Brian. As previously discussed, Brian was renting his accommodation and had an issue with space which minimised his desire to invest in physical assets. Brian values NFTs over physical possessions as he simply does not have the space to store physical items, which ignited his attraction and lifestyle transition into digital collecting.

On this note, the participants that followed a pathway from physical to digital asset collectors raised the issue of the cumbersome nature of physical assets. It is important to note that Maslow's (1943) Hierarchy of Needs theory is relevant in this section, particularly around the lower order needs of safety and security, which can be particularly connected to NFT consumers who have less physical space or property to store tangible assets. This connection can be made for the following reasons: Participants who own their own homes or have more storage space for physical assets already have a large aspect of lower hierarchy need fulfilled; their motives for NFT investing were more grounded in the higher order of this Hierarchy of Needs of self-esteem and self-actualisation. On the contrary, participants who rent or have lower physical space for storage of physical assets displayed traits indicating that their lower order needs for safety and security hadn't been as fulfilled, however the ability to purchase NFTs and hold these as assets filled the gap which physical space or property ownership may have otherwise provided. For example, a consumer who does not have the space to store physical collections finds value in fulfilling this need though acquiring digital collections that do not take up space at all. This is made apparent by participant Ness who argues that he holds most of his investments in the digital realm of NFTs and cryptocurrency and does not hold physical investments. This is confirmed further with participant Brian's response, who gives an in-detail explanation for his rationale of why digital assets fit his lifestyle appropriately:

> It's difficult in a rental to kind of put paintings up on the wall, or show off your collection of this, that, or the other in the way that you would do it if you own the place. So maybe perhaps the fact that I don't own anything … Why would I collect physical items? Everything I do is digital. (Brian)

Ness' choice of digital investments over physical investments is explored in a follow up question where Ness discusses the limited nature of physical assets:

> I think the easiest part is to sell [NFTs] … I think you reach more people if you have, like, the digital because in my opinion you're limited when selling a physical product. It's like a little

> bit more limited to sell it because you have to ship it … So, I think it's harder to resell [a physical asset] and I think it's like location based, too. (Ness)

The selling of NFTs being less cumbersome than physical products is not the only convenience which participants discussed regarding their transition into digital collecting. Participant Kevin explains the contrast between owning a physical asset in your home that can wear and tear vs having an NFT that is verifiable, doesn't wear and tear, and is on the blockchain forever. Kevin makes a strong argument for why his mentality has transitioned more towards digital collecting than physical collecting. Kevin explains: "… artwork can be stolen quite easily. It is not easy to transport … real artwork, there's a lot of, like, risks in doing that, whereas it's very, very easy to transport an NFT". Kevin also elaborates on how portability, accessibility of asset and the removal of a third party being involved in his asset trading also greatly contributes to his decision for digital collecting:

> I mean you can take it anywhere you like in the world. You don't have to be restricted … I've done a private NFT trade instead of, like, using a marketplace, and it's literally just that person send[s] you the money, you send them the NFT, and that's it – done. Like, there's no … middleman or … excessive paperwork or anything like that. It's largely done in a couple of minutes. (Kevin)

Within the post-purchase evaluation and behaviour stage of their NFT consumption journey, transitioning into digital collecting was one such form of consumer behaviour in which participants engaged. This also played a part in creating a new digital identity that was formed through the consumption journey. Alternatively, consumers also faced another major factor that would impact their post-purchase decisions. This consideration by participants was whether or not to dispose of their NFT digital assets, which is discussed in the next section.

4.4.2.3 Disposal of digital assets

The disposal of digital assets is a potential choice that may be addressed by consumers during their NFT consumption journey. Disposing of digital assets involves a range of different processes which the consumer can act upon including burning, hiding, trading, or selling their NFT. Many of the participants expressed confusion with the term disposal, either not knowing what it meant, not understanding the process of burning an NFT, or not knowing why disposal was even necessary.

The literature of Jaakkola and Alexander (2024) argues that within consumer consumption journeys, the concept of 'augmenting' may be something for future researchers to consider. Augmenting can be a concept that is considered in this study because digital NFT assets can be both digitally 'hidden' as part of consumer behaviour, or 'burned' which is required in order for them to be truly disposed. Therefore, the consumer journey of NFT consumption is different to previous consumer consumption

journeys and is augmented in that hiding and burning are both new elements of consumer engagement within the post-purchase evaluation and behaviour stage of consumption.

When asked about burning an NFT, various participants expressed reluctance or confusion to do so, as it was more beneficial for them to sell their NFTs rather than dispose of them by sending their NFTs to a burn address. This was because if they chose to burn their NFTs, they had to pay a gas fee (Faqir-Rhazoui et al., 2021). Other participants opted to hide their NFTs over burning (to avoid paying the gas fee to burn the NFT) which essentially places the NFT in a hidden digital folder and masks the NFT from public view within their digital wallet. Supporting this is the response by participant Travis, who when asked about his NFT disposals makes it clear that disposing of NFTs is not on his radar: "I don't. I've never even sold one before, so … every NFT I have is because I plan on using [it] or I like the art." When asked more about disposals, Travis continues: "I don't know why I'd want to dispose it, [to] burn an NFT, to get rid of it … I just don't see myself doing something like that". In contrast, participants also spoke on the various reasons why burning an NFT would be an appealing consumer behaviour to choose. Participant Vin speaks on his reasoning for potentially burning his NFTs, "… just out of spite of not wanting to have this thing in my wallet anymore." Vin however also expands his answer to discuss the complex nature around burning mechanics that allow NFTs to become new assets that can provide different functions. Vin continues, "… or, like there are some mechanisms of certain projects or certain NFT's where burning them is incentivised."

In this case, NFT consumption can give adrenaline highs similar to how game theory impacts consumers gambling at casinos. The game theory (Sung et al., 2023) within the digital asset realm refers to the numerous ways NFTs can impact the consumer, such as preparing to purchase the asset, holding the asset versus selling the asset, or even burning the asset, which can lead to different outcomes for the consumer (Kim et al., 2023). It is even possible through the burning mechanism that consumers would gain another NFT from burning a previous one, a mechanism implemented by various NFT brands to create and leverage value speculation (Kim et al., 2023). Participant Dom discusses his hesitation with burning an NFT to receive another NFT or token; "I would prefer not to, because the token has a current value, and I would be burning for a potential future value."

It is worth considering the literature of Lemon and Verhoef's (2016), where they discuss how brands would be wise to elicit trigger points from consumers which lead them to discontinue product purchases. Understanding the specific trigger points of why consumers would pay the fee to dispose of an NFT could be something for brands to consider exploring. Supporting this, participant Stan discusses his trigger points for hiding or burning unsolicited NFTs, and how he perceives these assets as equivalent to junk mail scams. Stan discusses that it is these types of NFTs he would consider burning:

> For example … it's almost like junk mail in NFT's … you just get all these random things that are sent to you, and … usually it's like a scam trying to get you to click on something so it can drain your wallet. Probably in those situations would be when I wouldn't keep or [would] try to get rid of them or burn them. (Stan)

It became apparent that the threat of scams was an important problem raised by participants within their post-purchase evaluation and behaviour stage of NFT consumption and lead them to consider disposal through burning. The issue of scams is again raised by Karen who would consider burning NFTs that are of a false contract: "If it was … a nullified contract, I would burn it."

Karen also goes on to state that an alternative form of NFT disposal for her comes in the form of passing on the digital asset to another consumer: "If it were, say, a piece of art that I no longer wanted, I would probably transfer it as a gift."

The issue of scams is raised again by Ken who would only consider burning scam NFTs:

> That's pretty much the only reason I'd burn an NFT, I guess if I had some blatant scam that I didn't want someone else to use, you could burn it, and I could see that making a lot of sense … (Ken)

However, another important reason for NFT burning by consumers raised by Ken was for financial reasons. Ken states, "… tax reasons are the main reason I've seen …"

On this note, there was also a lot of confusion around how NFTs need to be taxed in regard to international tax laws (Nguyen, 2022). This impacted the post-purchase evaluation and behaviour stage for consumers as on the notion of tax laws there were mixed views from participants on how exactly NFTs can be burned to aid in local tax law purposes. Participant Moe provides one detailed example on how tax harvesting in Germany works and why he would burn or sell NFTs to assist with taxes:

> … in Germany we have tax laws that say if you hold on to an NFT until one year you pay taxes. So, if the value is higher [on the NFT], you pay taxes. If it gets lower, you can compare it to the [NFTs] that you have. So, if it's within that one-year frame, I would always try to sell it real low because I have a buyer and then I can use it for my tax loss. And if it's over the year … then I would probably go ahead and just burn it, but I would always try to probably sell it real low if it's within that one-year frame, because then I at least get the losses out of it for my taxes. (Moe)

However, participant Mickey paints a different picture of tax laws in America around NFTs. Thus, on this particular issue the laws and regulations would be different around the world and this particular topic extends beyond the scope of this thesis. The big issue that Micky discusses is that sending an

NFT to a burn address may not in fact be considered to be a true disposal of asset by governments. Micky illustrates:

> There's not really a regulation in the United States necessarily, so I go with the conservative take that burning may not be recognized as a true disposal … Where[as] if it goes to one of these harvest kinds of protocols, they actually pay me something for it, so it satisfies the transaction and not just a transfer. (Micky)

The topic of paying a gas fee to burn an NFT was raised by many of the participants as a reason not to burn their NFTs. Participant Miles reinforces this notion by stating that he would never send an NFT to a burn address where he has to pay Ethereum gas fees which he doesn't want to spend. Miles stated he would much rather hide these NFTs in a hidden folder than burn them. When asked what Miles would do in situations where he might receive malicious NFTs, his response was this:

> No, I wouldn't interact with malicious NFTs, like sending them anywhere or doing anything that's costing me gas or something. We'll just let them sit there. If it's something with the bad reputation, I probably just leave it on OpenSea and sell. (Miles)

In evaluating NFTs and consumer behaviour the concepts of cognitive dissonance, transition to digital collecting and disposal of digital assets contributed to defining the types of consumers in the post-purchase stage of their journey. It is through these experiences of participants that an identity and type of consumer was manifested into constructing consumer personas which allowed profiling consumers into specific NFT purchasing categories.

In summary, this section reports the findings of the consumer consumption journey relating to all three consumption stages of pre-purchase, acquisition and possession, and post-purchase evaluation and behaviour. In the pre-purchase stage, the findings raised the concepts of perceived risk, information search and consumers motivation to purchase NFTs. In the acquisition and possession stage the findings focused on digital ownership, gamification of the internet, innovative technology and the power of virtual communities. The post-purchase evaluation and behaviour stage explored the valuation of NFTs, and NFT evaluation and consumer behaviour. It is through the inquisition of each participant and their experiences within these three stages of consumption that profiling the NFT consumer by the researcher was made possible.

4.5 NFT Consumer personas

Consumers that go through the NFT consumption journey were observed to fall into a certain type of NFT consumer. Categorising segments of a market into groups of people that share commonalities means that oftentimes companies are seeking to design campaigns that are marketing to personas as a way of being more efficacious. Onel et al., (2018) states that personas can be developed through

identifying patterns in data and through uncovering characteristics and nuances of consumers. Through the interviewing process it was obvious that many participants were similar however there were nuances. These nuances ranged from likenesses, influences, and possessions which is in line with the literature of consumer personas by Grudin & Pruitt (2002). Categorising NFT consumers within varying NFT marketplaces by their personal characteristics has been created within this section. Common traits and behaviours were grouped together creating a series of NFT consumer personas. This assists in identifying the types of consumers that purchase NFTs. Participants didn't necessarily fall under just one category and could be categorised into multiple categories based on their consumer motivations. The next section explains the 12 consumer personas that the researcher defined based on the findings within the qualitative study.

4.5.1 Technological Optimist

The NFT consumer profile of Technological Optimist emerged to define a new age of consumer that has a passion for digital things. A Technological Optimist is used to identify participants that surrounded themselves with NFT technology and relate to how this technology changed their lives for the better. This is discussed by participant Lee who stated that she has never bought a television or a car but has a passion for collecting digital art. This is also supported by participant Brian who just owns digital investments and has not found the desire to purchase physical investments. While this is an extreme case, it shows a similar attitude to Lee in her purchasing decisions. Furthermore, Lady discusses the ease of owning many art NFTs compared to physical artworks. This observes Lady's awareness of how easy she found it to purchase digital artworks while she was moving house and did not have the storage space for physical assets. Her response is as follows:

> … when you move house, you have to take all your pictures down. You have to wrap them in bubble wrap. You have to be very careful transporting them, but when you have NFT art, it's completely portable. It's on your phone, it's on your laptop. You can take it with you if you're out with friends, you can show them your art collection. So, that's why I actually prefer digital. (Lady)

The majority of participants showed their passion and enthusiasm for the technical innovation and disruptions to traditional consumption patterns through NFT technology. Participants showed a genuine love of new technology that drew them towards blockchain and NFTs. This is apparent by participant Salman's statement: "I've always been passionate about new technologies, about just new ideas, whether they be scientific, whether it be philosophical, theoretical, [or] practical."

In addition, participant Lee studied technologies and was drawn towards cryptocurrency in early 2010 to 2011 where she could see the benefits that the technology provided for art pieces and currency. The participants all showed a form of technical expertise which facilitated them in obtaining digital

wallets that were required to purchase NFTs. This was also supported by Jenny who has updated her art gallery from traditional physical art to an NFT art gallery. Focusing on NFT art allows participant Jenny more flexibility in terms of storage space and benefits to her artists.

The Technological Optimist showcases a type of consumer attitude towards digital assets that is comfortable and optimistic about this new technology. All participants within this category share similar attitudes towards the ease of purchasing NFTs compared to their physical counterparts.

4.5.2 Gambler

The Gambler NFT consumer profile can be traced back to the literature by Kong and Lin (2021) and Yurtkuran (2022) who both state that the high risk/high reward nature in cutting-edge, technology-driven NFT consumption markets can lead to extreme wealth or bankruptcy. Billy went on to state in a follow up question that a singularity that separates himself from his family and friends is the fact that he looks for rising trends earlier than his peers. He says: “I'm a bit of a gambler, and I feel like I've got onto certain trends earlier than others, and I like to try to look for niches in the market.” The Gambler profile as a consumer profile is also supported when participant Lady was asked what separates herself from her family and friends in relation to purchasing NFTs. She states: “I think it's the attitude to risk. You know all these NFTs could go to zero tomorrow, just like cryptocurrency.”

Within this consumer profile, these participants show a different attitude towards risk-taking and this can be linked with how experienced a participant is within the field of digital assets. The fact Lady is a Web3 consultant and working within the digital asset space gives her the time and resources to assess and thoroughly analyse digital assets. Furthermore, this is supported by participant Belle who states NFTs are a high-risk asset. Belle and Lady share a similar lifestyle where they both have strong attitudes towards risk and are prepared for their investments to go to zero (when asked, both made similar statements on this topic). Belle’s states:

> There's so much confusion … it is also a risky investment, but I'm in a situation and I'm in a period of my life where I'm ok using a certain amount of what I want to invest anyway in a high-risk investment. So, I kind of treat it all as high-risk investment. (Belle)

The Gambler showcased an NFT consumer profile that has a high risk-taking tolerance and has less fear of losing their digital investments.

4.5.3 Impulse Consumer

The Impulse Consumer is a common occurrence in the Web3 marketplace having also been presented in previous literature by van Slooten (2022) and Schaar and Kampakis (2022). Here, a stark similarity to consumers that experience FOMO exists. This is supported by how these particular participants

discuss the hype cycle and influence that comes from the NFT brand which drives market demand. This hype cycle is also combined with digital scarcity demonstrated by limited supply of NFTs (Popescu, 2021), which drives perceptions that make consumers feel they have missed out on a popular purchase or opportunity. Participant Moe supports this consumer profile persona through sharing his FOMO around being part of NFT virtual communities. He states: “I think I was already interested in buying [an NFT] before I joined the Discord because it caught my interest. But yeah, once you just talk to people that are in this bubble, you kind of feel FOMO.”

Micky also supports this consumer profile by explaining his early-stage impulses to purchase NFTs from a state of FOMO:

> An early lesson I learned was if you're not buying something at the mint price … it could go up or it could go down, and I mean you'll learn very quickly what it feels like to, you know, as they say 'FOMO' into buying something because … it looks like it's like just going up and then have the opposite happen and you're like, 'oh yeah, I don't think I was totally in control of my senses there and that was irresponsible'. (Micky)

It’s clear to see that the NFT profile of Impulse Consumer categorises consumers that are potentially new to the marketspace and who are not in complete control of their rational mind when it comes to purchasing their NFTs.

4.5.4 Community Influencer

The NFT consumer profile of Community Influencer was unearthed through the assessment of participants responses as a person of interest who engaged with NFT social spaces which acted as a gateway of information that assisted participants in gaining new insights into NFT products. The current literature has provided information on influencers within NFT spaces (Ivanova et al., 2020; Martin and Nagler, 2010). However, the community influencer is an NFT consumer profile that categorises how specific personalities within virtual communities (such as X and Discord) can influence opinions and sway purchasing decisions of consumers towards precise digital assets. Participant Billy states how he uses Discord to negotiate and sell his NFTs, providing another form of community influence:

> If I was going to sell an NFT, I'd just list it on OpenSea before I do it. I might go on Discord and ask if anyone's looking to buy something in a certain project, and then you kind of have a negotiation and discussion with them, and then if you can meet on something, then you can make a like a private listing just for that person. (Billy)

In alignment with supporting this consumer profile type, when the interviewer asked Lady if anyone had influenced her NFT journey, this was her response:

> Yes … a lady called Sparrow on Twitter … she was very influential. There's a male artist called Trevor Jones, who lives in Scotland, but he's Canadian and I actually bought one of his physical prints and he started, you know, saying to me, 'why don't you buy one of my NFT[s]?' So yeah, [I've] been influenced by quite a few people.

The Community Influencer NFT consumer profile shows a personality type within NFT social media platforms and markets who has power over shaping other consumers NFT purchasing and acquisition decisions.

4.5.5 Collector

The digital asset Collector was a common NFT consumer profile among participants. Some participants noted that they were not traditional collectors due to factors of storage space being an issue. This is supported by participant Brian who prefers to collect digital assets over physical assets. Brian raises the topic of those that rent versus those that own a house. This is in their constant search for space and property to store their physical assets. NFT digital assets provide a solution to storage as Brian doesn't have any physical assets; all of his investments are NFTs. Brian states: "I rent a house, I just have the car that I drive, but I'm not a big collector of a lot of [physical] things."

When asked about his main motive for maintaining long term ownership of NFTs, Brian replies: "… overall, I am in this to collect and build a collection. And I enjoy it, you know, enjoy that collection. That's why I want to hold on to this stuff."

In addition, participant Lady enforces the Collector NFT consumer profile by stating collecting was incredibly important to her during the Covid-19 pandemic when people were not able to enter her home to view her artworks. Lady informs that for physical asset collections a person needs to enter a home to see the artwork. This is not the case with NFTs: Lady is able to showcase her collection to the world on social platforms. She says:

> What's the point in having lots of beautiful art on your walls if no one's allowed to come in your house? Whereas if I was chatting with people online, on Twitter or something, I could say here's my wallet address, go look in my wallet, look at all my art. (Lady)

The Collector NFT consumer profile displays consumers who are avid buyers of digital media for the purpose of building digital asset collectables based on financial, pragmatic and personal reasons.

4.5.6 Revolutionary

The Revolutionary is an NFT consumer profile that defines a consumer who is looking at a future of decentralisation and is generally seen to have an anti-establishment mentality against traditional banking systems. The term 'bucking the establishment' was raised by participant Dom who has started

up NFT projects and seen NFT artists create themes that reflected the landscape of both traditional and decentralised art. Dom states:

> I was in the community of an artist, and I just resonated with the themes behind his art because it was all about bucking the establishment. His character is a balaclava clad man who breaks into rich people houses and steals their artwork … he creates artwork based on that character in those themes and it was all about bucking the establishment and I thought that was a beautiful depiction of how digital artists feel going up against the traditional art market … (Dom)

In addition, NFT technology radically changes the selling behaviour of art creators. This is raised by participant Belle who explains how artists and creators of NFTs are given more options to make profit than traditional artists. To summarise a quote that Belle mentioned earlier:

> … I've been an artist my whole life. I love that the creators can get a residual … that is definitely one thing that drew me through to NFTs and people doing artwork is that the artists are getting something, some residuals back … You as an artist, as an NFT artist, can actually make a living. (Belle)

Belle informs that there is a profile of consumers who support the establishment of giving back to the original creators and this power made possible by the blockchain.

The Revolutionary was present in participants that got into cryptocurrency and NFTs early through unconventional and non-traditional methods. Participant Belle fit into this NFT consumer profile when she mentioned that her sister always said she was a pioneer who looks towards her future. These participants also experienced a lot of resistance around their NFT consumption practices from family and friends of more traditionalist mindsets. History has shown disruptive technology to alter the way we live life from the agricultural society through the four industrial revolutions (Atkeson & Kehoe, 2001; Clark, 2014; Henretta, 1978; Liu & Grusky, 2013; Schwab, 2017). Thus, it can be surmised that the Revolutionary NFT consumer profile categorises consumers who observe a potential future where these disruptions to technology are paramount.

4.5.7 Gamer

Many of the participants within the Gamer NFT consumer profile had a background playing games. Participant Vin was a pro gamer who was involved in gaming economies of esports. Other participants such as Harry and Ken also had similar experiences within game economies, where they would trade cards or existing game assets within these game economies that predated NTFs. This in-game trading assisted the participants when it came time to trade, buy and sell NFTs. Participants with this persona type could see similar patterns to the gaming ecosystems that they had been a part of previously. This

is supported by participant Vin who discusses the concept of true sovereign which digital asset ownership provides leading to independent ownership which clicked for him as he was a gamer. His response is as follows:

> I think that the mentality of many gamers and games translates well to a lot of the game theory and mechanics of NFT's. Anyone that's played, you know, World of Warcraft or Runescape or Diablo, or fiddled around with CS Go [Counter Strike Global Offensive] skins. Those types of markets have very real kind of digital currency to real currency, like value exchanges. (Vin)

To this group of participants, NFTs provide a solution for gaming economies to transition into platforms which enable fully independent ownership of digital assets. As Vin continues, he discusses how he is essentially leasing his time and assets from Web2 gaming platforms. Whist NFTs, which are based within Web3 systems, allow for truly independent ownership to exist which appealed to participants within this type of NFT consumer profile. The profile of Gamer was shown to be present in participant Ken as he voiced his negative experience with the game Hearthstone. His dislike stemmed from how the platform limited his ability to sell any cards and thus created no payoff if he won them in tournaments. In addition, participant Harry discussed the cumbersome nature of always having to purchase a new FIFA game to get access to the FIFA marketplace for card trading. Participants within the NFT consumer profile of Gamer had ample experience with gaming platforms that have spilled over into their NFT consumption practices.

4.5.8 Tribalist

The tribal nature of some participants was apparent by how they congregated between each NFT brand/community. Tribalism was clearly apparent here as participants explained their rationale on NFT projects in which they had a vested interest. The most common NFT project and one of the most successful was BAYC, where several participants were current members. These participants included Salman, Harry, Jimmy, Ken, Belle, Peterson, Karen, Micky, Sally, Billy and Lady, showing a large portion of the selected participants having NFTs within this specific community brand. The access to the community, in-real-life events and additional NFT (or tokens) provided a value point for each participant to hold this investment and talk highly of the brand's community benefits. BAYC created a growing community of tribalism around this NFT brand (Zhang et al., 2022) which is strongly displayed through consumer engagement within this specific NFT community. This is also apparent amongst the different blockchains where people congregate in a tribal-like nature around Ethereum, Bitcoin, Solana and Tezos (Bousfield, 2019). Thus, the NFT consumer profile around NFT Tribalists is for consumers that have high conviction and inspiration towards a specific NFT community and its benefits.

4.5.9 Investor

The creation of consumer personas around NFTs would not be complete without a discussion about the Investor. This NFT consumer profile was made apparent from observing the financial motivation and monetary value of NFT consumption being a major contributing factor for the majority of participants who entered the NFT market in the first place. This has been identified in the extant literature by Nieh (2022) that links NFTs to the New York stock exchange and NASDAQ of shares investments. Many of the participants expressed that their interest to invest in NFTs stemmed from speculation around future value of their assets. Participant Sally came from the start up industry in Silicon Valley where she and her partner had traditional investments of shares. It was when they discovered NFTs and saw the upside of this potential investment that they sold all their traditional shares for NFT digital assets. Unlike traditional investments, the topic of rarity arose when participant Salman discusses the fact that rarity can play a part in motivating investors that seek exclusive or rare traits within their NFT purchases: “Rarity is a big part … if you're buying it as a trader and investor, then you know that those [NFTs] are going to be valuable.”

Upon answering a follow-up question from the researcher, Salman elaborates on the mentality of investors around rare NFT artworks:

> In some projects … they will do a bunch of products like generative art of 10,000 out of which 500 are made by some famous artists … The idea of owning an art piece by such a famous [figure] … I’m a big fan of art in general. (Salman)

The Investor NFT consumer profile shows a type of consumer that studies the current market and makes calculated long-term investments. This profile differs from the Gambler as these consumers study the market, where the Gambler takes risks which are more like bets and are mostly short term in nature.

4.5.10 Digital Alter Ego

The NFT consumer profile of Digital Alter Ego arose as some participants expressed how their online digital image (depicted through the NFT they owned) changed their social appearance on digital platforms such as Discord and X. Participant Jimmy explained how, when he changed his digital identity, his peers failed to recognise who he was. This consumer profile is also supported by the grand statement from participant Lady who expressed how her NFT alter ego was essentially a different persona than her living and breathing self.

Stan supports the conceptualisation of this NFT consumer profile through the recognition of his NFT peers who would adopt alternative personas within the NFT digital community space. To reiterate Stan’s previous comment:

> … our online profile pictures … kind of becomes an identity. I didn't take it as far as some of the others where maybe they created a character around their art and were kind of almost like role-playing as this character. (Stan)

The NFT consumer profile of Digital Alter Ego is created around how there are consumers that essentially can have a new alter-ego within a digital presence that extends their sense of self and can even be disconnected from that of their physical world identity.

4.5.11 Sentimentalist

Sentimentalist as an NFT consumer profile became apparent when certain participants such as Mickey described an emotional and sentimental connection towards certain NFTs purchased regardless of monetary valuation. Mickey stated that he purchased an NFT the same day his son was born and thus has no desire to sell that NFT. His connection to his digital asset was simply not about the monetary value but the emotional attachment to the significant life event. This emotional connection can even transcend to the creator of an NFT as supported by participant Lee. To readdress what Lee expressed previously:

> I might have a connection with the artist or the person on the project that created it. If, let's say, someone just gifted me an NFT, if someone that knows me will probably you know have an emotional value because someone that I know gave me a gift. (Lee)

This Sentimentalist NFT consumer profile shows a progression from Watkins (2015) who discusses the attachment to DCOs which can now extend into NFTs as consumers can also develop an attachment to these digital assets.

4.5.12 Networker

The Networker is an NFT consumer profile that shows how consumers use NFTs to network and grow relationships. Participants stated that it was out of virtual communities that came friendships and comrades that banded together over similar interests. These interests led to the creation of further virtual chat rooms and communities that extended beyond the original community. Participant Sally discusses how virtual communities enabled her to form friendships with more ease. She discusses how additional women exclusive communities spawned out of general Discord groups around popular NFTs as a way of supporting women within NFT communities. Sally states:

> We have even a separate group of the women … we talk a lot. Every day we try to support each other's project. When I joined BAYC, I was not sure that this was about community. I didn't know what to expect, but it turns out that I found friends there especially between New York … it was easier to make friends being part of BAYC than it was … outside in the real world. (Sally)

Participant Stan supports this claim further by talking about the relationship he has directly to the artists he purchases his NFTs from as he can talk directly to them in the virtual chatrooms of Discords. These chatrooms allow consumers to have a direct connection to an NFT creator which transcends their financial motivation and is situated around buyer/consumer relationships.

The Networker NFT consumer profile is comprised of consumers who value their NFTs based around the formed networks, friendships and other social relationships which owning their NFTs permits. These types of consumers appreciate the exclusive community access that is gained through their NFT ownership, a similarity that can be related to real-world and digital world exclusive clubs.

4.6 Persona themes

The NFT consumer personas lead to three themes that group consumer personas together. The identified themes include financial, utility and community. Table 5 explains the themes of consumer motives to purchase NFTs and what group these NFT personas:

Table 5

NFT persona themes

Theme	Consumer profile	Explanation
Financial	Gambler Investor Collector Community Influencer Tribalist Revolutionary	Particular consumers who are after monetary gain through short or long term. This can be through speculation, gambling or calculated long term investments.
Utility	Technical Optimist Investor Collector Community Influencer Tribalist Gamer	Consumers who appreciate and engage with the functionality of the NFT. This could be around community access granted, transferability, storage, IP or various other uses which the NFT enables for the consumer.
Community and social	Collector Community Influencer Tribalist Revolutionary Gamer Impulse Consumer Digital Alter Ego Sentimentalist Networker	Consumers who have a desire to be part of a community that has a network. They share similar interests around an NFT brand. They engage in discussions with members of virtual communities and take on advice from community influencers, as well as express various digital personas.

4.7 Conclusion

This chapter discusses the findings of this research by establishing themes which have arisen from the collected data from participants around NFT consumption. These themes were all supported by quotes that were taken directly from participant interviews. The chapter started with the three stages of the consumer journey of NFT consumption.

The first stage is pre-purchase which observes the constructs of perceived risk, information search and the motivation to purchase NFTs. It was within this stage that consumers were motivated to purchase NFTs based on monetary benefits, community, authentic digital ownership, technology and gaming use cases. Consumers are purchasing wholly owned digital assets in a decentralised setting as opposed to centralised assets with which contemporary consumers are traditionally familiar.

The second stage is acquisition and possession which looks at digital ownership, gamification of the internet, innovative technology and community impact of consumption. Here, consumers expressed the innovative technological abilities of NFTs and how virtual communities can influence consumer behaviour.

The third stage is post-purchase evaluation and behaviour which observes the value consumers place on NFTs, consumer cognitive dissonance (regret) and consumer behaviour around purchasing and selling consumption practices. It is in this last stage that consumers can develop an emotional attachment to their NFTs as well as build personal brands around their NFTs. This was shown to impact the post-purchase evaluation and behaviour stage as consumers were co-creating alongside the NFT brand.

This chapter concludes with identifying specific characteristics of NFT consumers and hence initiated the formulation of 12 distinct consumer personas. In turn, this aided the development of a conceptual model which directly analyses the consumer journey of NFT consumption. A discussion on the analysis and interpretation of the findings and the conceptual model follows in the next chapter which aims to answer the research question of this thesis around what the motivations and ownership intentions of consumers are within NFT markets.

Chapter 5: Discussion

5.1 Introduction

The present study aimed to understand the motivations and ownership intentions of consumers of Non-Fungible Tokens (NFTs). The findings revealed that consumer consumption of products in a decentralised market structure is somewhat different to traditional centralised markets, which suggests the custodians of these products need to be aware of the subtle differences required in the way consumers consider, purchase and consume these products. The findings gathered from participants lived experience around their NFT consumption, gives context and meaning to this thesis as well as expanding upon research by scholars (Ante, 2021; Lee, 2021; Chirtoaca et al., 2020; Hungara & Nobre, 2021; van Slooten, 2022; Wang et al., 2021) around consumption practices. This research extends upon the current framework of CCT by Arnould and Thompson (2005), as a progression from Web2 to Web3 consumption, through the development of a modified framework that illuminates understanding around the consumption of NFTs in decentralised markets.

The modified framework of CCT explores the decentralised consumption of NFT by consumers. This new model explores the conceptual frameworks of understanding digital markets, consumer motivation, consumer preferences, and valuation towards digital assets. To illustrate this progression the more contemporary work of Rokka (2021) discusses the future directions of CCT for the evolving digital world. This study goes a step further in expanding CCT within the context of understanding decentralised Web3 asset consumption and digital ownership. This is necessary as argued by Watkins (2015) that digital assets can be a challenge for corporations to implement into marketplaces in a way which attracts consumption by their customers. Although significant in their findings on NFT markets, earlier work by Fai (2021), Kaczynski and Kominars (2021) and Wang et al., (2021) do not investigate the characteristics, patterns and behaviour of consumers in these markets. Further, this study contributes to the work of Lemon and Verhoef (2016) and the most recent examination by Jaakkola and Alexander (2024) in consumer engagement journeys. As the NFT market matures there exists a latent need to better understand the growing marketplace of digital asset consumption and the rationale behind decentralised consumer purchases and consumption within Web3 environments. This chapter will discuss CCT within decentralised markets, followed by the consumer journey, concluding with the self and consumer personas.

5.2 Towards a Decentralised Consumer Culture Theory (DCCT)

For nearly four decades CCT has provided a theoretical framework to understand consumption and marketplace behaviour. This research builds on contemporary CCT perspectives as elaborated upon by Rokka (2021) that signal that CCT needs to evolve if it is to remain relevant in understanding

consumer behaviour and marketing in years to come through changes in marketplace behaviour and consumer motivations (Arnould et al., 2019; Arnould & Thompson 2018; Askegaard & Linnet, 2011; Steenkamp, 2019; Cova et al., 2013). Rokka (2021) highlights that while CCT is unique and provides a methodological tool for marketing scholars, more work is needed in establishing methodological principles within contemporary marketing. As CCT is predominantly focused on understanding consumer phenomena and culture in centralised markets (Arnould & Thompson, 2005;2018) the research findings of this study propose a new avenue for CCT in decentralised markets that is currently missing in CCT research. This thesis introduces Decentralised Consumer Culture Theory (DCCT) as a foundation to explain the theoretical significance of NFT consumption by consumers in decentralised markets. DCCT is a large step forward in the realm of understanding decentralised digital consumption previously not explored by CCT.

The rise of blockchain technology has encouraged the emergence of digital assets by elevating the internet through the establishment of decentralised marketplaces. Furthermore, the alternatives to Fiat currencies such as cryptocurrency bypass existing financial instruments for exchange as highlighted by Kaal (2020). In essence, these changes allow digital marketing to have greater flexibility and customisation by creating a permanency to digital assets that previously did not exist. Considering the paradigm shift of decentralised markets and the actors employed within them provides a new opportunity to revisit whether existing CCT could be advanced by reference to DCCT. To do so allows the analysis of decentralised consumption practices within Web3 blockchain technology, including cryptocurrency, NFTs and more broadly decentralised digital assets.

To explore DCCT in a theoretical sense within the marketing discipline the following four new structures are discussed i) decentralised practices of digital consumption, ii) open-source and localised marketplace culture, iii) virtual community marketplace ideologies and interplay between corporations and consumers, and iv) digital consumer identity manifestations. Each of these new structures are then linked to stages of the consumer journey.

5.2.1 Decentralised practices of digital consumption

The first structure of DCCT is ‘decentralised practices of digital consumption.’ This structure is an update to socio-historical patterning of consumption by Arnould and Thompson (2005; 2007) and expands on this notion in relation to decentralised digital consumption within Web3 marketplaces. Here, the consumer journey stage of pre-purchase is relevant as consumers face a new frontier of decentralised assets and marketplaces that shape their behaviour. It is through this decentralised digital consumption that consumers experience an entirely new purchasing system that has a lasting impact from its pre-purchase stage beginnings. This structure extends the understanding of consumer interactions around blockchain technology (Vranken, 2017), decentralisation (Bodó et al., 2021), cryptocurrency (Oh & Nguyen, 2018), virtual communities (Preece et al., 2003), social media (Carr et

al., 2015) and dApps (Antonopoulos & Wood, 2018). Within this structure, digital assets can be seen to act as a union between corporations and consumers. This builds on the findings of Watkins (2015) where this union acts as a bridge for organisations to implement digital assets in a decentralised market for consumers that was previously a more challenging feat. The first structure also observes how the technology of decentralisation, blockchain and NFTs all concurrently enable secure and instantaneous acquisition of assets within a globalised digital marketplace. Comprehension of this technology is a step forward in understanding the innovation discussed by Popescu (2021) on new digital infrastructure in market sectors whereby full consumer ownership of digital assets is possible. This new structure ultimately addresses the evolution of decentralised digital, technological and social structures within digital consumption through class, community, ethnicity, gender and other adaptable social organisations and groupings.

Decentralised practices of digital consumption include the social class of consumers which in this study were found to range from students, business owners, technical workers, managers, marketers, and Web3 employees. This aligns with the findings of diverse backgrounds of NFT consumers by Sharma et al., (2022) where a wide spectrum of ethnicity was seen within participants of this study ranging from various multi-cultural backgrounds and countries. The diversity of ethnicity within digital consumption spaces means that the consumer world becomes vastly more interconnected and allows for a multi-cultural influence on consumption. This impacts the many cultural landscapes that consumers otherwise would not have been able to connect or be perceived within the marketplace. It also impacts the pre-purchase journey of NFT consumers as they must navigate new cultures and diverse consumers. This is a perfect example of how the many different Fiat currencies of the world can be translated into universal digital assets for all nations and people with access to Web3 to consume. As the participants selected in this study came from a total of six countries each with different cultures it was interesting to note that consumption patterns among all participants were consistent. Participants shared similar stories on how they entered the NFT trading space through self-learning, influencers and virtual communities. Younger and older participants of varying ages both shared the same affinity to learn how to use NFT technology. Initially, participants across the sample expressed confusion or found the process of NFT consumption challenging, though over time each of them learned to adapt and use the technology. Another consumer segment explored within digital consumption is gender. This study highlighted the disproportionate number of males to females interested in decentralised NFT consumption. Fewer females participated in the study, and were harder to recruit, which might be in part due to gender stereotypes that have plagued businesses for decades in attracting females to STEM (science, technology, engineering or math) occupations. This trend appears to have moved into the digital consumption practices that only further research may confirm. However, female participants raised and discussed exclusive ‘women only’ chat groups where they were supported by other females. In contrast, males felt comfortable in almost any virtual

group chats. This structure highlights the discrepancy between males and females in decentralised consumption marketplaces, where social constructs affecting gender still play a part in consumption practices. This first structure explores how the decentralised nature of Web3 creates an environment that is evident as a universal hub across cultures and demographics. Hence, the consumer experiences a myriad of different cultures and demographics that vastly affects the pre-purchase stage of NFT consumption. In centralised markets and digital consumption of consumers did not have to factor in this dramatic increase in culture or the pressure and risks of wholly owned digital assets.

5.2.2 Open-source and localised marketplace cultures

The second structure of DCCT is 'open-source and localised marketplace cultures.' This structure builds on marketplace cultures as outlined by Arnould and Thompson (2005; 2007) and extends to decentralised marketplaces for digital assets. A strong link to the acquisition and possession stage of the NFT consumer journey exists here as consumers experience the capabilities of their NFTs in a marketplace of likeminded individuals and virtual communities. Marketplace culture within CCT is a broad concept that focuses on consumer consumption within centralised institutions based on symbols and identity (Arnould & Thompson, 2005). Rokka (2021) provides future directions for how CCT can progress to explore the shaping of brands symbolic universes, which emphasises the complexity of building brands. It is within this decentralised market that consumers can essentially build on top of existing open-source code and improve upon its properties. Similar to marketplace culture in CCT, open-source and localised marketplace culture explores how it is possible for dApps, programs and protocols to be created and built on top of the existing code by other consumers that can continue to learn in an open-source marketplace. In addition, localised marketplaces also means that consumers are in control of their assets without third party intervention (Korpal & Scott, 2023). This places consumers back in control of their assets, which is a fundamental contrast from centralised marketplaces that CCT is focused upon. Unlike CCT which explores an internet (web) that is centralised (Korpal & Scott, 2023) the change that DCCT suggests is that localised marketplace culture is vastly different as it focuses on decentralised consumption. This fundamental difference looks at how decentralised markets (e.g., blockchain and peer to peer networks) allow users to hold data with full control rather than being governed by centralised organisations (Wang et al., 2022).

This structure observes digitally localised marketplace cultures where humans create cultural meaning and how this meaning is interpreted through digital brands (Colicev, 2023; Yilmaz et al., 2023;), digital communities and fan communities (van Slooten, 2022; White et al., 2022), gamification of digital consumption (Wang et al., 2023), and subculture and consumer tribes (Arnould et al., 2021). Digital brands within localised marketplace cultures can take on properties such as NFTs, tokens, dApps and other cryptographic innovations which can impact cultural meaning and how this meaning is interpreted by consumers within digital communities and fan communities. User interface (UI) is

also affected by gamification of marketplaces that resemble video game activities. Gamification creates a new decentralised economy marketplace culture of transactions that reaches into the psychology of consumers and emulates gaming economies that previously only existed in Web2 platforms. This is in line with the findings of Arnould et al., (2021) on how digital assets such as cryptocurrency, blockchain products and NFTs may provide new economic and social relationships. This utility aspect of NFTs affects consumers during their acquisition and possession as traditional products do not have the many features of smart contracts (Wang et al., 2021; Fai 2021). The consumer now has to deal with products that can have limitless functionalities which can ultimately influence this stage of the consumer journey. For instance, it's possible for an NFT to act as a financial store of value retaining profit or speculation (Wang et al., 2021), a virtual key to access exclusive networks (Fai, 2021), a token that received benefits of additional NFTs (van Slooten, 2022) and physical products or even a game asset (Weyl et al., 2022) that can be interacted with by the user.

5.2.3 Virtual community marketplace ideologies and interplay between corporations and consumers

The third structure of DCCT is 'virtual community marketplace ideologies and interplay between corporations and consumers.' This structure takes inspiration from mass-mediated marketplace and consumer interpretive strategies by Arnould and Thompson (2005; 2007). The acquisition and possession stage is also relevant within this structure as the co-creation of virtual communities by corporations and consumers is an active part of this stage of the journey. Once consumers purchase an NFTs they utilise its functions and social powers by interacting in virtual communities (Colicev, 2023). This theoretical structure within DCCT is where digital consumption systems are given meaning by both the consumer and brands that in turn invigorate consumers thoughts and actions within a digital society. While collaborative networks (Bardhi & Eckhardt, 2012) have existed, the technological change of decentralisation and NFTs (Rehman, 2021) places consumers in direct purchasing power. The consumer journey is augmented (Jaakkola & Alexander, 2024) through the experience of co-creating NFT products alongside creators, brands and corporations.

The third structure looks at how marketplace ideologies and virtual communities generated around NFTs are defined by symbolic validations that come in the form of memes, pop cultural references, and the subculture of digital asset brands and art forms (Fai, 2021; Nepul Raj, 2021; Wang et al., 2021). These symbols shape the marketplace ideology of digital assets to be lively and active around the latest trends in social media. Marketing by brands and corporations are specifically targeted and act as a visual representation of the consumers brand ideologies. Here, virtual communities function as hubs of marketplace engagement where consumers and brands concurrently interact with like-minded individuals, learn from each other and discuss NFTs and decentralised consumption practices.

It is within these virtual communities that consumers are creating relationships with members and interacting with NFT utility that provides value to purchases based on aspects of community. The exciting dichotomy of entering virtual communities and having discussions with members about likeminded topics, marketplace views, new knowledge and technology innovation are valuable tribal experiences. These experiences can encourage a co-creation of NFT brands, much like Brouard (2024) and the Bored and Hungry extension of BAYC. This aligns with the research by Arnould et al., (2023) on the power of communities' co-creation abilities in harbouring members to extend the brand. Hence, the NFT brands provide a community that goes beyond the findings of Colicev (2023) in that NFTs are more than brand components; they are an extension of the product identity itself. As consumers use the NFT image in social media circles, they are part of a new tribe of consumers which aligns with CCT literature on neo tribalism (Arnould et al., 2023). Furthermore, the NFTs image is reflected in social media as status symbols of the community similar to the status that is rewarded by a Cryptopunks and BAYC NFT (van Slooten, 2022).

These NFT communities are unlike traditional communities such as HOG (Harley Owners Group) in which members or enthusiasts do not need to verify their serial number of an owned Harley Davidson Motorcycle to join the group. There is also no guaranteed interplay between brand members and consumers within the HOG. NFT virtual communities on the other hand such as BAYC, CryptoPunks and World of Woman all have a plethora of group members consisting of both creators and consumers of the brand that are authentic owners of their NFTs. It can also be argued that this is a fundamental difference between the acquisition and possession stage of traditional products where consumers are now influenced by authenticity and social status of their possession in order to progress their consumption journey. Within these virtual community marketplaces NFTs symbolise both functionality and ideology through providing visual identification, authenticity of asset and accessibility into these merged communities. NFT community members cannot falsify their entry with a fake NFT due to the technology of the Blockchain (Lee, 2021; 2023). This leads to NFTs providing authenticity that can enhance the customer experience (Morais, 2023) and create stronger brand and consumer connection. In addition, traditional communities such as HOG show consumer tribes taking place in centralised systems. Alternatively, consumer NFT virtual tribes extend current literature on tribal entrepreneurships (Arnould et al., 2023) and brand communities. This is because while traditional systems have the tension of sharing products between a producer and consumer which can be blurred in marketplace culture. In decentralised marketplaces there is a co-created exchange where tribes of consumers have an ownership that links co-creation of value to derivative projects as outlined by BAYC bored and Hungry (Brouard, 2024). This aligns with CCT literature by Arnould et al., (2023) on the discussion of creating new community forms by fostering a sense of tribal belonging. This is prominent in NFT communities due to the flexibility and power of smart contracts and the decentralised power of the blockchain.

5.2.4 Digital consumer identity manifestations

The fourth structure of DCCT is 'digital consumer identity manifestations.' This structure is linked to Arnould and Thompson's (2005; 2007) consumer identity projects. DCCT updates this structure to focus on how these factors are shaped within decentralised markets. The link to post-purchase evaluation and consumer behaviour is made as consumers digital identities are shaped throughout the consumer journey and evaluated in their post-purchase decisions. These factors are: digital identity and alter ego (Pfeiffer et al., 2022), anonymity (Chen & Omote, 2022), gender performatives (Notaro, 2022), symbolic distinctions (Alkhudary et al., 2023), digital extended self (Belk, 2013; Clark et al., 2024;), consumer digital persona (de Kerckhove & Almeida, 2013), negotiating cultural contradictions and cross culture (Afkhami & Daskalaki, 2023), experiential dimensions of consumption (Glaser, 2017) and self-representation and sovereign identity (Parry & Ellul, 2024). A point to raise is that there was a strong emphasis of gender anonymity within digital communities, and participants stated that digital identities were at times non-disclosed within these communities. Building from Arnould and Thompson's identity products (2005), consumers are now much more interactive in the co-creation of digital products that they can also take on digital identities that can represent an entity (person, organisation, device or vehicle) (Parry & Ellul, 2024). These new digital tendencies and alter-ego personality traits are impacted by the symbolic landscape of digital markets and narratives of identity. As consumers are purchasing digital NFTs their needs and wants shift in the direction of digital purchases. This is in line with the literature by Belk (2013) and Jain et al. (2022) on digital selves seeking different preferences in different situations. In addition to their needs and wants, they can also take on the properties of the digital asset in social mediascapes thus becoming more embedded into the digital product and community. Consumers can also take on entirely new identities that can be created from memes (Arnould et al., 2023;Colicev 2023) and sold as decentralised NFT personalities. This manifestation of new identities in NFTs is further impacted by the vast landscape of diverse customers, brands and social media that shapes consumer identity. Consequently, consumers that partake within the decentralised marketplace culture of NFTs have preferences for digital products that affect their digital presence within Web3 markets. This is different to the wants and needs of consumers in traditional marketplace cultures of physical and even centralised digital products in that decentralised consumer purchases are recorded on a permanent blockchain, viewable on decentralised marketplaces and stored within a digital wallet. This directly affects the digital post-purchase consumption process of consumers and how they allow their digital identity to manifest within decentralised marketplaces leading to an evaluation of their NFT purchase.

Previous literature on CCT (Arnould & Thompson, 2005; Hungara & Nobre, 2021; Mayer et al., 2007; Tadajewski, 2006) stated the full consumption cycle of consumers can be understood by observation. Hence, this study has endeavoured to observe and investigate consumers who purchase

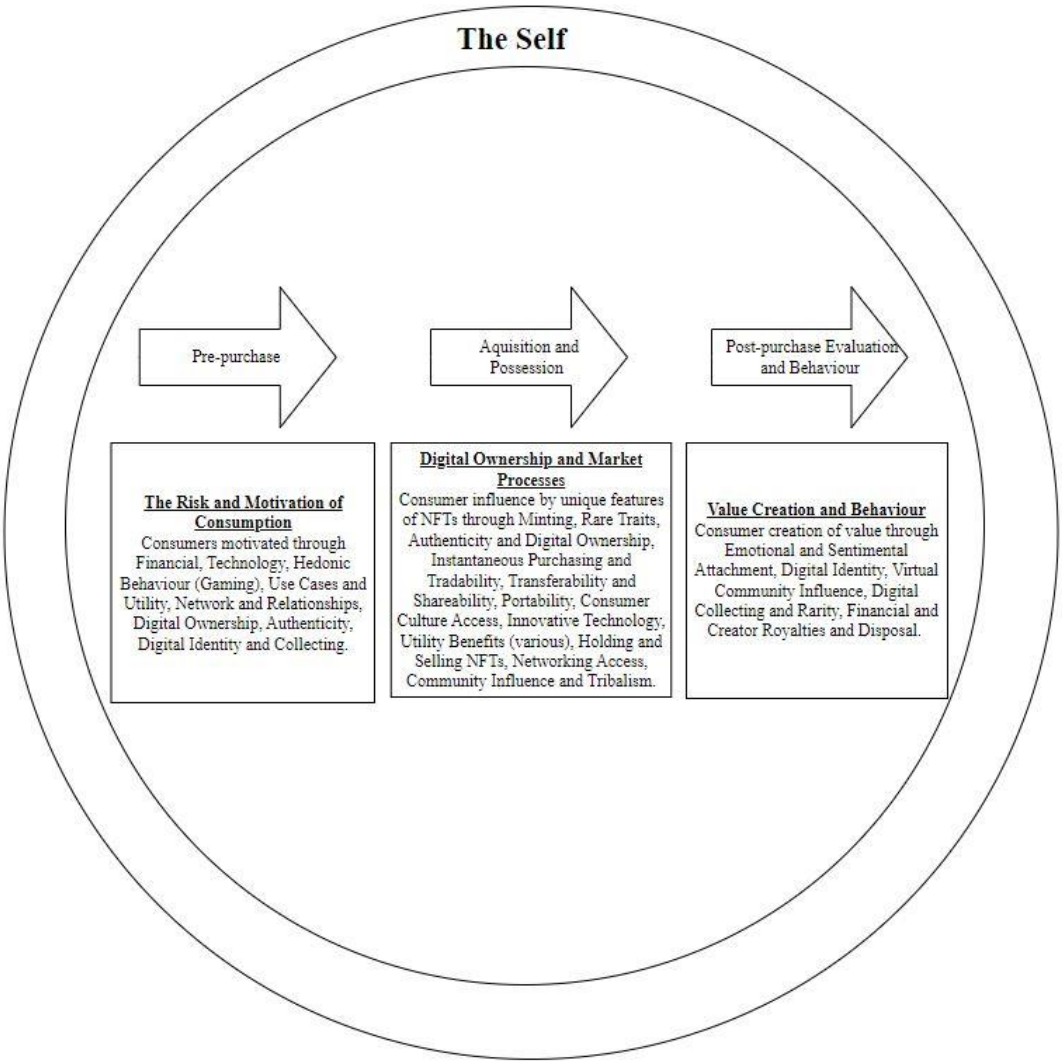
NFTs and explain their choices of consumption through their lived experiences. This was achieved by updating the four theoretical structures for decentralised consumption in a similar manner to how Rokka (2021) created new structures that look to the future of CCT. Thus, the existing framework of CCT is extended upon by investigating through a new lens how decentralised digital assets such as NFTs offer a new consumption paradigm that differ from traditional physical and digital products. This new lens of DCCT aids in explaining the current consumer culture of NFT and digital asset consumption which advances the conceptual model of the consumer journey of NFT consumption. To assist in understanding digital assets within decentralised markets, this study highlights the conceptual model of the consumer journey of NFT consumption. Based on this study the role of reconceptualising a decentralised model of consumption in digital markets around an extension to CCT may be beneficial for scholars and industry alike.

5.3 The consumer journey of NFT consumption model

The consumer journey of NFT consumption model advances knowledge of how consumers within decentralised digital asset markets follow the consumer journey from its inception to final evaluation. This model uses arrows to show the direction of purchasing stages. The inner circle dictates how the process can start again from post-purchase evaluation to pre-purchase, and the second outer circle signifies how the self is reflected at each stage of the consumption journey. Grouping each stage together such as pre-purchase, acquisition and possession, and post-purchase evaluation and behaviour demonstrates a simple progression of consumer NFT consumption. It is important to note the last stage reads post-purchase evaluation and behaviour rather than disposal as digital assets do not wear and tear, which is in line with the findings of Toygar et al. (2013) on digital products and more recently Weyl et al. (2022) on the limited disposal options for NFTs:

Figure 5

The consumer journey of NFT consumption model (proposed by the researcher)



5.3.1 Pre-purchase: The risk and motivation of consumption

In reference to the model described in Figure 5. The first stage is 'the risk and motivation of consumption' and occurs during the pre-purchase stage of NFT consumption. In this stage, there are several aspects impacting a consumer's purchase of NFTs which includes perceived risk, information search and motivations. Through the research findings, three dominant themes of perceived risk were determined specifically as financial, social and psychological risk which influenced consumer decisions in their pre-purchase stage.

5.3.1.1 Perceived risks of NFT in the pre-purchase stage

Perceived risk around financial, social and psychological factors play an important role in influencing consumer uncertainty in the pre-purchase stage of NFT consumption. Financial risk was associated with consumers who invested in NFT projects and expected to make a profit. This type of risk is particularly prominent in the pre-purchase stage, as this is where consumers learn about the blockchain and conduct information searches. Social risk can occur when the influence of the

consumers family, friends, peers, social media and virtual communities can impede consumer consumption of NFTs. Psychological risk was also seen whilst the consumer conducted their information search and came about based on the complexity of the technology and fear of making the wrong purchase decisions or accidentally succumbing to harmful scams (Mackenzie, 2022). Here, decentralisation is shown to be a double-edged sword as consumers that fall for a scam can lose the entire asset portfolio connected to their digital wallets (Gilbert, 2022). Hence, consumers need more education of decentralisation and digital assets to mitigate psychological risks impacting their pre-purchase decisions. In, having awareness of these perceived risks, consumers conducted their own research and looked towards influencers to gain a better understanding of these markets.

It became clear that understanding the market cycles of bull and bear markets dissipated a lot of perceived financial, social and psychological risk for consumers during their pre-purchase experience of NFT consumption. Current market sentiments can lead to demand factors that increase real and perceived financial value in NFTs within bull and bear market cycles. In bull cycles the value of an NFT can get lost in a flux of hype and hysteria (Mahmoudi, 2022; Zhang et al., 2020). During this time, the market is flooded with investors and gamblers that are captivated by a digital gold rush fever mentality. These consumers thrive in high risk and high reward environments where the hype of new technologies and innovations can lead to extreme highs and lows when investments either succeed or fail. Psychological risk is also heightened here as the Web3 marketplace is extremely volatile with many NFT project choices for consumers to buy, sell or hold. This volatility is also only further exacerbated by bull market cycles. It is during a bull market that consumers' strategies range from carefully investing, to risk-taking and even day trading where new information about marketplace trends is released regularly on social media and exchange platforms. Here, social risk impacts consumption choices even more as consumers are swayed by social media influence and the opinions of their family, friends and peers. This relates to the literature by Zheng et al. (2020) who states that the mindset of consumers during bull and bear markets is a unique area to explore as this subject matter provides useful aspects of consumption tendencies that would aid marketers and organisations within these cycles.

However, in a bear market, the ideologies and strategies take on a paradigm shift. During a bear market, valuations plummet (Zhang et al., 2020), and within the interviews of the study consumers indicated it was during bear markets that they made losses rather than gains. Upon the shift into a bear market cycle, the perceived financial, social and psychological risks change due to negative narratives that emerge during this time. Thus, one of the negative sentiments towards cryptocurrency and NFTs which the marketplace receives can be traced to the bear market cycle. Participants within the study indicated that once they gained a more thorough understanding of the bull and bear markets, their ability to assess legitimate NFTs improved and their perceived risk of investment significantly diminished. This understanding of bull and bear markets aided participants in mitigating their social

risk concerns compared to their family and friends who were more risk-averse towards NFTs and also less knowledgeable. This gained knowledge assists consumers from losing money when they purchase NFTs (Kong & Lin, 2021) and aiding against investing in NFTs with broken functionality or scams (Gilbert, 2022). These bull and bear cycles in digital investment markets tend to follow a particular pattern that lasts for a set and finite amount of time. Understanding when these cycles can occur would help to identify optimal timing for product releases and onboarding of new customers and aiding their understanding of perceived risk. By understanding these consumer marketplace cycles, organisations and marketing teams can better prepare for the rush of new entrants and mass consumption of digital assets during bull markets, and the stagnation of consumption and loss of consumers during bear markets, and the reasons behind consumer perceived risk in these cycles.

5.3.1.2 Motivation factors of NFT pre-purchase

As discussed in Chapter 2, consumer motivation of NFT consumption is shown to be consistent with the studies of Maslow's Hierarchy of Needs theory and McClelland's (1953) Achievement Motivation Theory. The findings confirmed that consumers who have limited space confer to the lower order needs while consumers who have ample space and own a house are more attuned to middle or higher order needs. Consumers felt a sense of worth when purchasing digital assets that related to their self-esteem, belonging and fulfilment of self-actualisation (Maslow, 1943, 1954; McLeod, 2007). These satisfied needs were reflected in the consumer passion for the aspects of technology, true digital ownership, authenticity and utility provided by NFTs. On the other hand, McClelland's (1953) achievement theory connects to how consumers were motivated to achieve better monetary, status and NFT valuation results from their digital assets. As participants within the study performed more research, these consumers found NFT brands which provided them with both networking communities and new NFT opportunities which increased their motivation to consume. It is interesting to note that participants who had prior experience with cryptocurrency generally had better purchasing experiences with NFTs and were more motivated to continue their consumption journey.

Table 6 was created with reference to Maslow Hierarchy of Needs theory (1943, 1954 1962, 1969, 1970). During the risk and motivation of consumption stage of the NFT consumer journey, consumers are impacted by a series of motivation factors where consumers are motivated to seek more information to better understand the benefits which this technology and NFT consumption can provide. The research found several motivating factors that influence the purchase of NFTs which include financial, technology, hedonic behaviour (gaming), use cases and utility, network and relationships, digital ownership, authenticity, digital identity, and collecting. Here, consumers become aware of the existing social structures and technologies that underpin the functionality of NFTs. Consumers were also found to have been educated by others in virtual technology communities and

shown how to use dApps on the blockchain. It is within this stage that consumers start their NFT journey by assessing their pre-purchase options.

Table 6

Motivation factors of consumption in NFT markets in alignment with Maslow's Hierarchy of Needs Theory

Maslow's Hierarchy of Needs	**Motivation factors of NFT consumption**	**Explanation**
1. Transcendence needs	Digital Identity (Network and Relationships, Gaming).	The connection of a higher reality (digital self) that exists within the digital world, exceeding physical and digital lower order needs.
2. Self-Actualisation	Digital Identity, Technology, Collecting.	Using NFT technology can be a form of self-actualisation through consumers using a digital identity and NFT technology to become the version of themselves they strive to be, including building collections.
3. Aesthetic needs	Gaming, Collecting.	Consumers who appreciate the visual elements of NFTs are satisfying aesthetic needs upon the hierarchy.
4. Cognitive needs	Technology (Network and Relationships).	Having knowledge of NFT and cryptocurrency technology through research and networking satisfies the cognitive needs of consumers in this hierarchy level. These consumers can be rewarded with new technology functions, dApps that allows for an increased understanding of using digital assets and use cases.
5. Self-esteem	Digital Ownership, Authenticity, Network and Relationships.	Digital ownership and authenticity of assets brings further status and respect to a consumer within a relevant digital community and provides them with self-esteem needs.
6. Love and belonging	Network and Relationships.	Networks and relationships that are established within digital communities acts as communally shared learning and playful environments where business and social connections can form. These

		networks and relationships established fulfill the need for love and belonging amongst NFT consumers.
7. Safety and Security	Use Cases and Utility, Money, Authenticity, Digital Ownership, Money.	Due to the security of the blockchain and dApps, the use cases and utility of NFTs act as a financial store of value and investment that follows with easy proof of purchase verification for consumers, thus letting consumers attain the need of safety and security.

The factors identified in Table 7 represent the motivational drivers of participants that enter NFT markets. These nine factors contribute to understanding consumer motivation drivers of NFTs during the pre-purchase stage.

Table 7
Motivation factors of NFT consumption

Financial
Technology
Hedonic Behaviour (Gaming)
Use Cases and Utility
Network and Relationships
Digital Ownership
Authenticity
Digital Identity
Collecting

Financial gain was a motivating factor for NFT consumption as consumers have the ability to both gain financial returns and store financial wealth within their NFT assets. This highlights how business can create marketplaces that encourage consumers to purchase their products through the incentive of gaining money back from their digital asset investments. In current centralised virtual marketplaces for digital media and gaming skins, these financial gains and returns are not possible (Ghazali et al., 2023; Taylor, 2022). This finding also underscores how NFTs provide benefits for consumers that continue to hold these digital assets. For example, holding a BAYC NFT raised the investment price of the asset due to additional benefits (van Slooten, 2022) of airdrops (tokens such as ApeCoin) and tickets to in-real-life events. In centralised markets, consumers motivations for financial gain are generally limited to individual platforms and cannot be easily traded and are restricted, whereas decentralised markets allow for digital assets and their financial gains to be traded cross-platform at any time. This encourages loyalty to brands as it allows consumers to trade their investments for money through the technology of the decentralised blockchain. This suggests that NFT communities

should focus on building strong brand loyalty with their community members as it can foster trust, driving up speculative costs of the NFT. However, a drawback of decentralised markets is that consumers can potentially lose financial investments which they've placed into digital assets that turn out to be scams. It is here that the concept of resilience (Rutter, 2012) triggers behaviour reactions on the consumption of digital assets. This trait of resilience was notable in consumers who experienced losses or fell to financial scams where they learnt from their mistakes, did more research and reinvested into their NFT journey to gain financial success. Observing these findings gives organisations cues on how to gain the interest of consumers and play into their financial motivations around their digital asset investments on decentralised platforms. Consumers who seek out financial gain should conduct research on new NFT brands and continue to purchase NFTs respectfully, learning from what practices worked and what did not.

Technology motivated consumers were interested in the innovative technology and ideas which were bestowed by investing in digital assets. The rapid change in NFT technology creates an environment where businesses and marketing teams are required to promptly adapt. Hence, these findings saw that the disruptive nature of NFTs alongside traditional marketplaces could potentially be used to improve different industries such as art and media. Centralised marketplaces have greatly lacked the technology to implement a strong royalty system for creators as the technology is designed around third-party integration that limits control of the royalty system. However, in decentralised markets through blockchain technology the smart contracts written within NFTs provides limitless technology options for creators and consumers alike to implement systems that streamline a direct line of transaction between the creator and consumer without third-party integration. The implications of NFTs as digital assets are clear: it's possible that NFTs could take on many innovative and advantageous forms (Fai, 2021). For managers, this aids in the ability to implement new systems of co-creative value to NFT communities, providing new functions, features and game theory. NFT technology offers marketplaces that exchange digital assets on a global scale (Wang et al., 2021). The technology also allows dApps to be built around NFT brands for unique consumer experiences that change the experience (Jaakkola and Alexander, 2024) and CE throughout the consumer journey. Ultimately consumers that have the desire for new technologies are drawn to how disruptive NFTs are within Web3 marketplaces.

Hedonic (Gaming) is another motivation driver that was discovered on the consumer journey. Consumers that have had experience with gaming and virtual platforms found striking similarities to gaming economies when purchasing NFTs. The NFT technology was even sought as an enhancement to current gaming assets (Drachen et al., 2016) as consumers felt they wholly owned NFT assets compared to their Web2 game assets which they felt were leased to centralised platforms. Gaming within decentralised and open-source platforms creates a new marketplace of consumption that challenges current traditional gaming systems by providing universally accessible trading

marketplaces where consumers are no longer bound by individual platforms. For instance, purchasing game assets in Web2 from the videogame Call of Duty means that if the server shuts down the consumer loses all of their digital assets. This is not the case with Web3 assets on the blockchain if an NFT project ceases to operate, their assets are still viable and tradeable in the decentralised marketplace. In NFT communities, members are able to seek out opportunities to trade game assets as NFTs with dedicated members which increases the tradability of NFT assets. The ability for users to own their own digital assets in decentralised games changes the way gaming consumption occurs. As another example, consumers can transfer their NFT gaming asset from the virtual game platform to another consumer in a different marketplace and then this asset can be bought or traded for cryptocurrency outside of the gaming platform. Depending on the rarity of the game asset and what functionality it performs then high valuations of individual NFTs can mirror popular NFT brands such as CryptoPunk and BAYC valuations. This can be compared with the literature of Taylor (2022) and Ghazali et al. (2023) on how current Web2 game items from CSGO and Dota 2 that are locked to game platforms fetch high valuations. Consumers with hedonic motivations then become stimulated to purchase Web3 digital assets within games because they obtain truly independent ownership of these decentralised assets. This implication allows organisations to implement scalable solutions to previously platform-locked digital assets that would instead allow consumers to trade assets essentially the same way NFTs are tradable on the blockchain.

Use cases and utility was another motivational factor, as consumers were shown to be incentivised to use NFTs in various ways such as memberships, generative artworks, royalty cards, airdrops, digital passports, and various other media-related functionality. The findings of this thesis align with Fai (2021) who calls NFTs ‘smart collectables’. However, the utility benefits of NFTs suggest that these assets are not just limited to being only considered as smart collectibles. NFTs can also by nature of functionality essentially become digital assets; this could potentially lead to NFTs becoming known as smart investments and smart assets. Consumers are able to observe NFTs as assets to their portfolio that provide rewards and functions. The inclusion of investments and assets being ‘smart’ goes back to how NFT smart contracts provide a range of use cases and utility that can remove third parties, motivating consumers to purchase.

Network and relationships were an appealing motivator to NFT consumers as they met like-minded people within virtual communities that could contribute to their personal and business goals. The ability for consumers to network and engage with creators and leaders of NFT brands allows organisations to build communities around the personalities of the creators directly with the consumers. In more traditional markets, the Apple community led by Steve Jobs has built a similar strong community that is still paramount today (Marzo & Tramontana, 2019). This is in line with the literature on Harley Davidson (Schembri, 2009) and Apple (Marzo & Tramontana, 2019) around how consumers are required to have the brand’s item to prove their place in the brand’s social community.

In Web3 virtual communities, proof of ownership (Catulli et al., 2017) is enhanced because proof of digital asset ownership can be searched for and verified on the blockchain. This motivation enforces consumers to purchase the NFT to get into virtual chatrooms, as their proof of ownership is also their pass to access each community, which extends their networks and relationships. For communities, this adds new value that is combined with the overall product to provide an experience with industry creators (in addition to the product offering). As for consumers, this aids motivation by providing an added experience that provides status and recognition of fandoms.

Digital ownership is a large motivating factor of NFT consumption as consumers receive authenticity and verification of their digital assets on a Web3 blockchain which Web2 has not previously granted. This is also linked with current literature on CE (Garanti & Berberoglu, 2018; Goulding et al., 2013;) as consumers take control of their digital assets and directly engage with their purchases. Digital ownership, which through purchase of these assets, endorses a new type of ownership which differentiates itself from physical and prior Web2 digital possession. Verification and authenticity, being a large part of digital ownership, was common as a motivator among participants of the study. To expand on this, when purchasing NFTs, consumers are obtaining a digital asset that is certified for being real and these assets are far more traceable on the blockchain than physical assets in the real-world. In addition, consumers wholly own their digital NFT assets, whereas on centralised Web2 platforms these assets are leased and controlled by a third party. This links to the literature of Watkins (2015) who discusses one of the three types of digital ownership being that which offers full and unrestrictive rights. Consumers now have direct control over their digital assets, which impacted the ways they interact with the NFT. Depending on the NFTs status, consumers would use it as profile pictures on social media or trade the NFT asset for profit. They would use its functions to enter virtual communities or use it as a game asset. The findings of this study highlight the potential for brands to build trust and loyalty through the verifiability and authenticity which NFT digital ownership provides. Managers are now challenged in decentralised marketplaces to provide wholly owned digital assets to consumers that provide NFTs that work and abide by the protocols that have been set. NFT technology allows organisations to create verifiable claims of authenticity on digital assets that are sold. The next section progresses to the second stage focusing on digital ownership and market processes.

5.3.2 Acquisition and possession: Digital ownership and market processes

The second stage is described as ‘digital ownership and market processes’ and occurs during the acquisition and possession of an NFT. Here, consumers have acquired NFTs for their possession which are held in their digital wallets. The consumer has the NFT in their digital wallet for personal use similar to regular physical or centralised digital assets. Once consumers become aware of the market process of purchase and the unique features of an NFT which they are interested in, they move

on to acquisition. It is within this stage that consumers acquire and own their NFT, and through the utility or social status of the NFT they can join in communities of likeminded people and gain access to further benefits. Consumers start to experiment with dApps and existing blockchain protocols, getting familiar with the underlying technology of their digital asset purchase. This includes the market processes of interacting with exchanges to buy and trade cryptocurrency, interacting with NFT marketplaces such as OpenSea or Blur, and connecting to websites via digital wallets to mint NFTs.

Traditional consumer journeys are not always traceable, and value can be hidden such as consumers who choose to hide their Fiat currency; consumption within tradition markets becomes vague as consumers desire their information to be disguised or distorted to prevent unsolicited activities such as identity theft (Martin, 2021) leading to loss of ownership recognition and concealed asset value. However, what is unique about NFTs is that even though there is a certain level of anonymity, consumers that own an NFT are easily searchable on the blockchain where all times, dates, NFT sales and purchase amounts are all clearly stated. In addition, each previous and current owner of the NFT is also listed and can be contacted or presented with an offer to purchase their NFT (if they are still in possession of the asset). This is unique for NFT consumption and illuminates the importance of visibility around ownership amongst consumers. Organisations can adopt this technology to improve their digital asset integration into their future product lines, thus ultimately creating more security and transparency around the ownership of their products.

5.3.2.1 Unique features of NFTs

Digital ownership and market processes affecting consumer purchases are connected by an interdependent relationship between the unique features of NFTs and consumer preferences which influence their purchase choices. The findings of this study reveal a complex relationship between the unique features which NFTs can provide and the preferences which influence consumers to purchase NFTs as identified in Table 8. These unique features of NFTs and how they influence consumer purchases help to understand the rationale behind digital ownership and market processes for organisations and marketers.

Table 8

Unique features of NFTs which influence consumer purchases.

Minting
Rare traits
Authenticity and digital ownership
Instantaneous purchasing and tradability
Transferability and shareability
Portability
Consumer culture access
Innovative technology
Community Influence and Tribalism
Holding and Selling NFTs
Networking access
Utility benefits (various)

Consumers are increasingly drawn to minting NFTs due to the sense of exclusivity and the intangible benefits which these NFTs provide. Organisations and marketing teams that understand the many ways the minting experience can be tailored, customised and constructed have the potential to open a new domain of consumer experiences in direct response to consumers wants and needs. In these instances, consumers who mint their NFTs have the potential to form an emotional and sentimental attachment depending on the NFT received. Minting NFTs can come in the forms of generative art, tickets and passes to events, game assets, PFPs and other entertainment media. Here, the blockchain authenticates the consumer as the first person to own the NFT, and the original consumer who mints will always be certified on the blockchain as the first owner of the NFT. In contrast, in traditional markets such as artwork sales, this process is much more difficult to keep track of and requires access to exclusive private gallery databases which are not publicly accessible (Whitaker and Kräussl, 2018). Essentially the findings around minting can be seen as an experience of CE as discussed by Jaakkola and Alexander (2024) that can further be witnessed as an exogenous norm where consumers are in turn influenced by the minting process. Hence, the minting process itself can be seen as a prominent influential component on the consumer journey of decentralised NFT consumption that has the power to provide extensive functionalities.

Consumer preferences for rare traits within NFTs can be taken advantage of by corporations when using them as status symbols such as luxury items. Consumers who own rare NFTs seek high valuations similar to luxury goods where their NFT provides a digital version of a high-end product that can be showcased to the world. This is in line with the literature of Kasztalska, (2017) on the valuation of real-world luxury watches and Kirjavainen (2022) who discusses the merging of NFTs and luxury items. This synergy of combining luxury brand products and rare NFTs can even include incentives for holding certain NFTs (van Slooten, 2022; White et al., 2022). What this entails is that consumers may be given additional benefits in the form of airdrops of additional NFTs, tokens or

even real-world physical items and events. Here, consumers can continue to experience the extended benefits of having a rare NFT after initial purchase. Alternatively, consumers can source and make offers to purchase NFTs with rare traits on secondary markets. Similar to traditional markets, rare traits exist for Pokémon cards (Ward & Clark, 2002) and are purchasable on secondary markets, though there is a decreased guarantee of authenticity. In contrast, in decentralised markets these rare traits have certain authenticity and are also easily distinguishable based on the digital scarcity of each asset which seamlessly is recorded within the blockchain. In addition, digital scarcity of NFTs drives up the valuation of rarity as there are less copies of NFTs with rare traits. This is supported by the findings of Schaar and Kampakis (2022) stating that the 'head scratching' high valuations placed upon NFTs can be dictated by consumers growing up around decentralised virtual economies. NFT rarity also goes beyond the scope of purely visual elements. Rare NFTs with specific smart contracts can provide a unique utility such as acting as a virtual key to an exclusive group that grants the user access to a new network of business relations. Thus, businesses can use this knowledge to create royalty programs which reward their top buyers with access to an exclusive group via the acquisition of rare NFTs.

The unique feature of authenticity within NFTs means that these decentralised assets can be declared as providing true digital ownership which retain a store of value for their consumers. This authenticity of asset and digital ownership is evident in that all transactions are verifiable on the blockchain meaning consumers naturally avoid false ownership of digital products (Wang et al., 2021). This provides an advantage to organisations as they can track all transactions at any time and identify who owns which digital product (Colahan & Perske, 2020). It also allows organisations to be protected from fraudulent products as authentic products are verified on the blockchain. For example, in non-decentralised marketplaces counterfeit artwork presents a risk to copyright holders, creators and the economy resulting in millions of dollars lost to fake artworks (Tantowibowo et al., 2024). Through NFT technology a certificate of authenticity can represent the physical artwork and be programmable through the metadata in the NFT smart contract. This is in line with the literature of Tantowibowo et al. (2024) who discusses an anti-counterfeit system that uses NFT technology called Art protect. It can be proposed that anti-counterfeit NFT technology can eventually branch out into different areas such as ticketing, gaming and healthcare.

Instantaneous purchasing and tradability in global markets is a unique feature of NFTs that allows consumers from all over the world to purchase NFTs in ever-open and instantly available 24-hour marketplaces (Kugler, 2021). While instantaneous purchasing exists in the traditional digital space of video game downloads on specific platforms (Sotamaa et al., 2011), these video game downloads are locked to an exclusive platform with no option for transferring these assets outside of the game platform (Ghazali et al., 2023; Taylor, 2022). The NFT holds a store of value for consumers who then have full control over their digital gaming assets and can participate in instant cross-platform

consumer trading. This offers a unique point of difference to purchasing physical assets online where a time delay occurs from purchase to acquisition.

Another unique feature of NFTs is that they can be transferred and shared outside of their gaming platforms. If a consumer wishes to see the NFTs of a family member overseas, this is easily done by looking at the viewable contents of the family members' digital wallet. This type of shareability can extend to gifting friends NFTs with the click of a button (White et al., 2022). This is similar to the gifting feature on Steam's video game platform which allows users to gift games to others (Galyonkin, 2016). Transferability and shareability of NFTs assist in granting consumers greater direct access to their digital assets which can also play a part in a direct peer to peer transaction line between creators and consumers.

Portability is an additional unique feature of NFTs that attracts consumers who are without much physical storage space as it provides consumers with easy storage and accessibility of digital assets. Consumers that rented or had limited physical space were drawn to this feature of NFTs as it provided them with investments consumers could collect and store, ultimately shifting their mentality towards digital asset collecting. This was apparent by the findings where the function of portability created a newfound desire within consumers to collect NFTs as they didn't exhaust physical space and exist purely within the confines of the digital world. This is an extension to the findings of Watkins (2015) where it is now evident that consumer purchasing is shifting due to the functions that digital assets such as NFTs provide. For example, a consumer who rents their home, physical artworks can take up a lot of space. Hence, this type of consumer may choose to avoid purchasing art. However, it is possible to have virtual NFT art collections that can be showcased online on social media platforms. NFT portability offers these consumers opportunities to collect artworks, media and other investment assets that were previously not possible for them.

Consumer culture access is a unique feature that is enabled through NFTs which draws consumers to virtual communities as a means of expressing their cultural identity and participating in these shared cultural practices. The consumer culture access granted by NFTs provides consumers the ability to build networks that serve as symbols of cultural affiliation. These symbols embody the values of its members, their aesthetics and style choices, and consumer narratives that define each community. This is enriched by the consumer appeal for tribalism which can be a powerful force within digital markets as brands can establish a community of diehard fans. In Web2, consumer consumptions within communities do not lead to the ability that grant derivative rights for them to extend the brand line; the original imagery is locked by copyright law exclusively to the brand (Rub, 2021). Extending from Colicev (2023) who notes that NFTs have community building aspects, it is possible for consumers within NFT communities to grow brands and sub-brands such as the case study of Bored and Hungry (Brouard, 2024). This case study showed that consumers are able to build brands around

their NFT which can extend the decentralised community even further as consumers can make a derivative of the original brand using the NFT imagery.

The various utilities which NFTs provide enables consumers to hold an asset that has many extended functions and potential benefits embedded within its smart contract. For example, organisations and creators can use these smart contracts to provide airdrops to reward brand loyalty and integrate game theory of burning mechanics to raise digital scarcity and value of their products. Burning mechanics will be explored more in the third stage of the consumer journey of NFTs. These utilities all have an impact on digital ownership and market processes as they grant a myriad of functionalities which gravitates towards consumer preferences of NFTs. In traditional marketplaces, including both physical and Web2 online platforms of sale, each asset is usually limited to a certain degree around its core functionality and utility. For example, a physical book is limited by its form and physical size; its pure function is for reading the text and there may be some additional information about the author somewhere within the early pages. In extension, a digital e-book is a step above with its utility and functionality and have some advantages over printed books (Jeong, 2012); not only is it smaller and more portable, it has accessibility to websites and further reading is just a digital click away. However, an NFT in the form of a book can have far more utility than just the book itself; holding the book could provide airdrops, access to communities with guaranteed verification, and many other utilities are possibilities due to the smart contract technology (Wang et al., 2021). NFT technology is just starting to scrape the surface of what functionality and utility it can provide to a multitude of asset types.

5.3.2.2 Categorising NFTs

Categorising of NFTs can potentially be as limitless as the capabilities of smart contracts (Arora & Kumar, 2022). According to Kraussl and Tugnetti (2024) there are five main categories of NFTs: gaming, collectables, utilities, art and metaverse. The first four categories are relevant to this study. The authors also mention ‘metaverse’ as a fifth category, however this is a topic that goes beyond the scope of this thesis. Table 9 shows the properties and examples of four new main categories found in this research. The four new categories are billing and payments, technology innovations, entertainment (media) and disruptions. Further findings of this research found that NFTs also came in the form of Proof of Attendance Protocols (POAPs), Ethereum Name Service (ENS), Soulbound NFTs, security gated data, entertainment NFTs and other formats. These are also documented in Table 9.

Organisations can utilise NFTs by implementing ticketing, vouchers, memberships, and licenses that use NFT technology (Baytas et al., 2022). Baytas et al. (2022) discusses education and governing sectors that could integrate the blockchain and NFTs into their systems to provide digital passports and certificates. This could fundamentally change the landscape of e-commerce and how

organisations conduct sales in the future, transitioning from physical identification documents and certificates into a digital format that uses blockchain technology and reinventing the industry. Thus, NFTs have the potential to expand into numerous alternative categories as the technology provides for innovating existing protocols and systems.

Table 9

Additional NFT categories (as proposed by the author)

Category	**Properties**	**Examples**
Billing and payments	Secure, accurate and real time transactions that enhance trust and ease of use	Memberships Ticketing and vouchers Receipts Royalty cards
Technology Innovations	Transformative changes which improve efficiency	Proof of Attendance Protocol (POAP) Ethereum Name Service (ENS) Blockchain gaming badges Airdrop NFTs and tokens
Entertainment (media)	Wholly owned entertainment media	Music NFTs Film NFTs Book NFTs Generative art
Disruptions	Challenge the status quo on traditional markets and practices for Web3	Digital passports Certificates Soulbound NFTs University degrees Security gated data Medical data

5.3.3 Post-purchase evaluation and behaviour: Value creation and behaviour

The third stage, ‘value creation and behaviour’ occurs during the post-purchase evaluation and behaviour stage. It is within this stage that consumers reap value from their purchases, evaluate these purchases, and then decide to either keep or dispose of their digital assets by selling, trading, hiding, or burning their NFTs. This is in line with the literature of Colicev (2023) and Yilmaz et al. (2023) on the value drivers that lead consumers to purchasing and holding their NFTs. A behaviour that comes into play within this stage is how consumers co-create and work alongside NFT creators in marketing these NFT brands. It is important to outline how NFT products don’t follow all of the typical post-purchase stages as outlined by Lemon and Verhoef, (2016). Instead, NFTs (unlike most physical assets) cannot be returned for a refund or an exchange in the traditional sense. Hence, the value of any NFT derives from what the consumer places on the NFT during their consumption journey.

5.3.3.1 Value drivers

The drivers of value have a big influence on whether consumers choose to hold, sell, hide or burn their NFTs. Here, factors of value creation relate to emotional or sentimental attachment, disposal, digital collecting, digital self and identity, and financial values placed upon the NFT by the consumer. Table 10 helps to answer the research question by identifying the six factors of value placed on NFTs by consumers.

Table 10

Values placed on NFTs by consumers

Emotional and sentimental attachment
Digital identity
Virtual community influence
Digital collecting and rarity
Financial and creator royalties
Disposal through burning mechanics

Emotional and sentimental attachment was a factor that created value for consumers during their post-purchase evaluation and behaviour stage. Consumers were motivated to hold their NFTs for sentimental reasons based on connections with their real-life experiences. These ranged from significant family member events which coincided with minting dates, gifts given from other friend NFT collectors which had no inherent financial value, as well as consumers who simply enjoyed supporting creators and artists. As consumers engage in emotionally charged attitudes and changing moods towards their NFTs, their subjective feelings have the power to override more logical information (Serada, 2023). This leads consumers to have an invested emotional and sentimental attachment for their digital assets.

Digital identity was another value placed upon NFTs by consumers. For example, entry into BAYC provided consumers with a digital identity that allowed them to network and engage within the NFT community (van Slooten, 2022; White et al., 2022). This also expands on the Digital Extended Self Theory by Belk (2013) who discusses that in the digital world, the self is now extended into avatars which can affect offline consumer behaviour and identity. In the physical world it is much harder to fabricate a secondary identity within social circles, and while this is a bit easier in the Web2 digital world there is still the issue of these centralized systems relying on a singular authority or entity to regulate data (Sahu & Chandramohan, 2023). In contrast, digital identity has much stronger weight as a value consumers place upon NFTs within decentralised marketplaces because of the sustainable solutions that blockchain technology provides to protect these digital identities (Jumelle et al., 2022) through transparency, resilience and security (Sahu & Chandramohan, 2023). Hence, consumers have

a stronger control of their NFT digital identity within Web3 markets due to the increased protection of the blockchain.

The power of virtual community influence plays a large role in shifting social norms which influence the value placed on NFTs amongst consumers. It is natural that members of these social communities would provide a stimulus to new entrants or existing members to persuade and change market opinions. This research also highlights community influencer power over digital assets in social media contexts. While considerable literature exists on influencers in Web2 markets (Ivanova et al., 2020), the research of this thesis extends current literature around influencers within Web3 marketplaces where the power of influencers can shift or change market valuation of a digital asset brand. These virtual communities and the influencers within them have shown to impact the price of digital assets and cryptocurrency. This study found that the use of an influencer in these marketplaces provided selective information (knowledge) and yielded massive hype, speculation and created a community of consumers around the brand. Based on this, it is also possible to speculate that negative elements can arise from influencers who exploit their followers. The power of using community influencers effectively as uncovered in this research can assist marketing teams and organisations to build brand loyalty through the persuasion of these influencer types.

Digital collecting is a consumer behaviour stemming from the value placed upon NFTs by consumers who lack physical space and prefer not to collect physical products, though appreciated the intangibility and portability of digital assets. As NFTs can take on many different functions (Fai, 2021), consumers that lack significant storage space can purchase collectable products that they otherwise would not. This allows organisations to implement market tactics towards consumers who rent, travel or have limited physical space in their homes, which is a marketing solution to the issue Watkins (2015) raises on DCO integration into company product lines.

Financial value attached to NFT consumption practices was one of the most commonly occurring themes in terms of the value consumers placed on their NFTs. The findings show that the majority of consumers who delved into the world of NFT consumption did so based on the financial benefits and possibilities offered by this technology. The literature of Wang (2022) supports this as he notes the many financial market spillover for NFTs that ranges from art markets, cryptocurrency markets, DeFi market, Bond Markets, Foreign Exchange Markets and Gold Markets. An interesting addition here is how consumers that had gaming experience within virtual economies where able to utilise that skill to purchase and trade NFTs for financial success. Consumers who attached financial value to NFT consumption did so based on reasons of holding an asset to gain future profits, obtaining NFTs via airdrops which gave various financial renumeration, as well as the grey area of tax harvesting benefits (Cong et al., 2023). Financial value creation was also prominent in NFT consumers who also

considered themselves to be creators of NFTs, whereby the sale of each NFT grants a royalty paid to the original creator.

5.3.3.2 Consumer Behaviour

Consumer behaviour in the value creation and behaviour stage observes how consumers interact with creator royalties and how holding, selling, hiding and burning (disposal) are factors that need to be understood. In centralised marketplaces, numerous problems exist around creator royalties of art and entertainment in that once a product has been sold, its re-selling value and potential royalties are left to simply a merit system without traceable guarantee (Rub, 2014). Creator royalties written into NFT smart contracts vastly change the interaction, distribution and financial renumeration of digital media amongst many different industries. Each re-selling of an NFT provides the original creator (or company) with a royalty that is traceable and continues to pay an instant return for each subsequent sale (Rehman, 2021), starting at the original asset sale. This not only speeds up the process of creator payments received but NFTs also provide more precise payments (Nautiyal et al. 2023) and works around the paperwork and legal proceedings of traditional marketplaces when going through a third party (Lee, 2023). In addition, the value of royalties extends to numerous creators that can be attached to royalty arrangements (Sazandrishvili, 2020) within NFT smart contracts which pay out a number of owners of the digital asset each time a sale is made. It is interesting to note that there exists the possibility to transfer digital assets to a different blockchain and in so limit the capabilities of the original smart contract to execute (Murray, 2023). However, this means changing security, cryptocurrency, protocols and compatibility usage that can impact the digital assets functions (Guo et al., 2024). An option that mitigates this further however are Soulbound NFTs as discussed by Weyl et al. (2022) which are locked to digital wallets and can prevent consumers from taking certain NFTs off to different blockchains. It's clear to see from the findings of this study as well as the supporting literature that creator royalties written into the smart contracts of NFTs are a land-mark innovation for brands which add value to both their consumers and creators.

The disposal of NFTs through burning mechanics is a value creation that has simultaneously been of importance and yet also raised complex conversations amongst consumers within the study. This is because although NFT disposal is a valid function that is enabled on the blockchain, the disposal of an NFT is actually determined by whether or not the consumer considered the NFT to be at the end of its product life. Consumers indicated there were various disposal options for NFTs including selling, trading, gifting, hiding and burning. The consumer here has the option to hold the NFT asset in their wallet, sell the NFT for a profit or loss, hide the NFT (make it invisible to the marketplace) or burn the NFT by sending the asset to a burn address. In some situations, participants explained how they were encouraged to burn an NFT to gain another NFT with different properties and a chance at a higher rarity which adds value to disposing of the current NFT. This is consistent with the literature of

Das et al. (2022) who discusses the stages of NFT disposal and Weyl et al. (2022) who mentions the limited disposal options for NFTs. There are also consumers who sold their NFTs and then re-bought into the brand as they experienced sellers' remorse and regret over missing out on the value which their NFT initially granted them. This is in line with the literature on cognitive dissonance in the Harmon-Jones and Milles (2019) study. In other situations, participants of the study were rewarded for holding an NFT by being given tokens which they could exchange for cryptocurrency (and then Fiat) which added value to holding their NFT. The value placed upon the disposal of NFTs by consumers was also impacted by the complexity of the disposal burning process. This complexity can be attributed to how NFT burn mechanics can factor into consumer decisions. Burning mechanics may allow consumers to think about and potentially act upon disposal of their current NFT for a chance of receiving a better, rarer NFT with new features and functionality (Kim et al., 2023). This awareness can provide marketing teams, organisations and creators with limitless options of customisation of digital assets within consumer post-purchase experiences. In this case, disposal of digital assets can lead to future value for consumers that was otherwise not made possible within more conventional marketplaces. On the topic of hiding an NFT, this only allowed the NFT to be invisible from anyone searching for the contents of a consumer wallet. This assisted participants in managing unwanted junk mail NFTs (that can be forcibly sent to a wallet) or NFTs which participants did not want to associate with anymore.

A noteworthy finding of this study was that consumers were hesitant to permanently burn an NFT. If they chose to do so, they would have to pay a gas fee to dispose of the asset. Instead of doing this, the participants of this study predominantly chose to simply hide the NFT which incurred no cost. Thus, future organisations and marketers need to observe the consumers behaviour during disposal of NFTs within the post purchase evaluation stage (as outlined in the consumer journey of NFT consumption model in Figure 5) in order to understand the rationale behind consumers who choose to dispose of NFTs for any reason. This would allow brands and organisations to gain deeper understanding into how to maintain customer retention regarding NFT asset holding.

5.4 The Self: Throughout the consumer journey of NFT consumption

The self is a construct of the consumer that is present throughout the NFT consumer journey and changes throughout each stage of the journey. The self of the consumer relates to the emotional and psychological states that shape the consumers identity. Here, the self of the consumer is shaped by the marketplaces that their social interactions take place (Arnould and Thompson, 2005;2018; Arnould et al., 2023) This construct becomes evident in the pre-purchase stage where consumers start to understand how their digital needs and wants are different to their physical needs. The construct of the self continues to grow through the acquisition and possession and post-purchase evaluation and behaviour stages as consumers gradually shift into their evolved consumption identity. It is possible

that targeting consumers within Web3 markets provides organisations with a consumer that has a different sense of self and has completely different purchases to their physical reality counterpart. This runs in parallel with research on managing multiple identities by Wijetunga (2016) who found that people construct more than one identity for themselves. For example, a shy, introverted consumer in the physical world may have a persona that is the exact opposite in the digital world, extending their purchasing options in the digital environment. Arnould et al., (2023) discusses identity being formulated and cultivated by surrounding culture. As the digital environment provokes a culture that is comprised of a diverse near endless realm of consumption practices the self and the eventual consumer identity are shaped by the Web3 marketplace. The findings from this study provides new knowledge for understanding the consumer journey of NFT consumption. Through observing consumer motivations, ownership and valuation of digital assets, it was discovered that the Self changes throughout the consumer journey of NFT consumption. Thus, from this it the identification of a digital core self was made known through the research findings.

5.4.1 Digital core self

An interesting finding within value creation and behaviour was the discovery of consumers who created a secondary digital core self within their NFT consumption journey. This aligns with Arnould et al., (2023) on how consumers use possessions and objects to define themselves. The findings of Quartiroli (2011) indicate that there is a digitally divided self from their real-world self within consumers. This can also be linked to digital persona theory by de Kerckhove and Almeida (2013) and extended self -theory by Belk (2013). De Kerckhove and Almeida (2013) discuss how each individual self can have many personas but only one core self may exist. It is through the previous literature and the findings of this study that it can be argued that consumers create a digital persona along their NFT consumption journey which presents as a new digital self-identity. It is through identification and acknowledgement of these digital consumer personas that organisations and marketing teams can pinpoint the types of NFT consumers and their motives for consumption.

However, building on from the consumer personas literature, this thesis suggests that a secondary digital core self can also exist. Arnould et al., (2023) discuss how identity construction can be linked to external factors that are witnessed in the individual that can include advertising, subcultures of consumption, consumption experiences and brands influence. These factors have all been shown to impact the consumer that leads to a secondary digital core self. This is in relation to how NFTs can become digital identities within virtual communities and are potentially ceaseless in existence based on the immutable power of blockchain technology (Zhao et al., 2021). No identity is required to make a digital wallet which leads to trading and buying being completely anonymous, hence the consumption of NFTs can remain completely anonymous. Therefore, the findings of this study indicate that the core identity given to the NFT can live on beyond its original creators. It is also

possible that multiple people could be running the same digital core self though their consumption of NFTs without specifically identifying any one of them as its soul creator. This can be seen as linking to the concept of multiple self-aspects by McConnell et al. (2012) such as a mother taking on the identities of a wife and professor in different environments. A link to CCT can be witnessed with the postmodern approach of identity in CCT literature (Arnould and Thompson, 2005;2018) as traditional identity anchors (such as tradition and family) are replaced by communities of consumption. As the social life of consumers is vastly diverse in decentralised marketplaces, the wide influence of social media and lifestyle consumption choices and communities, impacts the identity of the inner core self (Arnould et al., 2023). The difference here is that while a consumer can take on multiple selves within the physical world or even through digital Web2 technology, the NFT on the decentralised platform can act as an entirely new entity. This surpasses social roles and personality (Roberts & Donahue, 1994) as the digital persona can move beyond that of its human creators, and functions as a recognisable independent 'persona' that autonomously influences decentralised marketplaces.

As more than one person can have control over this digital identity, a new core self is created that is separate from the multiple consumers that control this identity. This aligns with digital hyperconnectivity by Brubaker (2020) where the self has been reconstructed in new ways in sociotechnical systems. Hence, this identity can be sold as an NFT and live on through another person who purchases it and takes on its likeness in decentralised markets. For example, if a digital identity was controlled by five people and then sold to one person, the digital identity NFT would have its own core identity separate of who owns it. Here, The Extended Self theory by Belk (2013) on the topic of consumers who spend time as a different 'avatar' can change. In addition, creators can use this implication to build decentralised personalities that are created around a new core digital identities that are separate from their own. In recent CCT literature by Arnould et al., (2023) the discussion of memetic identities as a form of communication aligns with the identities created in decentralised markets. As entire NFT brand communities have been created around memes, the concept of selling such an identity or decentralised personality as an NFT is now a possibility. Creators can cultivate engagement, influence decisions in social media, build a new brand image or interact with likeminded individuals through this second digital core self. For both organisations and creators that create digital identities around their NFTs: selling the NFT would sell the association of the persona and the core self that has been perceived within decentralised virtual communities. Essentially this goes beyond The Extended Self theory by Belk (2013) on re-embodiment as these digital identities transcend the confinement of a centralised ecosystem. Organisations can use this implication to create decentralised personalities that are unique and engage with consumers on virtual marketplaces that can evoke different needs and wants from consumers. This helps to explain how consumers' needs and wants can shift in decentralised digital markets. This implication can assist

organisations in understanding a new era of digital identity that can be consumed in decentralised platforms.

5.4.2 NFT consumer personas

Ultimately, during the research a discovery was made of the different consumer persona types that were found to be dominant amongst NFT purchasers. The findings of this study identified 12 NFT consumer personas which include the following: Technological Optimist, Gambler, Impulse Consumer, Community Influencer, Collector, Revolutionary, Gamer, Tribalist, Investor, Digital Alter Ego, Sentimentalist and Networker. These consumer personas are identified in Table 12 in detail. Each of the NFT consumer personas classes the type of NFT consumer into a category that allows marketing teams and organisations the opportunity to provide specific targeting to consumers of NFT consumption. These consumer personas are identified in order of interview discovery. It is through the NFT consumer personas that three themes emerged to group NFT consumers more broadly into the constructs of financial, utility and community/social (see Figure 6).

Table 11

NFT consumer personas and relation to marketing and organisations in DCCT

NFT consumer persona	Relation to marketing and organisations in DCCT
Technological Optimist	Understanding the persona of the Technological Optimists allows marketing to be efficient towards consumers that do not have the physical space to store products and collections. Technological optimists find more value within digital products and assets due to their scarce storage space. It's possible that digital products can be marketed towards this portability and the fact an NFT takes up no physical space. These types of NFT consumer personas also have an interest in new technology, meaning that organisations with innovative approaches will appeal to this consumer persona type.
Gambler	The Gambler consumer persona explores short term risks for maximum rewards. These types of consumers can have marketing approaches directed towards them where rare NFTs or rewards are offered for an exclusive window of time.
Impulse Consumer	The Impulse Consumer persona type rushes into the purchase of new digital assets in fear they will miss out. They are influenced by strong marketing and hype cycles on social media platforms. It is possible to understand this type of persona as a consumer that jumps onto new and popular trends and interesting ideas that the majority of NFT consumers are exploring.
Community Influencer	The Community Influencer persona type informs organisations about the ability to market digital assets direct to the community through influencer personalities that can enhance the branding. Essentially this is a way of marketing in Web3 where an influencer can be used to market products to NFT community members based on their social persuasion.
Collector	The Collector shows a type of consumer who is fascinated with collecting digital assets. For marketers this consumer persona will be targeted through the appeal of new digital collections and rare edition sets. For organisations interested in target marketing towards this persona type, they would focus on creating collectable aspects within their digital assets to encourage consumers to amass a series of the same asset type. This would be a similar comparison to baseball and Pokémon card collection sets.
Revolutionary	Consumers who look towards a change of traditional systems can be considered a Revolutionary persona type. These consumers are focused on a future decentralised economy and find digital assets that are decentralised and wholly owned appealing. Marketing teams and organisations can target this persona type through promoting the decentralised nature of digital asset ownership and the control which the consumer has over these assets.
Gamer	The Gamer persona has experience within digital gaming worlds where these gaming elements have spilled over into a Web3 environment imbued with decentralised digital assets. Organisations can create communities and systems in line with what these gamer persona types have been accustomed to within their game worlds, though by incorporating digital assets that are tradable outside of these gaming platforms.
Tribalist	The Tribalist persona tends to band together with other consumers over a common NFT brand and have an underlying passion for the chosen digital asset based on the brand and the community principles.

	Organisations that have strong communities with Tribalist consumer personas can utilise them as ambassadors who act as free marketers and naturally focus on sharing good publicity around the digital asset. Tribalists that have an extreme passion for the brand can even extend the brand line from the parent NFT brand.
Investor	The Investor persona type observes specific financial patterns within NFT consumption and looks at long term probabilities for making a profit. Marketing teams can aim to target this consumer persona type by focusing on investment profitability, the technology that the NFT enhances and the team that is behind the NFT brand.
Digital Alter Ego	Consumers who use digital assets as their digital identity and greatly immerse themselves into this secondary identity are considered Digital Alter Ego consumer persona types. Organisations can create communities that invoke consumers that are focused on their Digital Alter Ego.
Sentimentalist	The Sentimentalist persona type typically associates digital assets with significant milestones within their lives. Marketers can use this to market digital assets that can be linked to specific emotional or sentimental dates or events. As an example, organisations could evoke feelings of emotional attachment from their consumers to their digital products through relating these to birthdays, celebrations, and other significant moments in consumers lives.
Networker	The Networker persona type uses their digital assets to get into exclusive groups and meet other consumers for current and future relations. Organisations who market to these persona types can create communities that thrive on networking with people from all over the world. In addition, access to exclusive clubs could be granted to networks with a select number of people in specific business areas, similar in nature to a prestigious network that a golf course membership can provide.

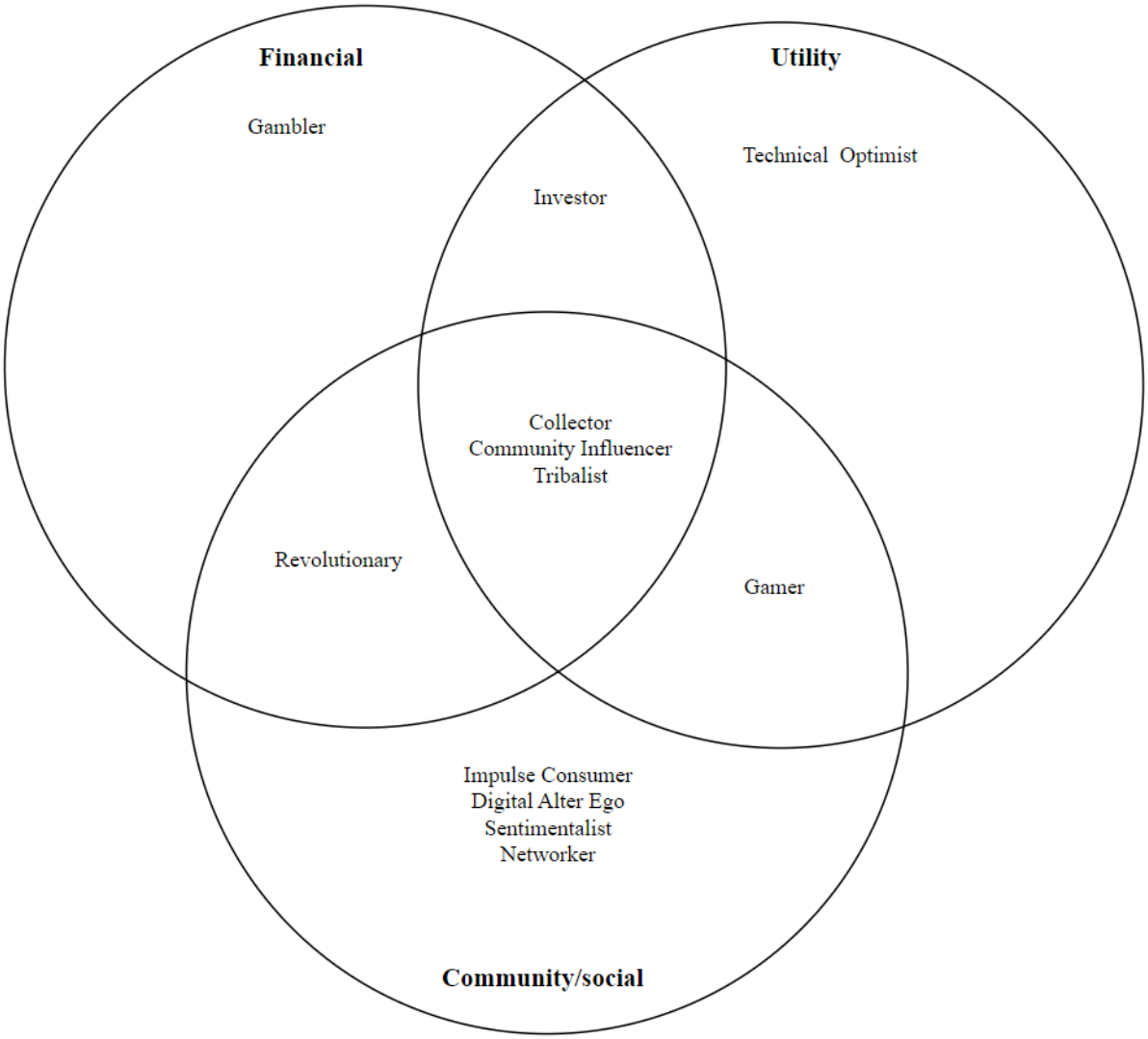
Categorising the NFT consumer personas by diversifying each into three themes allows for a broader insight into these consumer persona types and their predominant motives for NFT consumption. To theme the stimulus affecting the rationale behind each NFT consumer persona, a Venn diagram (see Figure 6) was created that shows how each persona is influenced by different stimulus for consumption. These three main stimulus themes are conceptualised as financial, utility and community/social. Firstly, the financial theme includes personas such as Gambler, Investor, Collector, Community Influencer, Tribalist and Revolutionary. These are consumers who are after monetary gain through short or long term speculation, gambling or calculated long term investments. Secondly, the utility theme includes Technical Optimist, Investor, Collector, Community Influencer, Tribalist and Gamer. These are consumers who appreciate and engage with the functionality of the NFT. This could be around community access granted, transferability, storage, IP or various other uses which the NFT enables for the consumer. Lastly, community/social includes Collector, Community Influencer, Tribalist, Revolutionary, Gamer, Impulse Consumer, Digital Alter Ego, Sentimentalist and Networker**.** These are consumers who have a desire to be part of a community to network and share

similar interests around an NFT brand. They participate in discussions in virtual communities with members and take on advice from community influencers, as well as express various digital personas.

Some NFT consumer persona types crossed over into multiple stimulus themes but not all of them. However, at the intersection, the consumer personas of Collector, Community Influencer and Tribalists were found to be influenced by all three themes.

Figure 6

Venn diagram of digital personas within stimulus themes



5.5 Conclusion

This chapter has provided a discussion on motivations and ownership intentions of NFT consumers through the use of the consumer journey model and consumer consumption theory. This research argues for revision of CCT to adopt to the new knowledge surrounding consumer behaviour phenomena and culture for decentralised markets. These new practices of decentralised consumer interaction are vastly different from centralised consumption which CCT is currently focused on. To create this new model around NFT consumption, an updated proposal to CCT has been suggested in this study referred to as DCCT which is used to aid in explaining the consumer journey in decentralised digital markets. The consumer journey of NFT consumption was presented as a three stage model, somewhat different to the previous model of consumption. The first stage is referred to as risk and motivation of consumption. The second stage is digital ownership and marketplace processes. The third stage is referred to as value creation and behaviour. Throughout the journey the consumer 'self' is observed and evolves. Furthermore, the study found that there was not one type of NFT consumer, and it was possible to create personas of NFT consumers, which focused on three main motivations and consumption behaviour of financial, utility, and community/social. The next chapter concludes the thesis by highlighting the key findings along with the practical implications, limitations and recommendations for future research.

Chapter 6: Conclusion and recommendations

6.1 Introduction

The aim of this study was to explore the lived experiences of the consumers who actively trade and buy NFTs to investigate the motivations, ownership intentions and value consumers place on their NFTs. To satisfy this aim, the study addresses four objectives:

1. Investigate consumer motivation towards the purchase of NFTs along the consumer consumption journey.
2. Identify the unique features of NFTs which influence consumer purchases.
3. Research the value consumers place on NFTs.
4. Profile the psychographic characteristics of NFT consumers.

This chapter concludes the thesis by summarising the key findings contributions to theory, and the practical implications of the study. It concludes on a discussion of the limitations of the study and provides recommendations towards future research within the field of digital assets and decentralised markets.

6.2 Research summary

Findings from the research offered a suggested extension (a modified framework) to CCT based on the Decentralised Consumer Culture Theory (DCCT) of digital assets and NFT purchases in Web3 environments. The creation of DCCT led to the development of a new conceptual model of the consumer journey of NFT consumption which cycled through the stages of consumption: pre-purchase, acquisition and possession, post-purchase evaluation and behaviour (Jaakkola & Alexander, 2024; Lemon & Verhoef, 2016).

The theoretical findings from researchers notes, literature and findings were interpreted throughout each stage of consumption. This allowed the researcher to paint a picture of participants within their NFT purchasing journey from before they entered the market, reflecting on early memories and what motivated or influenced their decisions to purchase. This free-flow interview style allowed the participants ample time to discuss and reflect on this phenomenon which led to deep discussions that expanded on ownership and emotional attachment to digital objects.

In the absence of studies explaining NFT consumption, this current research informs the gap. This has been achieved by the following findings of this study:

- The first research aim is on the motivating factors of NFT consumption which represent the rationale for consumers who start and continue their NFT purchasing journey. These motivation factors include money, technology, hedonic behaviour (gaming), use cases and utility, network and relationships, digital ownership, authenticity, digital identity and collecting. The motivation factors were shown to be similar to products such as shares and stocks but expressed multiple differences due to the capabilities of digital assets and smart contracts. This resulted in different motivations for consumers that purchase digital assets such as NFTs.
- The second research aim is on the unique features of NFTs which influenced consumer purchases. These included minting, rare traits, authenticity and digital ownership, instantaneous purchasing and tradability, transferability and shareability as well as portability. They also included consumer culture access, innovative technology, utility benefits, holding and selling NFTs, networking access and community influence and tribalism. NFTs provide a different CE for consumers where they can experience customised purchases that can be dictated by organisations and consumers. The CE can also be more exclusive as purchasing NFTs allows for more co-creation than physical goods.
- The third research aim is of the value consumers place on their NFTs and how this dictates how consumers evaluate the retainability, tradability, sell-ability or disposability of their decentralised assets. Value creation of NFTs included emotional and sentimental attachment, digital identity, digital collecting and rarity, financial and creator royalties, and disposal. These findings indicate that NFTs offer a range of value for consumers. NFTs can be embedded in the purchase as a co-creation between the creator and consumer, expand the NFT brand line as a derivative, take the form of a digital identity which can be traded or sold and provide creators and organisations a solid platform for creator royalties to exist.
- The fourth research aim is of profiling the psychographic characteristics of NFT consumers. These characteristics are classified through the NFT consumer personas into distinct categories that will allow organisations and marketing companies to target their decentralised products towards accurate consumer markets in Web3 markets.
- Reflection on the suitability of the CCT model by Arnould and Thompson (2005) for decentralised markets. The proposed Decentralised Consumer Culture Theory (DCCT) expands on CCT as its 25 years old seminal article focus on Web2 markets. The peer-to-peer trading enabled through the blockchain in Web3 markets reinforces the view that digital assets are not consumed in the same way as traditional products and hence require a focus on understanding decentralised consumption practices.

- Conceptualising the consumer journey of NFT consumption in the form of a conceptual model extends the theory of the customer journey of traditional consumer products by Lemon and Verhoef (2016).

6.3 Contribution to knowledge

While NFT consumer consumption has been previously studied (Wang et al., 2021; Yilmaz et al., 2023), the phenomenological study of in-depth interviews provides empirical insight into the understanding that surrounds consumers consumption of NFTs from motivation, ownership preferences, value and identifying distinct consumer personas.

6.3.1 Theoretical contribution

The findings of this thesis have several theoretical contributions for digital assets and NFTs adding to academic knowledge. With a relative dearth of knowledge related to the global value of this phenomenon, this study seeks to provide the first assessment of the consumer journey for NFTs and adds valuable insights to what factors influence purchase. The main contribution of this study provides a conceptual model of the consumer journey of NFT consumption for organisations and marketing teams to better target consumers of their digital assets and NFT products. This adds value to previous research in consumer culture as DCCT updates the theoretical structures of CCT erected by Arnould and Thompson (2005) to focus on decentralisation in digital asset markets. The proposed new framework reflects a progression into observing consumer consumption specifically around decentralised Web3 digital assets such as NFTs. Through the creation of DCCT, the conceptual model of the consumer journey of NFT consumption was created which follows consumers through each stage of their NFT purchase.

The consumer journey of NFT consumption is an area worthy of investigation by this study as NFT markets are still in its early stage (Wang et al., 2021). Here, the traditional consumer journey by Lemon & Verhoef (2016) needed to reflect decentralised digital assets. Hence, the worth of intangible digital assets such as NFTs and the customer journey in relation to acquisition, possession, consumption, and disposal required further clarification and explanation (Yilmaz et al., 2023). This was important as there can be several reasons for NFT consumer behaviour during each stage of consumption that was yet to be well defined and researched. This thesis provides a conceptual framework which shows the consumer journey of NFT consumption from three stages that helps to assist organisations and marketing teams understanding the complexity of NFT purchasing. Firstly, pre-purchase is combined with the risk and motivation of consumption. Secondly, acquisition and possession are combined with digital ownership and market processes. Lastly, post-purchase evaluation and behaviour are combined with value creation and behaviour.

As digital assets are a relatively new area of digital consumption, this study contributes to understanding consumer motivations by discerning factors that lead consumers to purchase NFTs. The findings of this research also contributed to identifying the unique features of NFTs which influence consumer purchases. This contribution assists in understanding what consumers desire out of their NFTs which is lacking in current literature and media. The value consumers place on NFTs is another contribution made by this study that assists in understanding how consumers dictate the worth of their NFT assets. This research establishes factors of value creation which give a deeper understanding of consumer product attachment and purchasing. Lastly, an outcome of this thesis lays contribution in the literature by profiling the NFT consumer through the modelling of consumer personas. A total of 12 personas were identified that categorise the types of consumers who purchase NFTs. From these 12 personas, three themes of consumption stimulus were devised (Chapter 5, Figure 6.) that allow further classification into specific use cases through financial, utility and community/social outcomes. The ability to profile consumers based on their NFT purchasing trends as consumer personas is a new area that needed to be explored in the emerging digital decentralised consumption markets. As consumers are growing up in a world dominated by digital items and experiences it becomes ever more important to understand digital consumption practices (van Slooten, 2022). NFT consumers cannot be marketed to in the same way as they differ in motivation, consumption and value derived from NFTs.

6.3.2 Managerial implications

The practical contribution of this research will enhance marketers and organisational understanding of NFT consumption from pre-purchase to post-purchase evaluation and behaviour which will provide practical significance as follows:

1. The growing desire for intangible digital objects is a new consumer phenomenon which has received little attention in research and practice (Li, Phang & Ling, 2019; Marinotti, 2020) and needs to be explored due to the growing user base of consumers and the rapid change in technological understanding (Fai, 2021). This research provides consumer insights that may assist organisations and businesses to implement strategies to cater to the consumers within their market of digital assets. The consumer insights centre around motivation, ownership preferences and valuation of NFTs. From this, organisations and marketing teams can have a better understanding of what factors influence consumers to purchase NFTs from their pre-purchase to post-purchase decisions. Managers now have more of an understanding of perceived risk in the pre-purchase stage as they can mitigate consumer concerns and provide knowledge to lower risk to consumers. Managers can now identify the motivations of consumers in the pre-purchase which isolates factors of Financial, Technology, Hedonic Behaviour (Gaming), Use Cases and Utility, Network and Relationships, Digital Ownership, Authenticity, Digital Identity and Collecting. Managers are also able to provide specific functions of

NFTs and utility consumers are seeking. In the purchase stage of acquisition and possession managers can now understand unique features of consumers. These factors include; Minting, Rare traits, Authenticity and digital ownership, Instantaneous purchasing and tradability, Transferability and shareability, Portability, Consumer culture access, Innovative technology, Community Influence and, Tribalism, Holding and Selling NFTs, Networking access, Utility benefits (various). Lastly, managers can now identify the value consumers place on NFT that makes them hold rather than sell their digital assets their post-purchase evaluation and behaviour stage. These factors include; Emotional and sentimental attachment, Digital identity, Virtual community influence, Digital collecting and rarity, Financial and creator royalties, Disposal through burning mechanics.

2. Understanding consumer motivation for NFT consumption provides a new area of study to explore. This understanding is crucial in determining how consumer motivation theory informs the way in which organisations interact with consumers in NFT markets (Sharma et al., 2022; Yilmaz et al., 2023). In the near future, NFT technology and its features will be further implemented as smart collectables (Fai, 2021). Hence, having an understanding of the relationship between consumer motivations and smart assets/investments will be vital for organisations seeking exposure to NFT markets. This thesis explains the motivating factors (see Chapter 5, Table 7) of financial, technology, hedonic behaviour, use cases and utility, network and relationships, digital ownership, authenticity, digital identity and collecting. These motivating factors can assist marketing teams to better understand the rationale behind consumers who decide to start their NFT consumption journey.

3. Understanding the unique features of NFTs which influence consumer purchases is critical to gaining an insight into what consumers expect from NFT products. This research provides the findings for what contemporary digital asset consumers prefer in their consumption practice. The unique features of NFTs (see Chapter 5, Table 8) all play an important role in influencing consumer purchases in these markets. Observations from this study show that the inclusion of NFTs within ticketing services can provide secure, authenticity service protocols to consumers. NFTs in the form of tickets help to fight against fraud and copyright by creating fair systems that cannot be gamed due to the blockchain mechanics. It is also possible to have each ticket become a memento or double as a collectable at events such as live sport matches. Each NFT ticket could utilise a burn mechanism upon entry into the event to provide the consumer with a rare digital collectable where rarity can play a further part in consumption, which supports the findings of Wang et al. (2021) and Howell (2022). In a practical setting of a soccer match, football game or rugby match filled with hardcore fans, this ticketing service would radically change not just the authentication process of entry but also create incentives for loyal fans to attend sports games by rewarding them with collectibles.

4. The value consumers place on NFTs (see Chapter 5, Table 10) is an area that has had scarce empirical findings. Thus, this study provides further research and findings on how consumers perceive

value in their NFTs. This value is placed through factors such as emotional and sentimental attachment, disposal options, digital collecting, digital self and identity fabrication, and financial incentives. This assists organisations in finding touch points (Lemon & Verhoef, 2016) that trigger emotional states when purchasing NFTs. It also assists in highlighting the disposal options for organisations that consumers are currently experiencing where there is a less emphasis on burning NFTs. The research discusses how digital collecting can be a value to consumers who previously did not have storage space, thus being able to consume products that they normally would not.

5. The ability to identify consumers based on their NFT purchasing trends as consumer personas is a new area that needed to be explored in the emerging digital decentralised consumption markets. This assists in understanding the different consumer motivations. As consumers are growing up in a world dominated by digital items and experiences it becomes ever more important to understand digital consumption practices (van Slooten, 2022). This can assist future corporations, business and marketing teams in structuring the best campaigns and tactics in order to more accurately target their chosen consumer.

6. Much like the findings of Brouard (2024) on the Bored and Hungry derivative from BAYC, digital ownership of NFTs can extend to the creations of entirely new brands that form out of the parent company. This raises new implications around IP ownership and how brands grant ownership rights to new members. This suggests that NFTs are a powerful tool in Web3 that allow the diversification of existing NFT brands by community members. All the consumer needs to do is purchase an NFT and then they can create a brand extension that shares the likeness of the parent brand.

7. The use of gamification creates an implication for how consumers interact with NFTs. These strategies reward individual achievements, such as holding a rare NFT or completing specific digital challenges in an online community. Gamification can be viewed as a further subcategory of the consumer journey that resembles video game world economy. An example of this is how the term Soulbound (meaning an NFT is untradeable and locked to a digital wallet) derived from the video game World of Warcraft (Weyl et al., 2022). This implication can be seen as a progression from the literature of Drachen et al. (2016) as consumers are now able to take concepts from game economies and implement them into the world of NFT consumption. The gaming economies of Runescape and Diablo have auction houses that can exist within decentralised marketplaces and offer digital assets such as NFTs the ability to take on gaming asset properties.

8. A practical implication of this study is the ability to be anonymous and go by a Pseudonym or brand which allows a consumer to take on properties of a different persona. In essence, the user can become anyone they choose to be within the virtual digital society of Web3. This impacts the digital identity structure as consumer's entire being/self is being rebuilt within the context of a digital self that takes on new traits and even personality. The literature by Shohan and Paschen (2023) can be

extended for marketers and organisations to explore two potential sides to a consumer, the physical and digital self. What this means is consumer desire and needs are fundamentally separate between their real self and digital persona. The findings of this study have illustrated how consumers in Web3 are after different intangible products that play apart in their digital image. This expressed a shift in the consumer personality that is present in the real world compared to the digital world. It is possible here due to the digital avatar whereby consumers that are introverts in-real-life can take on more extrovert tendencies in virtual communities as social barriers and non-verbal cues play a bigger part with CE. Thus, by extension it can be viewed that consumers are the products of Web3. Organisations need to be mindful of the different consumer behaviours that a digital self has in contrast with a physical self in order to target their consumers appropriately.

9. For the entertainment industry where the notion of digital scarcity can play an important role in the release of movies, books, music, games and other entertainment media. Creators essentially can create limited edition NFT digital collectibles of their entertainment and limit it by a set number. For example, this creates digital scarcity whilst giving consumers the chance to obtain a rare version of a movie.

10. NFTs have the power to tokenise assets such as deeds to real-world homes. This is in support of the literature of tokenisation by Liu (2016) and Quiroz-Gutierrez (2022) who explain how a Florida five-bedroom house was sold and paid for with cryptocurrency in exchange for the house deeds written into the smart contract of an NFT. In this instance, an NFT acts as the legal contract between seller and buyer of the real-world physical house. With land scarcity in large cities, it is possible that multiple consumers could collectively own a home in which the deed is fractionised by tokens. NFTs could assist in allowing more affordable options for renting and purchasing than current and traditional consumer channels. Using NFT technology, consumers can potentially list their real-world home on a decentralised marketplace where anyone in the world can bid on the NFT which grants the buyer the rights to the real-world home. Here, protocols or dApps could be created by real estate agents to assists in selling real world property within Web3 markets.

11. It is important to end the practical implications on the name of this technology which has been referred to at present as NFT, which to reiterate is an abbreviation for the term Non-Fungible token. The name NFT may not live on in future years but the technology that underlies this name has a high chance of being integrated into many parts of the digital world that can revolutionise digital assets which this thesis has discussed. It’s also possible that the NFT name may transform into a new name that represents a combination of what predates it. To note, Watkins (2015) findings on DCOs which were instrumental in the foundation in structuring this thesis, it is possible this thesis will aid in the assistance of future research situated around consumer consumption of digital assets. The next section will discuss the research limitations.

6.4 Research limitations

At the time of this research there where scant empirical studies within the digital asset sector on NFTs and NFT consumption. The findings identified consumer personas through qualitative research, however, future studies can test larger samples on a wider scale with quantitative cluster analysis to look for participants across more demographic and psychographic characteristics.

The sample used in this study utilised the researcher's network of volunteers from virtual communities and snowballed further to find new participants gained via existing participants connections. This was required given that this is a new area and access to potential participants is difficult. While this yielded a strong and diverse sample with participants from all over the world, there are a few elements around the sample that need to be addressed. Firstly, the sample collected had a much higher rate of acceptance from male participants (18) opposed to female participants (7). At the time of writing this thesis, it could be argued that more men are involved in NFT consumption than woman although it could also be a limitation from the researchers' network. When seeking participants for this study, all of the male participants were willing to participate whereas three of the female potential participants did not wish to participate. This discomfort from the females to participate ranged in reason from lack of understanding NFTs, to not wanting to be part of the study. It was also quite hard to find females as a male interviewer within the current traders of NFTs as females in this space felt more comfortable in women exclusive groups. On reflection, employing a female to gather data (one on one interviews) from a woman's only NFT community group may have received a higher percentage of female participants.

Other sampling limitations include:

1. Participants in this study have had a mostly positive experience with NFTs and were part of virtual communities that were very successful or well established within the NFT bull market of 2021. Therefore, larger samples of participants with different experiences, whose experiences were not as good, would be interesting to examine.
2. As the study was global it was not focused on one specific country and thus resulted in only one or two participants being present from certain countries, meaning limited representation from these parts of the globe. However, there were not obvious differences between the responses from participants across the different countries.
3. The NFT sample is based on mostly developed (Western) economies rather than emerging or less developed economies where motivations and participations may be different.
4. This study focused predominantly on the Ethereum blockchain with all chosen participants using this blockchain as their primary platform. It is possible results from participants could vary by testing consumers who use other blockchains.

5. The sample size was limited to 25 participants; however, these participants were active users and traders of NFTs within online social media platforms such as Discord which may provide responses that are similar in nature. While saturation was fulfilled at this sample size, the types of consumers of this sample all had active NFT trading experience and contributed meaningfully to the findings. Hence, future research may find different findings in consumers that are just starting their NFT journey.

6.5 Future research

This study raises several points that are deserving of future discussion. These points include the consumer disposal of NFTs, alternative mixed methodology research, metaverse interconnectivity with NFTs and understanding NFT consumer ethnicity, gender and anonymity in the context of the consumption journey. This section provides research recommendations around each topic that may aid future researchers in expanding these concepts in their studies.

Future research could consider alternative research methods as well as investigating participants that have just started to trade digital assets. A mixed methods approach to the topic of this thesis that explores NFT consumer consumption in relation to CCT as more research on this topic arises would grant a more comprehensive perspective on the research findings. The inclusion of a quantitative survey would allow for more consumers to be tested in a wider sample. The mixture of questionnaires and in-depth interviews could be seen as a further expansion of this research that may provide a broader and more detail and broader understanding of the research topic.

The disposal stage of NFTs remains largely an area that could use further research for organisations to better understand their consumers. Understanding consumer insights into burning their digital assets is an area widely unexplored. In addition, burning mechanics offer organisations and creators unforeseen potential to the end product stage of digital assets. There could be further research done around the motives for both burning, hiding, selling and gifting NFT digital assets to assist organisations in understanding consumer disposal behaviour. Given the newness of NFTs, the time that consumers hold on to these digital assets would also be of interest.

A notable exclusion of this research was the concept of metaverse. The researcher felt this concept could have an entire thesis dedicated to the subject. The inclusion of the metaverse within this thesis would have detracted from the main focus of this study. Hence, the area of NFT consumption within metaverse digital scenescapes is a worthy future research topic to undertake. It can therefore be proposed to use the findings of this thesis in relation to understanding NFT consumption and digital personas within the metaverse.

Another recommendation for future research is the ethnicity, anonymity and gender of NFT consumers. Participants were anonymous, mostly males and all predominantly spoke English as their first language. Future research could extend to include a broader range of multi-cultural and multi-lingual participants and thus give a greater spectrum of understanding consumer motivations around NFT purchasing from a more immense array of angles. The study could seek more participants from emerging countries such as India and China which may find different consumer motivations around NFT consumption. In terms of anonymity and gender roles are loosened within an anonymous digital landscape of markets and communities and thus gender plays a very different role with consumer motivations around NFT consumption.

The suggested towards DCCT model provides a foundation for future researchers to develop and build on the results of this thesis. This will allow future scholars to go in more depth on each of the structures of CCT and its relationship to decentralisation.

On the topic of participant sample and selection, additional studies would be useful to support the findings. It is also possible that future research could focus on in depth interviews of managers in NFT corporations, creators, administrators and moderators to keep a focused sample of participants within the NFT environment.

6.6 Final conclusion

NFTs are a groundbreaking phenomenon in the age of decentralisation. This study breaks new ground as it has uncovered new motives and rationales behind consumers NFT consumption in decentralised markets. From an academic perspective, this research adds to the extant literature regarding NFTs specifically in the underlying motivational factors that influence consumers to purchase NFTs. It also outlines the unique features and presents use cases of NFTs that may influence consumer purchases. The understanding of value placed on NFTs by consumers is also explored in detail to reveal findings that do not just focus on monetary gain. This leads to a principal outcome of the thesis which resulted in categorising the types of consumers that purchase NFTs into distinct personas. From an industry perspective this enhances organisations, creators and marketing teams understanding of the specific characteristics that underpin the types of consumers that purchase NFTs. Simply what benefits are they after and why do they consume? Hence, this research also offers an updated approach to CCT for Web3 and directly feeds into the relatively recent Decentralised Consumer Culture Theory (DCCT). Furthermore, this research has shown how NFTs exist as a perfect example of products offered within a decentralised marketplace and can therefore contribute to the existing literature on CCT through DCCT. Through this development, it was possible to construct the conceptual framework that explains the consumer journey of NFT consumption through the three stages of pre-purchase (the risk and motivation of consumption), acquisition and possession (digital ownership and market processes)

and post-purchase evaluation and behaviour (value creation and behaviour). This research makes valuable methodologies, theoretical and practical contributions and provides insights for future researchers. It allows researchers to take what has been found and extend this research into the future development and understanding of this revolutionary field of digital assets.

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APPENDIX A – Ethics declaration form

VICTORIA UNIVERSITY, HUMAN RESEARCH ETHICS COMMITTEE

APPLICATION FOR ETHICAL REVIEW OF RESEARCH INVOLVING

HUMAN PARTICIPANTS - DECLARATION FORM

This document must be submitted as an attachment to the online Human Research Ethics Application Form.

All named project investigators are required to complete this declaration.

Project Title: The Consumer consumption journey of Non-Fungible Tokens (NFT)

Primary Chief Investigator: James Di Martino

I/we, the undersigned, declare the following:

- I/we accept responsibility for the conduct of the research project detailed above in accordance with:
  a) the principles outlined in the National Statement on Ethical Conduct in Human Research (2007);
  b) the protocols and procedures as approved by the HREC;
  c) relevant legislation and regulations.

- I/we will ensure that HREC approval is sought using the Changes/Amendments to Research Project form, if:
  a) proposing to implement change to the research project;
  b) changes to the research team are required.

I/we have read the National Statement on Ethical Conduct in Human Research prior to completing this form.

I/we certify that all the investigators/student researchers involved the research project hold the appropriate qualifications, experience, skills and training necessary to undertake their roles.

I/we will provide Annual/Final reports to the approving HREC within 12 months of approval or upon completion of the project if earlier than 12 months.

I/we understand and agree that research documents and/or records and data may be subject to inspection by the VUHREC, Ethics Officer, or an independent body for audit and monitoring purposes.

I/we understand that information relating to this research, and about the investigators, will be held by the VU Office for Research. This information will be used for reporting purposes only and managed according to the principles established in the Privacy Act 1988 (Cth) and relevant laws in the States and Territories of Australia.

APPENDIX B – Information to participants involved in research

INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH

You are invited to participate

You are invited to participate in a research project entitled the "consumer consumption journey of Non Fungible Tokens (NFT)." This project is being conducted by a student researcher James Di Martino as part of a PhD study at Victoria University under the supervision of Associate Professor Romana Garma and Dr Colin Drake.

Project explanation

The value of NFT is not fully known and the growing interest in consumer diversification of their wealth via investments in digital assets such as NFT is increasing, providing a unique area to investigate. Understanding this phenomenon has not been widely researched. Thus, the aim in this research is to investigate the consumer motivation and ownership of digital assets NFT from pre-purchase to disposal. This emerging and growing product class require a deeper understanding of the consumption phenomena.

What will I be asked to do?

You are invited to participate in a 45–60-minute interview with Mr James Di Martino via a google meets virtual room. With your permission the interview will be recorded to allow for us to interpret the information provided.

What will I gain from participating?

You will be contributing research in an emerging area of research. There is no payment or reimbursement to participants.

How will the information I give be used?

The information you provide will be collated with information from other participants and interpreted to identify patterns or new information. The research will contribute to a thesis, conference papers and journal articles. The information you provide will not be linked or identified to you.

What are the potential risks of participating in this project?

There are no potential risks to participating in the project.

How will this project be conducted?

The project has been conducted at Victoria University. It is part of a PhD program. The study will involve interviews conducted with participants that purchase or trade NFTs.

Who is conducting the study?

Victoria University
Associate Professor Romana Garma +61 3 99191515 Email: romana.garma@vu.edu.au
Dr Colin Drake Mobile: +613 9919 9551 Email: colin.drake@vu.edu.au
Mr James Di Martino Mobile:+61432346135 Email: james.dimartino@live.vu.edu.au

Any queries about your participation in this project may be directed to the Chief Investigator listed above.
If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

APPENDIX C –Consent form for participants involved in research

CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

We would like to invite you to be a part of a study into the:

"Consumer consumption journey of Non Fungible Tokens (NFTs)."

The aim of the study is to gain insight into the consumer consumption journey of owners of Non-Fungible Tokens (NFT). We are interested to hear about why you have purchased NFTs and what you do or plan to do with your NFTs.

By participating in the study, you agree to be interviewed for approximately 45-60 minutes via Google Meets. It is voluntary to participate in the study and you may withdraw from the study at any time. There are no perceived risks associated with participating in this research we are just interested to hear about your experience with NFTs.

CERTIFICATION BY SUBJECT

I,
of

certify that I am at least 18 years old and that I am voluntarily giving my consent to participate in the study:
"The consumer consumption journey of NFTs" being conducted at Victoria University by: James Di Martino

I certify that the objectives of the study, together with any risks, have been fully explained to me by Mr James Di Martino
and that I freely consent to participation in the interview.

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researchers Mr James Di Martino Mobile: +61432346135, Email: james.dimartino@live.vu.edu.au, Associate Professor Romana Garma (romana.garma@vu.edu.au) or Dr Colin Drake (colin.drake@vu.edu.au).

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email Researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

APPENDIX D – Interview questions

INTERVIEW GUIDE

Pre-Purchase (Social historic patterning of consumption)

1. Tell me a little about yourself and your professional/work background.

   Prompt- Outside of work what activities do you enjoy?

   Prompt- Do you have physical or digital investments? If so can you explain what they are?

2. Have you heard about NFTs? If so, how did you first become aware of Non-Fungible Tokens (NFT)?

   Prompt – Did anyone influence you? If so how did they influence you?

   Prompt- Why did you trust the influencer's advice? Why not?

3. What's your level of experience in using digital wallets to make digital purchases? Was this process easy to understand? Why? Why not?

   Prompt- Do you find digital wallets secure? If so why, why not?

   Prompt – What digital wallets do you use? Which one holds the majority of your assets?

   Prompt- Do you believe digital wallets are a barrier of entry to purchasing NFTs? How so?

Acquisition (Marketplace cultures)

4. What got you interested in NFTs?

   Prompt- What was the year you made your first NFT purchase?

   Prompt- Can you tell me about the first time you purchased an NFT? Alternatively, have you ever created an NFT or been gifted a NFT? If so why, why not.

   Prompt- Did you do any research in your purchasing/creating/transferring of NFT? Why? Why not?

   Prompt- Do you consider yourself a early or late adopter of NFT, Why?

5. What do your friends and family think about NFTs?

   Prompt- What do they think about you trading in NFTs? Is this positive, neutral, or negative?

   Prompt – Are your family and friends engaged in the process of buying and selling NFTs? Have you encouraged them?

6. Do you see consumers who don't purchase NFTs eventually adopting and using NFTs in everyday life? Why? Why not?

   Prompt- What do you believe to be a big selling point of NFTs?

7. Do you envisage companies on a global scale incorporating NFTs within their business? If so, how?

Prompt- Are you motivated by rarity of an NFT? Why? Why not?
Prompt- Do you understand the culture around NFTs?

Possession (Mass mediated marketplace ideologies and consumers' interpretive strategies)

8. Have you ever been part of an NFT/virtual community? Why did you get involved with the NFT virtual community?

   Prompt - What kind of interactions did you get from NFT social gatherings and or relationships formed within these communities?

   Prompt- If yes, why is this important to you in your interaction with NFTs?

9. Can you explain your experience within this NFT community?

   Prompt- What are the communities/NFT projects you have an interest in? Why? Do you hold NFTs within these communities?

   Prompt- What do you find that separates successful NFT projects from unsuccessful ones?

   Prompt- Can you describe a 'typical' member of one of the communities you belong to? What do you have in common with them or are they very different?

   Prompt- What do you recall from the types of consumers you interacted with?

   Prompt- Do you believe that being part of an online NFT community provides benefits?

   Prompt- At times was the experience in NFT communities toxic or were the members mostly positive in their discussions? Do the positives outweigh the negatives? If so, why?

10. How does NFT ownership compare to other assets you hold?

    Prompt- As an example, how do you compare a physical painting versus an NFT held virtually?

    Prompt- In your opinion, does the access to 24/7 marketplaces with active social media channels influence ownership of NFTs? Why? Why not?

11. Do you plan to maintain long-term ownership of NFTs? If so why?

    Prompt- Can you please explain in detail what you expect the NFT to provide you with?

    Prompt- Do you expect the NFT to have value? Why? Why not?

Consumption and Post-purchase (Consumer identity projects)

12. Do you have a strategy in place for your NFTs (e.g., keep long term, dispose of when value is high?)

13. When would you consider disposing (Burning/hiding) or/selling your NFT?

    Prompt- If you were to dispose of your NFT, how would you go about the process?

14. Can you describe how you think you would feel when you dispose of your NFT?

15. What does it mean to you to own an NFT?

    Prompt- What does it say about you?

16. Did you ever use the NFT as an extension of your digital identity? How so?
17. Have you ever experienced regret in disposing of your NFT? If so, can you explain why? Why Not?

Prompt- Did you ever consider or actually re-purchase the NFT? If so Why? What were the factors that led to this?

APPENDIX E – Coding example

Motivation towards NFT purchase

│

├── Community

│ ├── " I picked out an [BAYC] Ape [NFT] that I thought was particularly cool to me and I wanted to have that as my identity on Twitter and [also] in the Web3 world.” (Ken)

│ ├── " You can have threads of conversation on Twitter. Discord … [is] like a hub where the [NFT] project, much like a website, can post their information and keep people involved that way" (Peterson)

│

├── Gamification

├── " truly independent ownership of in-game items as a very real, tangible application of this technology" (Vin)

├── " I dove into a game called Gods Unchained that I stumbled upon whenever I started that search, and [in] that game you end up owning NFT[s] as the cards." (Ken)