

NFT: the new face of the art market

What is the NFT business model and how are NFTs (Non-Fungible Tokens) revolutionising the art market?



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INTRODUCTION

When I was growing up, my parents used to take me to museums. My mum probably just wanted to keep my brother and I busy or help us develop our artistic sense whilst it was important for my dad that we have some solid knowledge of the art world. My dad also liked to explain the different techniques used to produce art, whether it was drawing, painting, etching, sculpture, pottery or printmaking, but he never really told us anything about computer art techniques. However, “as the digital revolution continued with the introduction of smart phones and increase in Internet accessibility, a demand for expressing arts in the digital world and social media was created”.¹ Today, digital art is booming, it presents multiple forms and is in continual evolution. It is a world that has quickly garnered the attention of celebrities, international artists, sports figures, digital creatives, entrepreneurs, influencers, and many more.² The only problem is that the commercialisation of a piece of digital art in the contemporary art market is complex. A digital creation is paperless and quite easily reproduceable so art collectors and investors may consider it as not profitable or at least not as worthy as an original piece of art, which is characterized by its uniqueness and makes the buyer the only one who possesses it. Now imagine being able to guarantee this ownership and rarity to a piece of digital art. In this case, collectors and investors would finally be able to put the work of traditional artists and digital artists on the same level.

The worldwide success of “CryptoKitties”, an online game, released on November 27, 2017, where you can adopt and trade virtual cats with other players, made NFTs (Non-Fungible Tokens) very popular. But what is an NFT? To understand what an NFT is, it is important to understand what “fungible” means. Something is fungible when it is “easy to exchange or trade for something else of the same type and value” (Cambridge dictionary). In other words, fungible items are interchangeable, we can swap them around with no consequences because they are identical and have the same value. For instance, a 10-pound bill can be replaced by any other 10-pound bill because they are both worth the same amount of money. NFTs are

¹ Shahriar, Sakib; Hayawi, Kadhim; “NFTGAN: Non-Fungible Token Art Generation Using Generative Adversarial Networks”; 2021

² *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 8

non-fungible, which means that they are absolutely unique and cannot be replaced – they are not interchangeable. “NFTs are distinct digital assets. Similar to a print of an original painting, an NFT is a certified copy of an original creation that is different from all other copies (both certified and uncertified) of that creation”.³ To simplify, an NFT is any form of digital item (audible content, picture, video, digital document, meme and so on) that you cannot copy and paste because it is digitally unique – it is one of a kind. They are also referred to as crypto- or digital collectibles. To create an NFT, you have to enter unique identification codes on a blockchain, which is what generates its authenticity. A blockchain is a “database that serves as a ledger for digital transactions. When an NFT is made or a transaction occurs, a block will eventually need to be added to the pre-existing chain of transactions”.⁴ In other words, it is a decentralized, distributed ledger that records the provenance of a digital asset so that it guarantees the fidelity and security of a record of data. The data entered is simply irreversible. It differs from a typical database in the way that it stores data in blocks that are then linked together and chained together in chronological order. This unusual authenticity of a digital asset may explain why some NFTs are worth so much money. NFTs make digital content irreplaceable, hence valuable. For example, on March 21, 2021, the cofounder of Twitter, Jack Dorsey, sold his first tweet “just setting up my twttr” as an NFT to Bridge Oracle CEO Sina Estavi for almost 3 million dollars on the “Valuables”, which is a platform where you can buy and sell tweets.⁵

This idea of creating non-fungible content was first explored by Bitcoin in 2012 with its “coloured coins”. The aim was to colour a coin to prove ownership and value. This was not a success because if a participant did not agree on the value, the whole transaction was affected. However, this innovation started to grow in popularity for digital art pieces. As mentioned above, public awareness of NFTs began with the success of “CryptoKitties”, but also “CryptoPunks” which are unique and collectible digital characters. Everyone started to understand that now, thanks to NFTs, digital content creators could have a certified original

³ Pack, Larissa; “NFTs: a new approach to digital content”; *Information Today*; October 2021

⁴ Ibid.

⁵ Locke, Taylor; “Jack Dorsey sells his first tweet ever as an NFT for over \$2,9 million”; URL: [https://www.cnn.com/2021/03/22/jack-dorsey-sells-his-first-tweet-ever-as-an-nft-for-over-2point9-million.html#:~:text=The%20tweet%2C%20which%20says%2C%20%E2%80%9C,sold%2C%20just%20like%20physical%20assets](https://www.cnn.com/2021/03/22/jack-dorsey-sells-his-first-tweet-ever-as-an-nft-for-over-2point9-million.html#:~:text=The%20tweet%2C%20which%20says%2C%20%E2%80%9C,sold%2C%20just%20like%20physical%20assets;); [retrieved 02/05/2022]

file with the impossibility of being endlessly copied by other users. It is a brilliant method of “storing and selling digital content”,⁶ and therefore a great method to distribute art.

NFTs are already quite common in the contemporary art market and it is safe to say that this is only the beginning. They are all over the digital art world because of the ability to certify uniqueness and ownership. For instance, a digital art collection entitled “Everydays: the First 5000 Days”, created by Beeple in early 2021 was sold at Christie’s on March 11, 2021, for almost 70 million dollars, the third highest auction price for a work by a living artist (after works by Jeff Koons and David Hockney). Beeple also sold a short video with a figure of Donald Trump for nearly 7 million dollars in March 2021. It is interesting to see how NFTs have gained the same notoriety as an original, authentic and tangible piece of art.

Among all the different digital forms an NFT can take, I have decided to take a closer look at the NFTs that represent digital artworks in order to define the business model around this technique and the way they are revolutionising the art market.

As I have already briefly explained, NFTs are digital items which are unexpectedly unique and it is important to point out that this uniqueness leads to an innovative form of ownership and to a boom in digital art. NFTs offer new possibilities. They are more and more trendy. Cryptoart can therefore be considered a strong marketing tool: brands may benefit from digital “artketing” and be underscored by a strategic business model aiming to achieve some kind of competitive advantage. But are NFTs truly sustainable forms of art or are they simply speculation? We may acknowledge the positive influence of NFTs in business development, but it is certain that, as some art lovers have noted, there has been a shift from the love for art to a business of art.

⁶ Pack, Larissa; “NFTs: a new approach to digital content”; *Information Today*; October 2021

PART 1. NON-FUNGIBLE TOKENS (NFTs): DIGITAL ITEMS WHICH ARE UNEXPECTEDLY UNIQUE

In recent years, NFTs have been gaining popularity. In 2021, it was reported that the 24-hour trading volume on average of the NFT market is \$4,592,146,914, while the 24-hour trading volume of the entire cryptocurrency market is \$341,017,001,809.⁷ NFTs can be compared to collectables such as stamps, cars, works of art and so on: each one is unique. Yet at first glance, the uniqueness of NFTs may seem astonishing. Indeed, it is well known that digital assets can be reproduced multiple times and that there is no true possibility to have control over them. However, this particular way of creating digital art guarantees an innovative form of ownership that in the recent past was impossible and mostly beyond belief. Here is how it is done: the blockchain makes these NFTs impossible to forge but also offers access to easily verify its owner. This is a clear improvement over traditional property rights, which are slower to verify and not free of fraud. We are dealing here with a real right of ownership.⁸

Moreover, this new characteristic of uniqueness has created a boom in digital art because it certifies an original creation and consequently adds value to the piece of art, turning it into a profitable investment for collectors.

Chapter 1 – An innovative form of ownership

Since the beginning of the Internet, non-fungible digital assets have always existed. For instance, domain names and event tickets are all non-fungible digital assets. Most of them are incredibly valuable because of this characteristic of scarcity. The only problem was that no one really owned a digital asset. Digital art, for instance, was easy to duplicate by pressing the PrintScreen key on the keyboard because it requires little to no training. It was possible to own a digital item in the sense of it belonging to one person and not someone else. But

⁷ Wang, Qin; Li, Rujia; Wang, Qi; “Non-Fungible Token (NFT): overview, evaluation, opportunities and challenges”; 2021

⁸ Philippe, Herlin; *Bitcoin comprendre et investir: guide pratique des cryptomonnaies: Bitcoin, Ethereum, blockchain, finance décentralisée, NFT, etc.*; Editions Eyrolles; France 2021; p. 125

owning a digital item in the sense of having the “freedom to hold and transfer indefinitely”,⁹ just like owning an object in the physical world did not exist.

1. The introduction of ownership in the digital world

Before, everyone used to pass around and repost digital content in an unlimited and effortless way. Ownership, and all the characteristics that go with it, did not exist in the digital world. And this is why NFTs are so special. They are an “opportunity to automatically assume complete, concrete ownership over a digital file or artwork”.¹⁰ NFTs can be used to represent ownership of any unique asset and it is actually the most common use we can make of NFTs. They represent digital property. By all means, they are tokens that guarantee ownership. A token is different from a crypto coin. A crypto coin is the digital version of underlying value whereas tokens carry the digital asset. For instance, casino chips. “These chips are just pieces of plastic that are worth nothing outside the walls of the casino. It is in this context that their value is agreed upon and they become the representation of an asset”.¹¹ So thanks to NFTs, we are able to tokenise basically anything, from art to collectibles and even real estate. Up to now, it was not possible to certify the scarcity, uniqueness and ownership of a digital asset. Anyone could very easily copy any kind of file, creating as a result the exact same file as the original one. The uniqueness of NFTs guarantees that no two NFTs are the same.¹²

2. How does this new ownership work and what does it imply?

An NFT can only have one official owner at a time and this ownership is verified with the NFT’s cryptographically secure digital code. To clarify, this ownership is protected by the Ethereum blockchain on which it is impossible to modify or delete any information saved on the file. Blockchain makes it possible to create a tamper-proof “digital signature” and thus

⁹ Devin, Finzer; “The Non-Fungible Token bible: Everything you need to know about NFTs”; URL: https://opensea.io/blog/guides/non-fungible-tokens/#Digital_art; [retrieved 02/05/2022]

¹⁰ Fitzsimons, Elena; “NFT art: what is it, how it works and what it means for the creative industry”; URL: <https://en.99designs.fr/blog/web-digital/nft-art/>; [retrieved 02/05/2022]

¹¹ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 28

¹² “Non-fungible tokens (NFT)”; URL: <https://ethereum.org/en/nft/>; [retrieved 02/05/2022]

goes against the ability of computer code to be duplicated, shared or modified.¹³ The blockchain is a “digital transaction system that records information in a way that makes it very difficult to hack or scam, which means it’s extremely useful for tracking copyright ownership and maintaining records of creation”.¹⁴ All the digital transactions are saved in something known as a *block*. After this new block is confirmed, it is then “appended to the previously verified block, creating an ever-growing chain of blocks: the blockchain. The process repeats, and the blockchain grows longer and longer”,¹⁵ (see Figure 1). In short, it protects and authenticates each token.

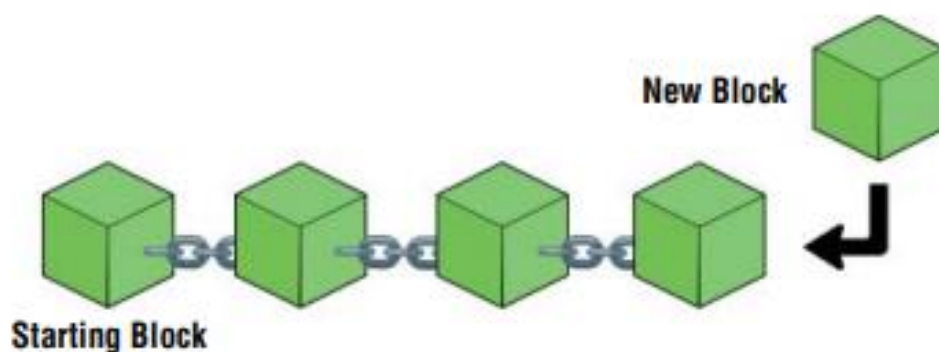


Figure 1 - The blockchain simplified, Screenshot from Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021

Technically, an NFT is minted through a smart contract. We use the term mint like minting a physical coin. That means that it is the process of turning a piece of art into an NFT (minting) via a smart contract. A smart contract is a piece of “software code that allows the network to store the information in a transparent and immutable manner”.¹⁶ They are contracts in the form of programming language that enforce contract negotiation and “which allows the owner to benefit from a future sale percentage”.¹⁷ In other words, a smart contract is an automatic

¹³ Masure, Anthony; Helleu, Guillaume; Singulariser le multiple; “Les NFT artistiques entre spéculation et redistribution”; *Multitudes* (Paris, France); 14/12/2021

¹⁴ Fitzsimons, Elena; “NFT art: what is it, how it works and what it means for the creative industry”; URL: <https://en.99designs.fr/blog/web-digital/nft-art/>; [retrieved 02/05/2022]

¹⁵ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p. 33

¹⁶ “NFT smart contracts explained”; URL: [https://cyberscrilla.com/nft-smart-contracts-explained/#:~:text=A%20smart%20contract%20is%20programming,transparent%20as%20well%20as%20immutable](https://cyberscrilla.com/nft-smart-contracts-explained/#:~:text=A%20smart%20contract%20is%20programming,transparent%20as%20well%20as%20immutable;); [retrieved 02/05/2022]

¹⁷ Shahriar, Sakib; Hayawi, Kadhim; “NFTGAN: Non-Fungible Token Art Generation Using Generative Adversarial Networks”; 2021

system on the blockchain that codes the NFT with a unique ID and metadata,¹⁸ which is “data about other data”.¹⁹ Metadata contains “the link to the image, GIF, video, or song that you want to turn into NFT”.²⁰ This process makes the NFT secure. It means that it cannot be replicated. Once added to the blockchain, the code cannot be changed, nor the transaction. It guarantees ownership and manages the transferability of the NFT.

The minting process consists in creating a new block to add to the blockchain, validating information and recording it into the blockchain.²¹ The process results in an NFT with a unique identifier, meaning that it is not interchangeable and that it has only one owner. All these pieces of information are public and easily verifiable. Therefore, the private key associated with the NFT is proof-of-ownership of the original content and it provides security to both creators and buyers.

To have ownership of a digital asset means you can decide to do whatever you want with it: you can keep it, rent it out, sell it and therefore possibly make a profit. Put simply, if you decide to create or buy an NFT, you will have full authority to display of it as you wish, meaning if you no longer want that asset, you can give it to someone else and so on, “with every transaction recorded in the blockchain along the way”.²² You can manage your NFT the same way you would do it with a regular physical object.

When you buy an NFT, you are given “a certificate of ownership and authentication that says that [digital] asset belongs to [you] now and that it is the original version”,²³ which is maybe the most important component to generate value – to be able to prove ownership of a digital item that is unique. By all these means, we can now “reliably trace the history of this unique digital item to verify who owns it now and who has owned it in the past”.²⁴

¹⁸ See appendix 1, p. I to see what a metadata looks like

¹⁹ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p. 43

²⁰ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 126

²¹ “Non-fungible tokens (NFT); URL: <https://ethereum.org/en/nft/>; [retrieved 02/05/2022]

²² Prentiss, Nicholas; “The NFT market – The future of trading and collecting”; URL: <https://www.bakertilly.com/insights/the-nft-market-the-future-of-trading-and-collecting>; [retrieved 02/05/2022]

²³ Ibid.

²⁴ Tiana, Laurence; Seoyoung, Kim; *NFTs for dummies*; John Wiley & Sons; New Jersey 2021; p. 36

3. *Ownership guarantees higher value*

At the present time, NFTs are probably the best solution to give proof of provenance for digital assets. Since provenance is “record of ownership used as a guide to authenticity or quality”,²⁵ NFTs seem necessary to seal a deal in the digital art market. Furthermore, in the world of art, provenance is the “documented chain of title from the current owner all the way back to the artist”.²⁶ Consequently, it is essential to be able to prove provenance while doing business in the art market. This proof of provenance gives additional value to the work of digital art.

Works of art have always required large sums of money to own, it is a fact and people are used to seeing expensive pieces because it is so democratised in our culture. Notwithstanding the custom, many people say it is ridiculous to put money into NFTs because you can look it up on the Internet in less than a minute and take a screen shot for free. It is very easy because you only need an Internet connexion and a device that can capture the screen. But these people have not truly understood what ownership is and the value it may have. For instance, a picture of Dali’s Persistence of Memory masterpiece will never have the same value as the original painting, no matter how good the resolution is. And owning the original content is more or less valuable depending on how the market evolves. Moreover, you cannot say you own the content itself if you only have a reproduction of it. And last but not least, the downloaded image on your computer has no real value, it cannot have the same value as the original image. Regarding NFTs, what is difficult to understand is that “the true public value of the purchase made is not only the work and what it represents [...] but actually resides in the token itself”.²⁷ By all means, anyone can find the work, look at it and even reproduce it countless times but the copies will have no value. It is the token associated with the piece of art which is the real work of art and that has value. To clarify, browsing through platforms to look at NFTs is like going to a gallery or a museum to admire paintings, sculptures and so on. Only the buyer can claim ownership of the original piece of art.

²⁵ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p. 51-52

²⁶ Ibid., p. 51-52

²⁷ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 106

In addition, NFTs do not need any intermediary to memorialise transactions and verify ownership, even though it may be difficult for some people to rely on. In general, people trust the “county clerk to maintain records of property ownership, and they trust the DMV to maintain records of car titles”.²⁸ But if you take a step back, it does not make much sense. In fact, as long as ownership records are held by institutions or a third-party, you must take their word for it. On the other hand, the owner of an NFT is the object of a public record and easy for anyone to verify, so there is no need for a trusted third-party.

NFTs are still at an extremely experimental phase but the emerging market offers a lot of new possibilities. One big opportunity NFTs offer is the creation of a new way for collecting. Indeed, the concept of collecting digital items simply did not exist because of the lack of ability to truly own the content. Today, ownership is guaranteed thanks to NFTs so individuals have the possibility to collect and trade digital items which may be widely appreciated as the world “continues to trend toward digitization of all things”.²⁹ Coupled with their uniqueness, NFTs have guaranteed the exclusivity of digital files, leading to a boom in digital art.

Chapter 2 – A boom in digital art

Exclusivity makes the value of content increase, it is a justification of value. Individuals are ready to put more money, a lot more money, into a piece of art because it is one of a kind. For instance, “an artist sells their most exclusive works at higher prices and subsequent works at lower prices”.³⁰ Equally important to explain a higher value is the authenticity of an artwork. Being able to verify if an artwork is the original one or a reproduction is essential to determine its price. These characteristics – exclusivity and authenticity – have been a challenge in the digital art world because of the difficulty to guarantee uniqueness and provenance. Thanks to NFTs on the blockchain, it is now possible to prove these pieces of

²⁸ Tiana, Laurence; Seoyoung, Kim; *NFTs for dummies*; John Wiley & Sons; New Jersey 2021; p. 36

²⁹ Prentiss, Nicholas; “The NFT market – The future of trading and collecting”; URL: <https://www.bakertilly.com/insights/the-nft-market-the-future-of-trading-and-collecting>; [retrieved 02/05/2022]

³⁰ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 9

information, making the digital art market seem more secure and trustworthy to invest in. Moreover, NFTs remove all intermediation, there is no third party between the creator of an NFT and the buyer. For instance, “artist and buyer are in direct contact in a whole new way”.³¹ Digital art platforms have also started to emerge. SuperRare, Known Origin and MarkersPlace are examples of platforms dedicated to publishing and discovering digital art. All of these evolutions have without a doubt led to a boom in digital art.

The cryptocurrency ecosystem and the industry of digital assets are becoming more and more trendy. They keep evolving and developing towards a major marketplace. In April 2021, Bitcoin reached over \$63,000, “which happens to be the all-time best of Bitcoin’s price over its entire history”.³² This plays an essential role in the digital art market and has mostly contributed to the rise of NFTs, making them so popular today.

1. The introduction of scarcity and secured transactions in digital art

Before the creation of NFTs, it was close to impossible to “create the perception of scarcity or value” for any kind of digital art.³³ This was due to the lack of ownership and consequently the possibility for anyone to replicate a digital item. Therefore, there was no place to build a market.

A market was born when all of a sudden, NFTs introduced the possibility to truly own a digital asset and also have the ability to save any proof of sale into its code. For instance, “there could be infinite JPEG files of an artwork, but only one real image specified by the NFT”.³⁴ The security and reliability of NFTs encouraged investors to put their money into cryptoart. It also changed the way people looked at digital art. Today, digital art may be considered as a collectible, just like physical artworks, coins or even stamps.

The art market has always been quite complex and fragmented, depending on the period and the objects, the diversity of buyers – collectors or investors – and intermediaries, the way to

³¹ Ibid.

³² Barron, Royce; *The ABC's of NFTs: A beginners guide to non-fungible tokens*; Independently published; 2021; p. 60

³³ “NFTs are booming but they’re nothing new in the art market”; URL: <https://www.bloomberg.com/news/articles/2021-03-02/nft-art-boom-is-the-same-concept-as-the-photography-market?sref=M8H6LjUF>

³⁴ Ibid.

sell art – online or in the physical world. This has created some sort of fear in the purchasers' minds and their first demand relates to the security of transactions, which requires guarantees in determining the origin and authenticity of the object. At the present time, the scarcity of an NFT is ensured by the blockchain. “The scarcity, along with the authenticity of NFTs, makes it possible for artists to sell digital artwork without having to worry about unauthorized or fraudulent originals”.³⁵ Thus, the blockchain promises more transparency and security for users and solves the problems due to the lack of trust and a trusted third party authority for digital transactions.³⁶

NFTs open up an entire new market for digital artists. This new art market makes it possible to collect digital art pieces and potential buyers are willing to pay, sometimes tremendous amounts, to show they own an NFT. It is also an investment. In 2020, despite the global pandemic, “the trading volume of the NFT market exceeded \$250 million, a four-fold increase over 2019, and they are continuing to grow by the minute even at the time of this writing” (2022).³⁷ The impact of NFTs on the art market is enormous. This is a whole new economy which finally makes it possible to give value to digital art and bypasses the traditional intermediaries such as galleries, auction houses, museums and collectors.

2. Examples of most expensive NFTs sold

As we can imagine, not every NFT is worth millions of dollars, but here are some examples of NFTs that were sold at a remarkably high price. As mentioned at the beginning of this paper, the most expensive NFT so far is the “*Everydays: The First 5000 Days*” by Mike Winklemann (Beeple) (see Figure 2). He decided to create a collage of 5000 of his artworks. It is supposed to represent all his artistic skills over his career. The associated NFT of the collage was sold for \$69.3 million at an auction conducted by Christie's, a British famous auction house. It was the first time in history an auction house sold a digital artwork. The buyer wanted to stay anonymous until he decided to reveal his identity to prove to the world

³⁵ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p. 64

³⁶ Prévost, Stéphane; Royer, Erwan; *La blockchain*; Paris: Dalloz; France 2020

³⁷ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 8

that people of colour can also contribute to crypto technology, just like the rest of the world. His name is Vignesh Sundaresan, he is the CEO of Portkey Technologies,³⁸ and purchased the NFT with a pseudonym, “MetaKovan”.



Figure 2 - *Everydays: The First 5000 days*, Beeple, Image from <https://www.kazoart.com/blog/oeuvre-a-la-loupe-everydays-the-first-5000-days-de-beeple/>

Beeple also created “*CROSSROAD*” (see Figure 3). “*CROSSROAD*” is a short 10-second-video clip of Donald Trump graffitied and mocked lying down on the ground with people walking by. This artwork was created in correlation with the 2020 election and was sold on one of the popular NFT marketplaces, Nifty Gateway, which is a platform for most digital collectibles. It was sold by “Pablofraile” (a Twitter username) for \$6.66 million to an anonymous buyer.

³⁸ Portkey Technologies is a premier IT consulting firm based in Singapore.

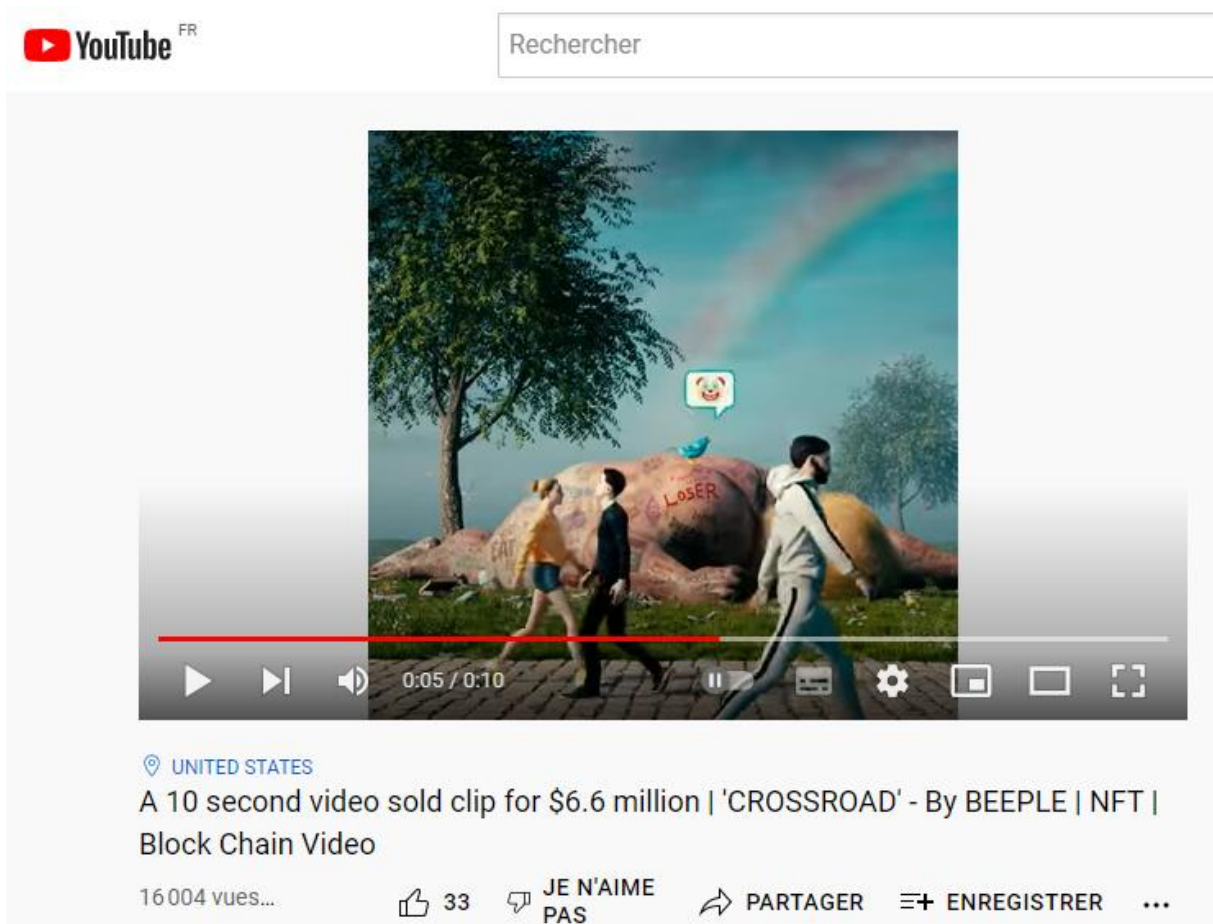


Figure 3 - CROSSROAD, Beeple, Screenshot of the Youtube video <https://www.youtube.com/watch?v=hjYB50rfSAY>

Speaking of Twitter, an NFT was created for the first-ever tweet of the cofounder and CEO of Twitter, Jack Dorsey (see Figure 4). This NFT was minted with the help of a platform known as Valuables, which lets users create NFTs. It was sold for \$2.9 million. Jack Dorsey decided to donate the entire funds to charity.

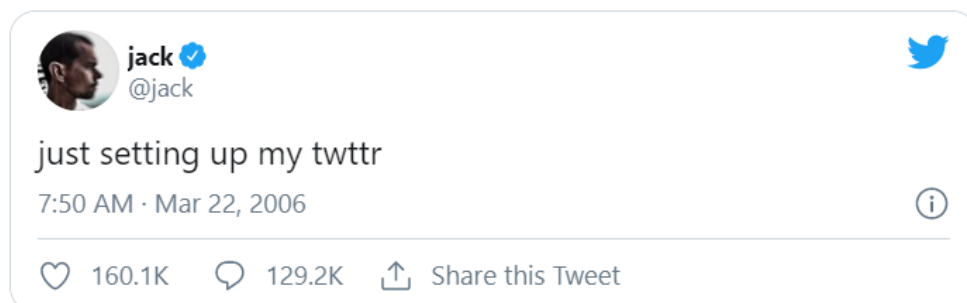


Figure 4 - Jack Dorsey's tweet, Screenshot of the website <https://www.zdnet.fr/actualites/nft-le-premier-tweet-vendu-29-millions-de-dollars-39919861.htm>

Cryptopunks is the oldest digital art site which brings together 10 000 portraits of highly pixelated digital characters, and they have reached tremendous amounts of money as well. The two most expensive ones are Cryptopunk #3100 and Cryptopunk #7804 (see Figures 5 and 6). They were both sold for 4200 ETH, which is the cryptocurrency of the Ethereum platform. However, there is a price difference between these two NFTs because one was sold on March 10, 2021 and the other one was sold on March 11, 2021. The price of Ether is volatile and it increased by a few thousand dollars during the night. This is the reason why Cryptopunk #3100 was sold at a higher price equivalent to \$7,584,485 while Cryptopunk #7804 was sold at a price equivalent to \$7,566,173. Both of these Cryptopunks are a blue-coloured alien-type and the only difference they have are their accessories.



Figure 6 - Cryptopunk #3100,
<https://www.larvalabs.com/cryptopunks/details/3100>



Figure 5 - Cryptopunk #7804,
<https://twitter.com/cryptopunksbot/status/136981264828804865?lang=fr>

Likewise, two ape-type Cryptopunks (another category of Cryptopunks) were sold for a lot of money. Cryptopunk #6965 was sold for \$1.54 million in February 2021 and there are no details concerning the seller or the buyer (see Figure 7). Concerning Cryptopunk #4156, the seller and buyer are anonymous as well (see Figure 8). This Cryptopunk was sold for around \$1.3 million, and just like the difference between the two alien-types Cryptopunks given as an example earlier, the difference between these two ape-types Cryptopunks are their accessories.

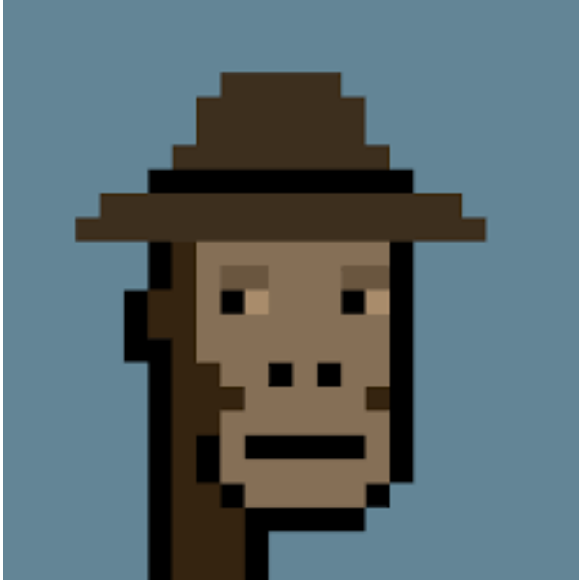


Figure 7 - Cryptopunk #6965,
<https://www.larvalabs.com/cryptopunks/details/6965>



Figure 8 - Cryptopunk #4156,
<https://www.larvalabs.com/cryptopunks/details/4156>

Digital art works, and NFTs in particular, have reached a high level of fame. This is not only due to their unexpected uniqueness and scarcity that lead to secured transactions and guarantee value to the buyers, but also due to the celebrities who participate in creating, buying and selling them. This positive image that NFTs have been benefiting from presents some advantages in terms of marketing; they also seem to be a strategic business model in order to achieve competitive advantage.

PART 2. CRYPTOART: A STRONG MARKETING TOOL

Crypto art has definitely brought uniqueness to the digital world and to the digital art world. It is a very new artistic movement. The artist produces artwork in the form of still or motion pictures animated with a computer and distributed using blockchain technology as seen previously. The blockchain network is infinite, it does not have any barrier for artists nor consumers. This new movement is making the rounds of the web and everyone is talking about it. The crypto art market is growing fast and consumers are keen about the innovative and valuable aspect of it. Edward Russell describes a market as a “collection of buyers and sellers who transact over a particular product”.³⁹ In this case, the product is the NFT. Curiosity regarding the phenomenon has increased interest in the art world in general and has fed the interest of marketers to integrate art in their marketing strategy. This digital “artketing” has several benefits for brands which leads to a competitive advantage when it comes to comparing the business model around NFTs with the different alternatives available.

Chapter 1 – The benefit of digital “artketing” for brands

Using art as a means to enhance a brand already exists,⁴⁰ it is what we call “artketing”. This can be done with a direct collaboration between artists and brands on the design of a product but also via advertisement. The rapprochement between luxury brands and art has accelerated in recent years. Brands, such as Louis Vuitton, are pursuing a marketing strategy with a deliberate artistic dimension. This strategy creates a meaningful and lasting connection between the brand and consumers. A work of art tells a story, whether you like it or not is subjective, but the consumer can quickly become attached to it. Therefore, using NFTs in a marketing strategy seems quite beneficial as NFTs combine the trendy digital aspect and the emotional artistic aspect.

³⁹ Russell, Edward; *The fundamentals of marketing*; AVA Publishing SA; Lausanne; 2010; p. 28

⁴⁰ Translated from the french “L’artketing consiste à prendre l’art comme un moyen de mettre en valeur une marque”. Terrier, Frédéric; “Artketing : comment faire de l’or avec de l’art”; *Oeconomicus*; 09/11/2020

1. Marketing via NFTs

Recently, the emergence of NFTs has given some brands the idea to integrate them into their marketing strategy. “The focus of the marketing concept is to satisfy consumers’ wants and needs”.⁴¹ In an increasingly connected and digitalised world, it is impossible to ignore the growing importance of digital art and NFTs in particular. Many brands see NFTs as a new way to communicate and interact with consumers. The idea of marketing a digital file as a work of art seems quite promising. This is also the opinion of Andrew Faridani, president and CEO at BreezeMaxWeb, a digital marketing agency. According to Mr Faridani,

Today’s brands are competing in a whole new post-pandemic world of digital consumerism filled with virtual events and experiences. When it comes to capitalising on new, lucrative industries like competitive online gaming and NFTs, brands that make the first move will very likely emerge as the dominant players. I believe NFTs are here to stay and brands that embrace the near-limitless potential applications of NFTs will create a win-win for themselves and their customers.⁴²

Marketing is about discovering what customers need and providing it to them as a profit. It is creating value for the customer in order to capture value in return. To have a good marketing strategy, it is important for the brand to develop a good branding strategy as well. A brand represents “everything that a product or service means to consumers. As such, brands are valuable assets to a company”.⁴³ Therefore, companies should work on their brand image which is what the brand actually stands for in the minds of people. So brands have to be careful with who or what they decide to “collaborate” with. In the art market, companies have to figure out with which artist they want to work with, and who is the most profitable. Any partnership between a brand and an artist today must be built around the customer, allowing the brand to respond to what will seduce them and build their loyalty. By generating more desire, brands will allow everyone to immerse themselves in rich, stimulating and surprising content.

⁴¹ Solomon, Michael R.; Marshall, Greg W.; Stuart Elnora W.; *Marketing: real people, real choices*; Pearson; London; 2018; p. 184

⁴² Faridani, Andrew; “How brands can capitalize on NFTs to boost engagement”; *Forbes*; 25/09/2021

⁴³ Kotler, Philip; Keller, Kevin; *A framework of marketing management*; Pearson; London; 2016; p. 249

NFTs in the marketing world have several advantages for brands. Firstly, they make it possible to attribute value to the content created thanks to their rarity. Secondly, they make it possible to authenticate, under a single number, the creative process thanks to blockchain technology. Thirdly, they make it possible to monetize the content: the consumer pays for the scarcity of the creation. Finally, they provide the consumer with a unique experience. All of these elements add value to the brands and many of them have understood it and are looking forward to using NFTs in their marketing strategy.

2. Examples of the use of art for marketing purposes

NFTs, although very popular, are not yet part of everyday life for the general public even though more and more marketers are using them in order to increase the images of brands. And they are right to do so. According to the Gartner Hype Cycle, which is a “visual representation of the maturity and adoption of emerging technologies”,⁴⁴ NFTs are one of the key technologies that will significantly transform future marketing processes. First, there is no third-party when dealing with NFTs, so marketers are able to “monetise and distribute NFTs directly to consumers”.⁴⁵ However, NFTs are quite new so adapting to this technology should be done with careful consideration. The key is to show consumers that marketers are giving them more than they are getting themselves.⁴⁶

To establish how marketers can encourage consumers to purchase NFTs, it is useful to look at a consumer buying decision model, the AIDA hierarchy comprising of four stages consumers go through during the buying process: awareness, interest, desire, and action.⁴⁷

First, to generate awareness, marketers should promote the NFT’s unique features because it creates “supply-based scarcity, which is one of the key distinguishable characteristics of NFTs

⁴⁴ Kimachia, Kihara; “6 emerging technologies to watch from the current Gartner Hype Cycle”; IT Business Edge; 19/11/2021; URL: [https://www.itbusinessedge.com/it-management/6-emerging-technologies-to-watch-from-the-current-gartner-hype-cycle/#:~:text=The%20Gartner%20Hype%20Cycle%20is,in%20IT%20affect%20their%20business.](https://www.itbusinessedge.com/it-management/6-emerging-technologies-to-watch-from-the-current-gartner-hype-cycle/#:~:text=The%20Gartner%20Hype%20Cycle%20is,in%20IT%20affect%20their%20business.;); [retrieved 02/05/2022]

⁴⁵ Chohan, Raeesah; Paschen, Jeannette; “What marketers need to know about non-fungible tokens (NFTs)”; Business horizons; December 2021

⁴⁶ Faridani, Andrew; “How brands can capitalize on NFTs to boost engagement”; Forbes; 25/09/2021

⁴⁷ Strong, Edward k.; *The psychology of selling and advertising*; McGraw-Hill; New York; 1925

compared to traditional products and services”.⁴⁸ Scarcity enhances value and desirability. For instance, marketers often use terms such as “limited edition” to put forth the exclusiveness of a product. For this reason, NFTs lead to a positive consumer purchasing behaviour.

Second, to induce interest and desire, marketers should point out how owning the NFT can add value to the consumer’s life. Since NFTs are immutable, meaning they cannot be forged or faked, they are considered as authentic and highly secured. These characteristics bring value without a doubt. Consequently, NFTs seem to be marketable.

Third, to encourage action, marketers have to make it easy for the consumer to purchase the NFT. Here is the tricky part because NFTs are based on a new technology and people may feel a little lost at the beginning, so marketers have to make it convenient and familiar for them so they feel confident enough to purchase the NFT.

In the meantime, consumer demand for NFTs has increased and brands have started to meet this expanding demand. Moreover, brands can turn clients and customers into more loyal fans by issuing NFTs that people can collect, sell and trade. Here are some examples of brands that have used NFTs in their marketing strategy.

On April 4, 2021, McDonald's launched the first NFT campaign in France during an Instagram and Twitter contest. The company distributed four works of art, five copies of each, i.e. 20 unique works (see Figure 9). McDonald's France Marketing Director Anne Lainé explains: "The ambition was to create engagement with a population inclined to be interested in NFTs and to make people talk about it".⁴⁹

⁴⁸ Chohan, Raeesah; Paschen, Jeannette; “What marketers need to know about non-fungible tokens (NFTs)”; Business horizons; December 2021

⁴⁹ Translated from the French “l’ambition était de créer de l’engagement auprès d’une population encline à s’intéresser aux NFTs et créer de la conversation”. Bonato, Julien; “le crypto art ou l’intérêt des NFT pour les marques”; URL: <https://www.indexel.com/marketing-digital/nft>; [retrieved 02/05/2022]



Figure 9 - McDonald's NFTs, Image from <https://www.alp.com/news/mcdonalds-france-prepares-nft-artworks-based-on-their-menu>

The National Basketball Association (NBA) developed *NBA Top Shot* with Dapper Labs, an NFT company that has its own blockchain, called Flow, and which is also behind the creation of CryptoKitties. Top Shot is “essentially an NFT marketplace that allows users to buy, sell, and collect influential NBA scoring Moments”.⁵⁰ Moments are highlights from a major play in NBA history. They are minted in packs, just like physical trading cards – you buy a pack without knowing what cards are inside it. There are three categories of rarity: common, rare and legendary. The more a pack is rare, the more it is expensive.

The famous sports equipment brand Nike has decided to tokenise the ownership of exclusive shoes. These NFTs are called *CryptoKicks* and the project has been patented. According to the patent, “when a consumer buys a genuine pair of shoes – colloquially known as “kicks” – a digital representation of a shoe may be generated, linked with the consumer, and assigned a cryptographic token, where the digital shoe and cryptographic token collectively represent a ‘CryptoKick’”.⁵¹ The patent suggests owners will be provided with an added element of

⁵⁰ Langston, Thomas; “NBA Top Shot: the ultimate guide”; NFT Now; 01/09/2021; URL: <https://nftnow.com/guides/nba-top-shot-guide/>; [retrieved 02/05/2022]

⁵¹ USPTO Patent full-text and image database; URL: <https://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetacgi%2Fsearch->

control over their shoes. For example, owners will be able to set limits on the number of clones or copies that can be produced. This opportunity is a way to achieve competitive advantage in markets across the globe such as luxury and exclusive footwear that are booming in popularity. It is also a way to combat counterfeiting. According to the latest estimates by customs, these counterfeits represent a loss of earnings for the brands of 216 million euros.⁵²

In regard to counterfeiting, an independent blockchain, called Arianne, launched in 2017 by several luxury and blockchain players, is dedicated to identifying and authenticating luxury products. This makes it possible to detect counterfeit goods and to check the traceability of goods. All of these examples show how the characteristics of NFTs are valuable to consumers and therefore open possibilities for brands to achieve competitive advantage.

Chapter 2 – A strategic business model to achieve competitive advantage

The use of NFTs seem a good way for marketers to achieve competitive advantage. Competitive advantage is “the generation of distinctive competencies relative to the competition. The key factor is to create an advantage, which creates customer value and is sustainable”.⁵³ According to Michael Porter, an academic known for his theories on economics and business strategy, there are three fundamental routes to competitive advantage. First, there is *cost-leadership* which is the fact of pursuing the lowest possible operating cost within an industry. Second, there is *differentiation*, which is the fact of creating a unique product or one differentiated from the competitors. Third, there is *focus*, which is the fact of specialising in a specific market segment and derive detailed customer knowledge. These routes are not mutually exclusive and can be pursued in parallel. As NFTs are fairly new, I have decided to use the differentiation strategy to analyse how they are distinct and differentiated from the competition.

[bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=Nike&s2=Crypto&OS=Nike+AND+Crypto&RS=Nike+AND+Crypto](https://www.footlocker.com/uk/brands/nike/nike-crypto-kicks); 07/09/2021

⁵² “Nike obtient un brevet pour ses baskets CryptoKicks”; Fashion United; 20/12/2019; URL: <https://fashionunited.fr/actualite/business/nike-obtient-un-brevet-pour-ses-baskets-cryptokicks/2019122022699>; [retrieved 02/05/2022]

⁵³ Drummond, Graeme; Ensor, John; *Introduction to Marketing Concepts*; Oxford: Taylor & Francis; Oxford 2020; p. 12

The source of differentiation must be on a basis of value to the customer, “the product offering should be perceived as unique”.⁵⁴ Here, the main goal is to create reasons for purchase, innovation and flexibility.

1. Advantages of a decentralised system

During the decision-making process, depending on the value of the product, consumers like to consider trust and risk when deciding whether to make the purchase or not. Therefore, online marketplaces and auction sites are “focused on convincing consumers that their transactions [are] trustworthy and free of risk”.⁵⁵ In the online world, trust and risk seem to be determinant attributes, which are the “features most important to differentiate and compare among the product choices”, when making purchasing decisions. However, another factor seems important for consumers on uncertain and vulnerable marketplaces such as the new NFT market: it is an external factor called the “institutional structure”,⁵⁶ and represents the guarantees by the vendor. NFTs are on a decentralised blockchain network, “meaning that there is not one central authority or location of a blockchain”,⁵⁷ as opposed to a centralised application such as the Internet (see Figure 10).

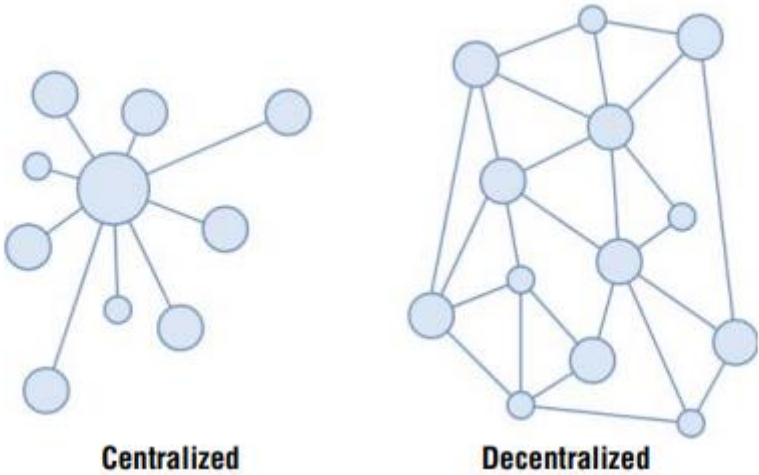


Figure 10 - A centralised versus decentralised system, Image from Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p.63

⁵⁴Ibid., p. 189
⁵⁵ Chohan, Raeesah; Paschen, Jeannette; “What marketers need to know about non-fungible tokens (NFTs)”; Business horizons; December 2021
⁵⁶ Ibid.
⁵⁷ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; p. 62

Decentralised systems have several advantages. First, there is not only one point of failure as there is with centralised systems. In a centralised system, transactions go through one single authority. Therefore, if a hacker attacks the system, he will have access to all of the records in the database. This is not the case with a decentralised system. Second, there is no single controlling authority with a decentralised system. This means that there is no authority that has full control of the database or how it is managed, as it is the case with a centralised system such as a bank for instance. Third, transactions are much quicker. For example, if someone in France wants to send money to someone in the United States, the transaction might take two or more business days to complete. Now if the person in France decides to send currency on a blockchain, cryptocurrency, there is no intermediary and it is instantaneous. Generally, a cryptocurrency transaction will take between a few seconds and several minutes.⁵⁸ All of these particular characteristics of a decentralised system are different from the ones of a centralised system and represent value to consumers. NFTs are based on the blockchain, so on a decentralised application. Therefore, NFTs seem to be a strategic business model to achieve competitive advantage.

2. Competitive advantage of NFTs

As a decentralised application, NFTs have five distinguishable characteristics of content that help achieve competitive advantage. First, NFTs are digitally scarce. As I have already said, scarcity gives high value to a piece of art and therefore, makes it very desirable to consumers. “When consumers identify a scarce resource, they often seek to get it to gain a competitive advantage over others, to derive pleasure from the achievement, and to meet their aspirations”.⁵⁹ Chris Anderson, an English-American author and entrepreneur, talked about “the long tail” strategy, which is a retail strategy in which it is preferable to sell a large number of unique items in small quantities rather than a small number of popular items in large quantities. Scarcity is, without a doubt, a major criterion for consumers in the decision-making process when it comes to purchasing a work of art. It is considered as highly valuable.

⁵⁸Ibid., p. 65-71

⁵⁹ Chohan, Raeesah; Paschen, Jeannette; “What marketers need to know about non-fungible tokens (NFTs)”; Business horizons; December 2021

According to the author of the book *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*,

For example, an asset that is highly sought after but scarce acquires value due to the competition between those who want it, while an asset that is available in large quantities or unlimited, even if highly sought after, does not acquire value because those who seek to possess it can easily obtain it.⁶⁰

Furthermore, scarcity is rather unusual and difficult to prove in the digital world so it may be seen with additional value compared to in the physical world. Second, NFTs are authentic. No two NFTs are the same and as I have already explained, their authenticity can be proven thanks to the blockchain. This authenticity has been difficult to achieve in the digital world, so it is perceived as high value and trust for consumers when making decisions. In addition, its authenticity can be publicly verified. Third, NFTs are non-fungible. “The non-fungibility characteristic enables the trading of ‘originals’. The buying and selling of originals is difficult in traditional digital marketing as identical copies can easily be created.”⁶¹ As a decentralised application, NFTs are compatible with anything built using the same blockchain technology. This means that they can be traded on the same marketplace. Whereas traditional content on a centralised application can only be exchanged if companies build their own infrastructure. Fourth, as an NFT content, marketers can sell their brand’s work anywhere and can access global markets. Moreover, the NFT system never goes down, they are always available to sell and buy. This is not the case with traditional content where marketers rely on the infrastructure and distribution of the platforms they use. These are often subject to terms of use and geographical restrictions.

The potential of NFTs is arguably undisputable regarding its competitive advantage and the fact that they are based on a decentralised system. However, there are “costs for creating and

⁶⁰ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 27

⁶¹ Chohan, Raeesah; Paschen, Jeannette; “What marketers need to know about non-fungible tokens (NFTs)”; Business horizons; December 2021

trading crypto collectibles, as well as potential risks”.⁶² Indeed, to perform any kind of blockchain-based transaction, gas fees must be paid. Gas fees are “fees to be paid to node operators to register new transactions on the respective blockchain. [...] They depend on the volume of transactions taking place on the blockchain network at a given moment”.⁶³ Moreover, if you look at the phenomenon’s media coverage, you may have the impression that most NFTs turn digital assets to gold, but it is not always the case. Although the examination of individual NFT sales reveals great similarities between the crypto art market and the traditional art world, I think it is interesting to see if NFTs are a sustainable form of art or if they are simply speculation.

⁶² Valeonti, F ; Bikakis, A ; Terras, M ; Speed, C ; Hudson-Smith, A ; Chalkias, K; “Crypto collectibles, museum funding and openGLAM: Challenges, opportunities and the potential of non-fungible tokens (NFTs)”; 2021

⁶³ Ibid.

PART 3. NFTS: SUSTAINABLE FORM OF ART OR SIMPLY SPECULATION?

As I have already explained, digital ownership is a specific valuable criterion for consumers and investors. Therefore, it may at some point become profitable. “NFTs are often described as an investment and beyond the scarcity value of owning something very rare, what that investment entails is still unclear and therefore speculative”.⁶⁴ NFTs are a fast developing and speculative area. NFTs can work like any other speculative asset, where you buy it and hope that the value of it goes up one day, so you can sell it at a profit. The NFT world is still in an extremely experimental phase. This extremely immature state of the technology and the markets around it can be illustrated with the dizzying numbers some of the NFTs have reached during auction sales. This also suggests a “speculative bubble that could burst as easily as it was generated”.⁶⁵ However, NFTs also seem to have what it takes to last over time. In other words, they may be considered a sustainable form of art, especially for digital artists. In short, digital artists “could find in NFT a new, concrete remunerative opportunity, getting recognition for the value of their work that would otherwise tend to get lost in the ether because of the extreme ease with which it can be copied and spread”.⁶⁶ In effect, NFTs have notably a positive influence in business development. For instance, the auction house Phillips decided to create an NFT department “right around the sale of the Mad Dog Jones’ NFT sale [...] early spring of 2021”, explained Alexis Chompaisal, NFT manager at Phillips,⁶⁷ during our interview on April 8, 2022.⁶⁸ Nevertheless, there seems to be some kind of shift from a genuine appreciation for art to a simple business of art.

⁶⁴ Ibid.

⁶⁵ Allen, Kevin W.; *NFT investing for beginners, the easy investing guide to create, buy and sell with digital crypto art and collectibles*; Kevin W. Allen; 2021; p. 37

⁶⁶Ibid. p. 38

⁶⁷ See appendix 2, p. II to discover what Alexis Chompaisal has studied, how she became interested in NFTs and what she does on a daily basis

⁶⁸ See appendix 2, p. II

Chapter 1 – The positive influence of NFTs in business development

The world has continued trending towards the digitalisation of all things for the past decade. This has led to a boom in digital art and the rise of NFTs. It is difficult to say if the NFT art industry has longevity. But one thing is certain, the NFT world has a lot of potential. Therefore, many digital artists are reconsidering their ways of working and producing art. “Most of my work is made and prepared for some sort of print, however all my work is created digitally, so it feels a bit of a wasted opportunity to not create an NFT. I think this will be the same for many designers”,⁶⁹ says Elena Fitzsimons, graphic designer and artist based in Dublin. The potential of NFTs is based on several characteristics such as the absence of intermediaries or the collaborative nature of the crypto ecosystem. Notwithstanding these criteria, it turns out to be quite challenging to evaluate NFTs since they cannot be judged according to the traditional canons.

1. *The (great) potential of NFTs*

The emerging NFT market provides seemingly endless opportunities. One of the major advantages that NFTs offer is the potential for protecting works of art. This is possible thanks to the blockchain technology. Moreover, some platforms come up with additional protection. For instance, *HUP market* is a marketplace that allows artists to authenticate their works, track copies on the Internet and sell licences and copyrights.⁷⁰ Speaking of protection, once they have finished their piece of art, artists have to rely on intermediaries to guarantee the provenance and future value of the work of art. According to QuHarrison Terry and Matt Fortnow,

Content creators of all kinds, including musicians, podcasters, painters, writers, performers, directors, and composers, are typically forced to use an intermediary to

⁶⁹ Fitzsimons, Elena; “NFT art: what is it, how it works and what it means for the creative industry”; URL: <https://en.99designs.fr/blog/web-digital/nft-art/>; [retrieved 02/05/2022]

⁷⁰ Bigot, Rémy; “NFT et cryptomonnaie: le guide ultime pour tout comprendre des crypto NFT”; 04/05/2021 ; URL: <https://www.monersonbusiness.com/entreprise/nft-cryptomonnaie-guide/>; [retrieved 02/05/2022]

share their creations with the world. Whether it's the art gallery, the music label, or the concert promoter, these functionaries all promise artists the ability to monetize their work in exchange for a healthy cut of the profits—and sometimes even ownership of the artist's work.⁷¹

Although not all intermediaries are bad, it is “no wonder that the creative community has long sought a way to regain control – and ownership – of their valuable creative assets”.⁷² NFTs allow creators to bypass the intermediary altogether. Therefore, there is no need for a trusted third-party to manage sales or verify the integrity of transactions. This means that for “the first time in history, artwork can be created, edited, purchased, and sold digitally and without intermediaries”.⁷³ The absence of intermediaries gives the artists the control of their intellectual property and excludes commissions on sales for example.

Another advantage of trading within a blockchain is that artists from all over the world can participate. Crypto art can be defined as a “global movement”,⁷⁴ with no barriers. Artists enter the market by creating their own dematerialised place on the Internet and displaying their art on it. Similar to attracting people all over the world to participate, it is clear that everyone is encouraged to create, “there is no distinction among gender, class, age, creed, etc”.⁷⁵ Moreover, the power in the art market is being redistributed with crypto art. Indeed, virtual galleries are like a public museum in some way because they grant everyone access. According to a new job posting, this new way of enjoying museums has pushed the Guggenheim Museum in New York to adapt to the new trend by looking for an expert in the field.⁷⁶ All of these advantages provide a positive influence in business development. For instance, the British auction house Phillips has entered the “great vortex of cryptographic art with the announcement of REPLICATOR”.⁷⁷ This work (a GIF), by Mad Dog Jones, was the first NFT to be offered in Phillips' history (see Figure 11). This piece of art has the ability to

⁷¹ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021; Foreword xvii

⁷² Ibid.

⁷³ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 134

⁷⁴ Ibid., p. 137

⁷⁵ Ibid., p. 138

⁷⁶ Nelson, Danny; “Even NYC's highfalutin Guggenheim Museum is looking at NFTs, job posting suggests”; 19/03/2021; URL: <https://www.coindesk.com/business/2021/03/19/even-nycs-highfalutin-guggenheim-museum-is-looking-at-nfts-job-posting-suggests/>; [retrieved 02/05/2022]

⁷⁷ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 138

generate new NFTs every 28 days. It was sold for a total of \$4.1 million with an opening bid of \$100.



Figure 11 - REPLICATOR, Screenshot of the website <https://www.phillips.com/mdj>

Rebekah Bowling, Phillips’ Senior Specialist of 20th Century & Contemporary Art, acknowledged the merger between the traditional physical art and the innovative digital art. She said,

The enthusiasm for Mad Dog Jones’ groundbreaking NFT has cemented the artist’s reputation as someone who continues to push the boundaries of the expectations of digital art. We were delighted to see support from traditional collectors of physical art, as well as those active in the crypto community, with REPLICATOR helping to bridge the gap between the two.

Overall, NFTs and crypto art marketplaces are very inclusive in that they do not “focus on an elite market segment but encourage emerging artists to create and earn fees”.⁷⁸ Most marketplaces have informal groups in chat apps. Therefore, the communication between crypto artists, collectors and so on is simplified. What unites these people is the ‘innovative creativity, and the enthusiasm to imagine something different and push the boundaries of what is possible’.⁷⁹ Moreover, the NFT market is a new and dynamic market that attracts many disparate companies. This can become a great opportunity for artists who find themselves in exciting collaborations with famous brands. For instance, the American brand of stackable potato-based crisps *Pringles*, asked the artist Vasya Kolotusha to create an NFT. It is called “Cryptocrisp” and is an MP4 file showing a golden Pringles can. Despite the increasing interest in NFTs and the crypto art market, NFTs are still at an early age. As a result, they seem quite challenging to evaluate.

2. The challenging evaluation of NFTs

NFTs are a new artistic expression with very little precedent. Therefore, you cannot only rely on previous evaluations of art works. Benjamin Kandler, NFT coordinator at Phillips,⁸⁰ said “there is a combination of things”,⁸¹ to consider while doing the valuation of an NFT. During our interview, Benjamin Kandler and Alexis Chompaisal, NFT manager at Phillips, described how they evaluate NFTs,

How do you choose which artists’ works to put in an auction sale? How do you select the consignment pieces for a particular auction sale?

Benjamin Kandler: this is a million dollar question everyone keeps asking me. To be honest, there is so many different factors. I look for history of coding and try and pin down what people are doing that’s being innovative or different or exciting and kind of grading the same as you would with contemporary art. Like are there willing buyers

⁷⁸ Ibid., p. 137

⁷⁹ Ibid.

⁸⁰ See appendix 2, p. II to discover what Benjamin Kandler has studied, how he became interested in NFTs and what he does on a daily basis

⁸¹ See appendix 2, p. III

for it? Is it really hard to get? Is it really important historically, culturally, aesthetically?

How do you do valuation? There is an unofficial point of view from the public that you often value the art rather low in range. Is this true?

Benjamin Kandler: There's a combination of things. There are our databases with traditional art market results which we can look into if the artist is sold there. We can use OpenSea and NFT market tools to look at recent price history, how frequent is that? How common does that price happen? Is the price being artificially created or are individual users consistently bidding and buying at this price? And then you can look at their primary pricing. You can use that as a rough guide but sometimes, I mean, it's better just start bidding at an extremely low price and see what happens because often there is no precedent especially in auction houses for these types of works and it normally takes off and that's just because the market decides so. You put the price low at the beginning, so everyone has the chance to bid on it.

Alexis Chompaisal: Exactly and the auction house is not a gallery. We do not set a price for it and then see who comes to buy it. It is our job to be a venue for willing buyers and willing sellers.

Does the seller have any say in this?

Benjamin Kandler: Yeah completely, it's case by case. We can advise on what we think would be the appropriate price both for the sale going well and being fair to their market but at the end of the day it's a negotiation like we can advise that this may look better for you but they might want the security of putting it at a certain price. And you know, it's the same as just kind of traditional art, you know, there's room for negotiation. If someone is like this is the firm price then sometimes you go with the firm price, sometimes you advise lower. They often take our advice, start at a lower price to get more bidding.

Alexis Chompaisal: Yeah and you still have to sign a seller’s agreement just like any typical consignment, we still have terms that we agree on prior to the auction. In that way it’s still quite traditional.⁸²

Moreover, the crypto art environment “cannot be judged by traditional canons because these would kill the peculiarities and innovativeness of this type of art”.⁸³ For instance, it is not possible to evaluate an NFT according to its state of conservation or its participation in famous exhibitions. The conventional art settings such as the technique adopted, the support or the size simply are not relevant or appropriate to evaluate a piece of digital art. On the other hand, the evaluation of NFTs takes into consideration subjective criteria. As a matter of fact, an NFT can be judged “for its creativity, power of expression, and general artistic merit”.⁸⁴ Equally important, “the purchase of a work also includes the emotions of the collector”.⁸⁵ However, NFTs can also be valued in objective ways before their release. One of the biggest determinants of value is the artist’s popularity. “If you have heard of the name, [it is] possible that other people have also and may also want to own a piece of digital art created by that artist”.⁸⁶ But as I have already said, there is only little precedent of NFT sales so there are not as many popular artists as there is in the traditional art market. Benjamin Kandler and Alexis Chompaisal say they have a look on marketplaces such as OpenSea or Rarible when it comes to pricing. For instance, “the active trade of the Cryptopunks [on marketplaces] creates a price floor and can give you a good idea about how much the market is determining their worth at any given time”.⁸⁷ Moreover, it has been proven with Cryptopunks and Cryptokitties that the older and rarer NFTs get, the more they gain value. Thus, before thinking about NFTs as an investment, you have to use your best judgement in determining the value of the NFT artwork you buy.

Although artists, collectors and investors benefit from the NFT phenomenon that favours the creation and sale of digital art, NFTs present some problems. There are several disadvantages

⁸² See appendix 2, p. III, IV

⁸³ *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 143

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ Tiana, Laurence; Seoyoung, Kim; *NFTs for dummies*; John Wiley & Sons; New Jersey 2021; p. 48

⁸⁷ Ibid.

to using NFTs. The access to NFTs and their use is not simple. The barriers to entry put aside artists who do not have enough money to create an NFT. Content creators must pay fees for the creation and upkeep of the NFT. Moreover, “many are concerned that young artists of colour in particular will be left out, as they have long been marginalized in the traditional art world”.⁸⁸ Another risk is to be sure hard drives and blockchain technology on which NFTs are stored are as durable as well-preserved canvas and oil paint for example. Above all, there are the environmental concerns. "The environmental impact of blockchain is a huge problem," says Amy Whitaker, an assistant professor of visual arts administration at New York University. Indeed, NFTs are very resource-heavy, they need highly powered computers and so a huge amount of electricity and fossil fuels to power the server farms. However, “climate-minded artists could move to some alternative blockchain platform with less environmental impact”.⁸⁹ In either case, it seems like the original love and appreciation for art is turning into a cold business of art.

Chapter 2 – From a love for art to a business of art

Although NFTs present many risks and disadvantages, Alexis Chompaisal and Benjamin Kandler agree on saying there are no dangers for the traditional art market:

Do you see any dangers for the traditional art market?

Alexis Chompaisal: I don't know that one has to replace the other, you know, I mean they can both coexist in the world it's just a different form of collecting like one can collect prints and paintings. Just because you collect one doesn't mean you can never touch the other and prints will never replace paintings and vice versa but you can have both in your collection.

Benjamin Kandler: when the camera came along, everyone was worried that nobody would look at paintings ever again.

⁸⁸ Chow, Andrew; “NFTs and the crypto art revolution”; *New York Time*; 29/03/2021

⁸⁹ Ibid.

Alexis Chompaisal: yeah and photographs weren't considered art works at all until they decided now they will. It's just a matter of mindset really.⁹⁰

Moreover, NFTs seem to be providing solutions for various aspects of digital arts and advantages for digital artists who have been creating content and getting almost nothing in return. NFTs have changed how the world values art, encouraging investment and therefore compensating artists on an appropriate scale.

1. A format that encourages investment

The world is reinventing itself very fast. A smartphone is obsolete every two years, features of a social media are changing so frequently that users barely have the time to get used to them. Everything is being digitalised, therefore investors are looking to invest in digital objects. Investors often collect art pieces, so they could be interested in digital art, but a digital work can easily be copied and shared. NFTs are the solution to this problem. An NFT is unique and its ownership, authenticity and transactions are protected on the blockchain. The NFT format separates the authentic original with all its copies. This provides security to both creators and buyers. "So, NFT is a boon for digital art practitioners in ways more than one. They offer undisputed benefits for the creator economy. It allows for authentication of artwork. It provides fool-proof and transparent provenance trail. It legitimises transactions. It makes arts more inclusive and allows for the relatively non-conventional art forms to be seen and collected. It decentralises the power and control over art selection process".⁹¹ Alexis Chompaisal and Benjamin Kandler are quite optimistic about the future of NFTs,

What is your general opinion on NFTs in the art world? Do you think NFTs are a sustainable form of art? And why?

Benjamin Kandler: I think the purely art focus NFTs will definitely outlive. When you think about them in terms of... there's a completely new category of collectors

⁹⁰ See appendix 2, p. V

⁹¹ Kumar, Rahul; "NFT: The business of art vs. the love for art"; URL: <https://www.stirworld.com/think-opinions-nft-the-business-of-art-vs-the-love-for-art>; [retrieved 02/05/2022]

who are younger, they will be happy to hold an NFT in their digital wallet for 20-30 years potentially in the same way that a traditional collector might hold a painting for the same amount of time. And I think it will all become much easier and more integrate so it'll become more and more mainstream.

Alexis Chompaisal: I think you have to treat it as a genre too. It's already starting to self-correct itself. The interest has declined deeply for artworks that aren't good like they would in any art market. So, I think that, in that way, you can still think of it as traditional.⁹²

However, what is not traditional is the fact you cannot display the work of art on your wall. In essence, it feels more like a stock purchase when buying an NFT than for its aesthetic or cultural meaning. To clarify, even though commerce in art is important, the very purpose of art, the emotional expression you feel in front of a piece of art seems to disappear with the NFT format that encourages investment. This format encourages investment because it simplifies transaction and ownership. Therefore, investors are reassured to invest in this new technology, putting aside the fact to actually engage with the piece of art per se. "More often than not, people who buy a painting or sculpture, or even a digital work by 'visiting' a gallery for instance, do so to place it in their homes and to live with it. Even with eventual resale, the work is engaged with by being viewed over time".⁹³ In the meantime, these speculative mechanics have benefited "digital artists [who] 'haven't really gotten what they deserve', says Tim Kang, a 27-year-old who says he has spent about \$1 million on almost 200 digital artworks".⁹⁴

2. Advantages of NFTs for the artists

Using NFTs offers many possibilities for digital content. Before NFTs, digital content creators could not prove ownership or guarantee the scarcity of their work. Therefore, "content creators see their profits and earning potential swallowed by platforms. An artist

⁹² See appendix 2, p. IV

⁹³ Kumar, Rahul; "NFT: The business of art vs. the love for art"; URL: <https://www.stirworld.com/think-opinions-nft-the-business-of-art-vs-the-love-for-art>; [retrieved 02/05/2022]

⁹⁴ "NFTs are booming but they're nothing new in the art market"; URL: <https://www.bloomberg.com/news/articles/2021-03-02/nft-art-boom-is-the-same-concept-as-the-photography-market?sref=M8H6LjUF>

publishing work on a social network makes money for the platform who sell ads to the artists followers. They get exposure in return, but exposure doesn't pay the bills".⁹⁵ By all means, NFT is a boon for digital art creators in ways more than one. They maximise earnings for creators and legitimise their work. When they sell a piece of digital art, funds go directly to the artists. Every time the owner of an NFT sells it, it is even possible that the original creator receives royalties because the creator's address is part of the token's metadata. A royalty is "a payment made especially to writers and musicians every time their books or songs are bought or used by others".⁹⁶ This is the same thing regarding NFTs: a creator of an NFT receives a payment every time their NFT is bought. This means that every time the NFT is sold in the future, a certain percentage will go back to the original creator. Some platforms such as Zora even support royalties for their artists. And this is an automatic system, creators earn royalties as their work is sold from person to person. There is no need to go through a third party to do so and the transaction is immediate. Artists save money as they are not being charged with intermediary fees by platforms and advertisements, just as they used to when their work was published on social networks. However, to be automatic, an NFT has to have a royalty programmed into it.⁹⁷ Creators can decide what percentage royalty they would like and this amount is directly sent to their cryptocurrency wallet when their NFT is sold. This obviously maximises earnings for the creators as they do not only get the amount of money the NFT is sold for at first.

Furthermore, NFTs offer the same advantage as what drives people to collect other works of art: scarcity. The core of collecting is scarcity and thanks to NFTs, digital art can now guarantee the same scarcity as an original piece of art. Therefore, digital artists are more likely to sell their work to collectors. As Matt Fortnow and QuHarrison Terry wrote in their book "*The NFT handbook: How to create, sell and buy non-fungible tokens*", "No matter what we collect, we do so because there are a limited number of those things".⁹⁸ In this way, NFTs are very similar to the traditional art market for collectors. However, I asked Alexis Chompaisal if selling an NFT was the same thing as selling any piece of art, and this is what she answered,

⁹⁵ "Non-fungible tokens (NFT)"; URL: <https://ethereum.org/en/nft/>; [retrieved 02/05/2022]

⁹⁶ Definition of "royalty" from the Cambridge Academic Content Dictionary. URL: <https://dictionary.cambridge.org/fr/dictionnaire/anglais/royalty>

⁹⁷ "Non-fungible tokens (NFT)"; URL: <https://ethereum.org/en/nft/>; [retrieved 02/05/2022]

⁹⁸ Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021

So, could we say that selling an NFT is kind of the same thing as selling any piece of art?

Alexis Chompaisal: Well, it's slightly different just because, as Benji said, the bidding opens and the market kind of dictates whereas traditionally you have a low value and a high value and that's where you anticipate the bidding to go in that range. But yes, in other ways it is the typical fashion. You don't want to, you know, put your NFT in for 500 000\$ and see if there happens to be a bid, that's not the auction house strategy at all. You put it in at a reasonable or just below reasonable amount that excites bidding, and you know we've seen this strategy work for hundreds of years in all collecting categories so, you know, at this point, we feel pretty comfortable in that strategy, even though, you know, people love to challenge that idea all the time, you have to trust the process.⁹⁹

Moreover, NFTs have a global reach. They provide the advantage to collect art online. This was not the case before the rise of NFT trading. Collecting and selling art was generally something that used to happen “in physical spaces concerning physical artworks”.¹⁰⁰ Artists had to organise or participate to events like exhibitions and markets to have the chance to sell their work to buyers. Therefore, “like social media, NFT platforms grant designer immediate access to global audiences”.¹⁰¹ NFTs give a way for the artists to sell their work that there otherwise might not be a market for. NFTs also provides a way to open up to an infinite audience. Therefore, collectors from all over the world can purchase NFTs. Moreover, “a young generation is approaching the art world by opening an alternative, less intimidating, and more transparent market”,¹⁰² thanks to crypto art. During our interview with Alexis Chompaisal and Benjamin Kandler, I asked them if they had noticed any cultural differences between the buyers, and this is what Benjamin Kandler answered:

⁹⁹ See appendix 2, p. V

¹⁰⁰ Fitzsimons, Elena; “NFT art: what is it, how it works and what it means for the creative industry”; URL: <https://en.99designs.fr/blog/web-digital/nft-art/>; [retrieved 02/05/2022]

¹⁰¹ Ibid.

¹⁰² *The NFT revolution 2022 – 2 in 1 – Basic guide for beginners + crypto art & fashion edition*; Crypto Dukedom; 2021; p. 81

Can you see any cultural differences between the buyers?

Benjamin Kandler: I would say it's very similar to the art market. I feel in Europe, it's perhaps a little more conceptual, a bit funkier and a bit weirder. In the US it's a bit more commercial, (Alexis) commercial in like visually impactful. In Asia, I would say it's a lot more like about pop culture and icons and trends. Again, this is not rule of thumb.¹⁰³

Therefore, there are many similarities between the traditional art market and the NFT market, whether it is in the way of selling or buying a piece of art.

¹⁰³ See appendix 2, p. V

CONCLUSION

Digital art is challenging to commercialise in the contemporary art market. The main reason is because of its difficulty to prove ownership. Furthermore, it is also laborious to determine the value of a digital piece of art since digital assets are easily reproduceable. Therefore, digital artists are struggling to make a living solely based on their work. As a matter of fact, this seems unfair. Digital artists are having a hard time to sell because of the format of their work, not because their work is not as good or valuable as what traditional artists produce. However, things have started to change. The introduction of NFTs in the contemporary art market seems to be a new promising method for trading digital art. Henceforth, they are a boon for the world of cryptoart.

NFTs are becoming more and more mainstream as artists, collectors, investors start exploring their potential. No wonder NFTs have been gaining in popularity the last couple of years, they are revolutionising the art market and especially the digital art market.

NFTs are intriguing but also fascinating. They have been able to introduce uniqueness in the digital world. This seems unreal as anyone can very easily copy and share a digital asset. However, it is now possible because this particular uniqueness is guaranteed by the blockchain. The blockchain secures the NFT and records every transaction that will be done over this NFT. This means that an NFT is not interchangeable, it is irreplaceable. All of a sudden, individuals can truly own a digital asset and prove that no other digital asset is the same. The fact that NFTs represent digital property is an astonishing innovation.

It may be difficult to understand because it is still possible for individuals to screenshot and print out an NFT, just like any other digital asset on the Internet. But the difference with any other digital asset is that an NFT has an owner and that it is provable. It works the same way as traditional art. You can have a reproduction of a piece of art, but only the owner of the original piece of art can have full authority to display of it as he/she wishes. Overall, it is without saying that copies have little to no value.

Altogether, NFTs guarantee the authenticity of a digital artwork. An NFT is like a certified copy of an original creation. In other words, an NFT gives proof of provenance of a digital piece of art. As a result, its value increases and collectors believe it is worth the investment,

therefore creating a boom in digital art. NFTs are considered as collectibles, just like any other kind of artwork and digital artists can finally sell exclusive works at higher prices. Furthermore, there is no third party between the creator of an NFT and the buyer since NFTs are on a decentralised blockchain network. The scarcity and authenticity of NFTs offer digital content creators new opportunities to value and sell their work.

In effect, NFTs offer new possibilities and are more and more trendy. They benefit from a very positive image leading marketers to integrate them in their marketing strategy. Consequently, NFTs may be considered as a strong marketing tool as they increase brand image. In fact, companies have often used art in their marketing strategy, it is not something new. However, using digital art and especially NFTs adds a trendy digital aspect to the traditional artistic aspect. The scarcity of an NFT equally seems very beneficial for companies. It may even allow marketers to achieve competitive advantage and meet their target of creating reasons for purchase, innovation and flexibility.

The future of NFTs may seem unclear but what is sure is that NFTs maximise earnings for content creators. Up to now, a digital artist used to publish his/her work on a social network, make money for the platform and get exposure, but did not necessarily earn money. Now with NFTs, the money goes straight to the artist and he/she can even receive royalties. Moreover, it is a great method to protect works of art and distribute digital art. Everyone has access to the artworks and anyone can decide to create an NFT even though minting fees remain quite high. However, the fact that NFTs are that new means there is only little precedent regarding sales, therefore the evaluation of NFTs seems quite challenging and has to be based on other factors.

The potential of NFTs is undisputable and they seem to have a lot of advantages, but they are still in an extremely experimental phase. It is hard to say if they are truly a sustainable form of art. Therefore, it would be interesting to follow the evolution of NFTs since they may end up like any other speculative asset.

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APPENDICES

Appendix 1 – Screenshot from Fortnow, Matt; Terry, QuHarrison; *The NFT handbook: How to create, sell and buy non-fungible tokens*; John Wiley & Sons; New Jersey 2021

For example, the metadata for a digital game trading card NFT might look something like the following:

```
{
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Appendix 2 – Interview with Alexis Chompaisal, NFT manager at Phillips and Benjamin Kandler, NFT coordinator at Phillips. April 8, 2022

Hello, so can you please start by introducing yourselves? What do you do at work on a daily basis?

Alexis Chompaisal: My name is Alexis. I work in Los Angeles. I'm the NFT manager, which means I manage the NFT sales and consignments from Phillips, and I manage all aspects of the sale, working with the consignors, regarding the contracts and the administrative duties. I also catalogue the works, I arrange for the smart contracts prior to the sale. I work in a typical auction house capacity to get the sale live, finding buyers, and then I work with the buyer's post-sale on payments and then transferring their now-purchased NFTs to their digital wallets.

Benjamin Kandler: I am Benji. I work in private sales at Phillips and also as an NFT coordinator. I assess projects, works and artists and look for what Phillips should take in, in terms of strategy, which artists we should pick. I comb for everything, and I look for what best artworks we can find and then try to get them assigned. I work a lot more on the business getting side with collectors and clients and manage relationships between our potential collectors, looking for potential collectors and consignments. That's my main focus for the moment.

What did you study? And how did you become interested in NFTs?

Alexis Chompaisal: I majored in art history at university. I worked at an auction house for many years, but this is the first time I'm working with NFTs. In my previous auction house, since I'm based in California, I worked on kind of creating a market for post-war and contemporary California-based artists and it started kind of as a, like a one-off sale and grew in popularity so much so that it became its own department at the house that I worked at. So, I really always kind of enjoyed working with these emerging genres, artists, that kind of were on the fringe but then folded into the mainstream art market so that's what kind of interested me the most about working in the NFT, I could see parallels into what I had done previously.

Benjamin Kandler: I studied art history as well. I've been interested in crypto and DeFi and all that goes along with NFTs for years and then, the last years, there has been so much

innovation in terms of smart contract art, just the aesthetics that go along with it and a real kind of culture and community has been built around it and so I became more interested in what kind of aesthetic approach to NFTs and generative art and the kind of skill of coding behind it. That's kind of what threw me in.

When was the NFT department created at Philips?

Alexis Chompaisal: It was kind of created, I would say right around the sale of the Mad Dog Jones' NFT that was offered so I would say early spring of 2021.

How do you choose which artists' works to put in an auction sale? How do you select the consignment pieces for a particular auction sale?

Benjamin Kandler: this is a million dollar question everyone keeps asking me. To be honest, there is so many different factors. I look for history of coding and try and pin down what people are doing that's being innovative or different or exciting and kind of grading the same as you would with contemporary art. Like are there willing buyers for it, is it really hard to get, is it really important historically, culturally, aesthetically.

How do you do valuation? There is an unofficial point of view from the public that you often value the art rather low in range, is it true?

Benjamin Kandler: There's a combination of things. There are our databases with traditional art market results which we can look into if the artist is sold there. We can use OpenSea and NFT market tools to look at recent price history, how frequent is that, how common does that price happen, is the price being artificially created or are individual users consistently bidding and buying at this price. And then you can look at their primary pricing. You can use that as a rough guide but sometimes, I mean, it's better just start bidding at an extremely low price and see what happens because often there is no precedent especially in auction houses for these types of works and it normally takes off and that's just because the market decides so. You put the price low at the beginning, so everyone has the chance to bid on it.

Alexis Chompaisal: Exactly and the auction house is not a gallery. We do not set a price for it and then see who comes to buy it. It is our job to be a venue for willing buyers and willing sellers.

Does the seller have any say in this?

Benjamin Kandler: Yeah completely, it's case by case. We can advise on what we think would be the appropriate price both for the sell going well and being fair to their market but at the end of the day it's a negotiation like we can advise that this may look better for you but they might want the security of putting it at a certain price. And you know, it's the same as just kind of traditional art, you know, there's room for negotiation. If someone is like this is the firm price then sometimes you go with the firm price, sometimes you advise lower. They often take our advice, start at a lower price to get more bidding.

Alexis Chompaisal: Yeah and you still have to sign a seller's agreement just like any typical consignment, we still have terms that we agree on prior to the auction. In that way it's still quite traditional.

What is your general opinion on NFTs in the art world? Do you think NFTs are a sustainable form of art? And why?

Benjamin Kandler: I think the purely art focus NFTs will definitely outlive. When you think about them in terms of... there's a completely new category of collectors who are younger, they will be happy to hold an NFT in their digital wallet for 20-30 years potentially in the same way that a traditional collector might hold a painting for the same amount of time. And I think it will all become much easier and more integrate so it'll become more and more mainstream.

Alexis Chompaisal: I think you have to treat it as a genre too. It's already starting to self-correct itself. The interest has declined deeply for artworks that aren't good like they would in any art market. So, I think that, in that way, you can still think of it as traditional.

Do you see any dangers for the traditional art market?

Alexis Chompaisal: I don't know that one has to replace the other, you know, I mean they can both coexist in the world it's just a different form of collecting like one can collect prints and paintings. Just because you collect one doesn't mean you can never touch the other and prints will never replace paintings and vice versa but you can have both in your collection.

Benjamin Kandler: when the camera came along, everyone was worried that nobody would look at paintings ever again.

Alexis Chompaisal: yeah and photographs weren't considered art works at all until they decided now they will. It's just a matter of mindset really.

So, could we say that selling an NFT is kind of the same thing as selling any piece of art?

Alexis Chompaisal: Well, it's slightly different just because, as Benji said, the bidding opens and the market kind of dictates whereas traditionally you have a low value and a high value and that's where you anticipate the bidding to go in that range. But yes, in other ways it is the typical fashion. You don't want to, you know, put your NFT in for 500 000\$ and see if there happens to be a bid, that's not the auction house strategy at all. You put it in at a reasonable or just below reasonable amount that excites bidding, and you know we've seen this strategy work for hundreds of years in all collecting categories so, you know, at this point, we feel pretty comfortable in that strategy, even though, you know, people love to challenge that idea all the time, you have to trust the process.

Can you see any cultural differences between the buyers?

Benjamin Kandler: I would say it's very similar to the art market. I feel in Europe, it's perhaps a little more conceptual, a bit funkier and a bit weirder. In the US it's a bit more commercial, (Alexis) commercial in like visually impactful. In Asia, I would say it's a lot more like about pop culture and icons and trends. Again, this is not rule of thumb.

So, in conclusion, we can say there is a lot of similarities with the traditional art market.

Alexis Chompaisal: yeah, more than people I think want to admit.