Artists and NFTs: literacy, perception, and future.

A qualitative study on the literacy and exposure of artists to NFTs, perceived positives and negatives of NFTs, and their perceived future.

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Abstract:

This thesis studies artists' literacy and exposure to NFTs, the perceived positives and negatives of NFTs, and the NFTs' perceived future. This study utilizes qualitative inductive research methods powered by the Gioia methodology. The study finds a moderate level of understanding and familiarity with NFTs, with most research participants engaged with NFTs. The study finds that artists see numerous benefits to NFTs: monetization; possibilities for more openness in the art world; giving extra tools for building community and engagement; opening new audiences of collectors for artists; ability to capture a resale value; scarcity; and ownership and authenticity of a digital asset. The study further finds that artists perceive numerous drawbacks to NFTs: concerns over the sustainability of the technology; a threat to the traditional art world values and established artists; the connection of NFTs to cryptocurrency; the vibe of the NFT community and the overcommercialization of it; the complexity of the blockchain technology; lack of transparency, regulation, and security; the aspect of monetization and gaining the audience being complex; and there being too much noise in the NFT space. Most research participants still view NFTs as a positive development for artists. The formative influence for most has been their research and experience, conversations with other artists and people in the industry, and seeing established artists using NFTs. The study finds that most research participants perceive NFT as a paradigm shift for artists. As of spring 2023, NFT technology is perceived to be at the Trough of

Disillusionment on the Gartner Hype Cycle, about to start, or possibly already starting the ascent into the Slope of Enlightenment.

Keywords:

NFT; blockchain; artist; NFTs for artists; artists and NFTs; fine art

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1 Introduction

I want to start this thesis with quotes from two vastly different people.

Hubert Humphrey, the 38th Vice President of the United States, once famously said:

"For the first time in the history of mankind, one generation literally has the power to destroy the past, the present and the future, the power to bring time to an end."

Vladimir Lenin, a Russian revolutionary and politician, observed:

"There are decades where nothing happens; and there are weeks where decades happen."

These words ring more accurately than ever nowadays, as the 2020s ushered in the era of uncertainty; uncertainty about whether or not our very existence will continue - and if it does, in what shape or form. What an eventful decade it has been so far - mainly in a horrendous way - starting with a global pandemic that ended millions of lives (Simonsen and Viboud, 2021) and caused severe economic hardship for millions, if not billions more, from the severe lockdowns that were instituted as a response (Ha et al., 2021), continuing to an ongoing war where the aggressor is a nuclear-armed state (Bollfrass and Herzog, 2022), and, finally, out-of-control inflation (Statistics Finland, 2023) and the resulting cost of living crisis plaguing the Western world and eating away people's living standards. Technological progress seems to march on ever faster than ever before, with stunning developments across the field: the rising prominence of blockchain technology (Zheng et al., 2018, as well as Nofer et al., 2017), the hype surrounding AI (Van Assen et al., 2020), and so many other things. It is hard not to get lost in the thoughts that the end of human civilization as we know it is drawing ever closer; at the very least, it is impossible not to acknowledge that a transformative shift is coming.

Most people in the world have been affected by the geopolitical and socio-economic changes that have been taking place. Some adjusted well - and some not so much. While respectfully not undermining the immeasurable suffering experienced by so many, I want to zero in on one group of people, who, by many accounts, have been affected, and many would say took a pretty hard hit - the artists. Museums and galleries were forced shut. Public art displays stopped - since there was no more public for who to display art. Theaters were closed. There

were no exhibitions for the foreseeable future (Frick et al., 2021). Artists from every walk of life and in virtually every country had their livelihoods slashed - overnight. Just when the pandemic had been brought under control with the rapid development and the rollout of the vaccines, an unstable political situation and the ensuing war would divide the world into camps (Bollfrass and Herzog, 2022). Artists, who had been used to working across national boundaries, found it increasingly impossible to work with their colleagues in countries affiliated with different political camps.

The aforementioned technological developments have not made artists' adjustment to the new reality that much easier. In the past decade, there emerged a technology that, until now, has not been talked about much - blockchain (Zheng et al., 2018, as well as Nofer et al., 2017). Essentially, blockchain refers to another way of storing data and records - a way that is transparent and publicly accessible to everyone. Blockchain can store a wide variety of data - be it numbers, which can be used as a de facto currency, or information about ownership of a digital file. Transparent ownership data of digital files could have significant consequences for some artists - historically, it was an immense challenge for an artwork to be put online and sold online, as a digital file could be copied and reproduced indefinitely - diluting or destroying its value. NFTs could be viewed as game changer, as they make it possible to see who owns a specific file (Wang et al., 2021). The fact that NFTs started to enter the mainstream in 2021, with a record having been set by a headline-grabbing sale of 69 million US dollars for a single NFT (Pawelzik and Thies, 2022), is no coincidence: as most of the world was still in severe lockdowns, a new, digital way of owning art was born.

NFT technology is still relatively new; however, it has undoubtedly already fundamentally disrupted how artists work - at least for some artists. Many benefits of NFTs for artists have been theorized, though many drawbacks have also been speculated upon (both of which are covered in subchapter 2.5). One may assume that all artists are excitedly trying out this new technology. Someone else may think that most artists are annoyed that another distraction is happening. This brings us to the topic of this master's thesis: trying to learn which one it is, trying to understand, first of all, whether artists know about NFTs, what artists think about NFTs - the good and the bad, and whether or not they believe that NFTs will constitute a paradigm shift for the way art is monetized or they are just a fad that will soon pass.

Several delimitations need to be established. First, I focused specifically on NFTs attached to digital artworks, with physical artworks and other record-keeping NFTs being out of the scope of this research. Secondly, I wanted to focus on the artist community and their thoughts rather than the collector community. Thirdly, the artist community is vast, so the research group required further delimitation (outlined in subchapters 3.3. & 5.4). Finally, in this study, I am studying perceptions: I put the artist and their thoughts as front and center of this study; I am not looking at NFTs from a technical perspective; instead, I am looking for opinions and perceptions.

My planned research questions therefore are:

RQ1: What is the level of NFT literacy and NFT exposure among the research participants?

RQ2: Assuming a basic understanding of NFTs by the research participants, what are the perceived benefits and drawbacks of the technology for the artists?

RQ3: Why do research participants accept or oppose NFT technology, and do they think the shift to NFTs will be permanent?

2 Theoretical framework

In this chapter, the basics of the NFT technology will be introduced. After that, the technology adoption frameworks will be explained, and how they may relate to NFTs will be analyzed. Afterward, there will be a discussion about artists and their historical and evolving business models. Finally, theorized benefits and drawbacks of NFTs from existing literature will be presented.

2.1 Basics of NFT technology

This subchapter aims to explain the basics of NFT technology.

In a nutshell, an NFT stands for a non-fungible token. To understand NFTs, one must understand the concept of fungibility and the concept underlying a token - a blockchain.

According to a Merriam-Webster dictionary definition, being fungible is “being something (such as money or a commodity) of such a nature that another equal part or quantity may replace one part or quantity in paying a debt or settling an account” or “capable of mutual substitution.” The closest synonym to “fungible” is interchangeable (Fungible definition & meaning, no date). For example, money is an example of a fungible asset, as one 20 euro bill can be substituted for two 10 euro bills without any change of value to either party. Art is typically non-fungible, as a painting or sculpture is usually unique.

A blockchain is a public ledger in which all committed transactions are stored in a chain of blocks and is meant to represent the complete record of the transaction history (Zheng et al., 2018, as well as Nofer et al., 2017). Ethereum is one of the most notable blockchains, albeit not the first (pp 1-3 of Dannen, 2017). While blockchain records typically contain financial information, Ethereum makes it possible to create tokens with different intrinsic features. “NFT is a unique token which cannot be exchanged like-for-like (equivalently, non-fungible), making it suitable for identifying something or someone in a unique way. To be specific, by using NFTs…, a creator can easily prove the existence and ownership of digital assets in the form of videos, images, [and] arts.” (Wang et al., 2021)

To sum this up in simpler terms, an NFT is a record on a blockchain - a decentralized ledger - pertaining to a digital file's ownership and origin information. An NFT can be viewed as a certificate of authenticity (Zhao and Si, 2021). This definition is essential since it is vital to distinguish an NFT from an actual digital file it authenticates - a common need for clarification.

2.2 Technology adoption frameworks

Before diving into the benefits of NFT technology, it is essential to look at the theoretical frameworks of adopting technology.

2.2.1 Gartner Hype Cycle

One of the most common methods of understanding technology adoption is the Hype Cycle by Gartner (Blosch and Fenn, 2018).

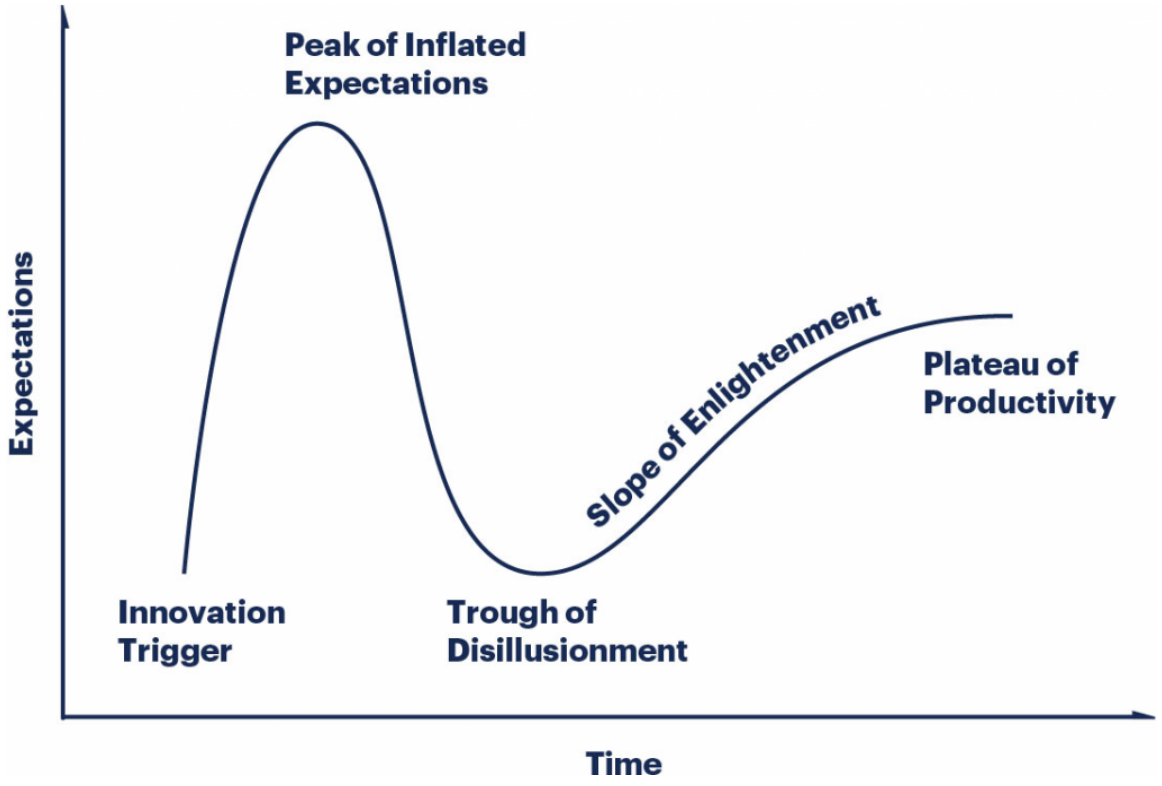

Figure 1. The Hype Cycle by Gartner (Raza, 2020)

Figure one of this thesis shows what the conceptualized model looks like, with the horizontal axis being the time since the innovation was introduced. The vertical axis serves as the indicator of the level of expectations. In plain terms, the model aims to predict the level of expectation of how potent a specific technology is based on how long since the introduction of the technology has passed.

Blosch and Fenn, 2018, explain what the model is and, thus, how the expectation in an innovation varies. Most innovations or digital services go through a pattern of overenthusiasm that quickly collapses into disillusionment, followed by eventual enlightenment and, in the end, productivity. To break down the concept further, every breakthrough product or service comes with a loud "bang" of excessive interest, the initial stage known as the **innovation trigger**. Expectations then quickly build up - way faster than the current capability of the innovation - creating a "bubble," more appropriately known as the **peak of inflated expectations.** Every bubble eventually bursts, and high expectations can never be met with the innovation that has just arrived, in turn slowing down adoption and causing the **trough of disillusionment.** However, early adoption does go on, and the hurdles will eventually be defeated by the early adopters, who can genuinely sense the benefits of the innovation, causing it to go on the **slope of enlightenment**. Soon after that, with the benefits of the invention becoming apparent, adoption starts to go up massively, and more and more individuals and companies are comfortable adopting the service or product. The final stage begins, called the **plateau of productivity**.

According to the model, every innovation is somewhere on the Hype Cycle and will go through it at its speed; there is no uniform time it takes. However, placing any given innovation on the hype cycle makes it possible to estimate how long it will take to reach the plateau of productivity, which in turn means the start of mainstream adoption (Fenn and Raskino, 2008).

Gartner's Hype Cycle carries practical implications for individuals and companies alike regarding their decision to use or invest in a particular innovation. On the one hand, one may want to avoid getting involved in something just because it is being hyped, which is easier said than done – fear of missing out is a genuine phenomenon (Scott, 2020). However, ignoring something that doesn't live up to early expectations can also be hurtful as innovation

goes through the cycle resulting in its eventual improvement. To sum up, to make a good decision about the adoption of an innovation, one must balance the potential value of that innovation, the innovation's current place on the Hype Cycle as well as consider one's level of risk averseness (Dedehayir and Steinert, 2016).

Gartner's Hype Cycle provides valuable insights into technology in general. Not every technology will go through the entire cycle, with many dying off. Understanding Gartner's Hype Cycle educates us that technologies should not be adopted and widely pursued just because they are at the Peak of Inflated Expectations, nor should they necessarily be abandoned and forgotten when they are at the Trough of Disillusionment (Linden and Fenn, 2003). However, despite Gartner's Hype Cycle popularity, there are arguments that the theoretical foundation behind the model is somewhat weak (Steinert and Leifer, 2010); therefore, more than one theory for technology adoption should be examined.

2.2.2 Diffusion of Innovation

Another model to examine the rate of technology adoption is called the diffusion of innovation; Everett Rogers introduced the theory in 1962 (Miller, 2015). Diffusion of Innovation explains how and why individuals and groups adopt new ideas, technologies, and products within a society.

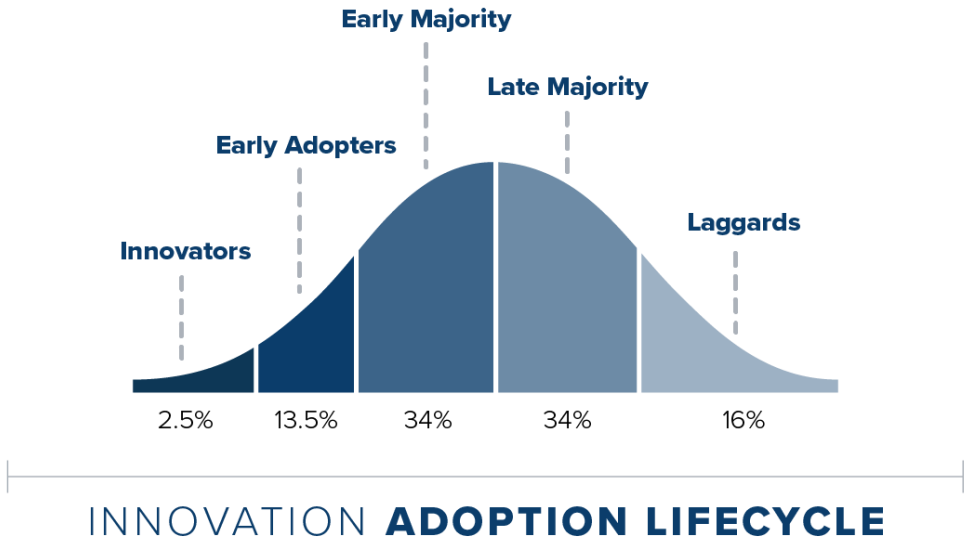

Figure 2. Diffusion of Innovation (Recchia, 2022)

The Diffusion of Innovation theory includes sorting the populous into adopter categories, which describe the different types of individuals or groups who adopt innovations at different stages in the adoption process. These categories include innovators, early adopters, early majority, late majority, and laggards. (Beever, 2022, as well as Singer, 2016). This has significant implications since one's willingness to adopt new technology is driven by the particular group they may belong to - usually formed by their values. Table 1 below provides a detailed description of each of the five groups (Beever, 2022, as well as Singer, 2016).

Group	Characteristics
Innovators	These people want to be the first ones to try the innovation. They are risk-prone and able to cope well with failure and uncertainty. They are the earliest gatekeepers – if this group doesn't take up the innovation, it's dead on arrival.
Early Adopters	This group of people constitutes opinion leaders. Often being managers, they are acutely aware of the need to change and are comfortable with new ideas. They are the true gatekeepers; mass adoption is only possible if the stamp of approval by early adopters has been given.
Early Majority	These people typically adopt new ideas before the average person. They are rarely leaders, but they still serve as essential links in the diffusion process as a connection between early and late adopters.
Late Majority	This group is skeptical of change and will only adopt an innovation after most people have successfully tried it. The late majority has no desire or motivation to change; embracing innovation typically results from peer pressure or necessity rather than genuine desire.
Laggards	The laggards are very conservative and skeptical of change. They are definitely by far the most challenging group to bring on board.

	Laggards are risk-averse, are not opinion leaders, and are considered mainly an isolated group in society.

Table 1. Diffusion of Innovation summary table (interpretation of the author + using Beever, 2022 as well as Singer, 2016)

A significant gap exists between the early adopters of new technologies and the mainstream ones. Early adopters are typically enthusiasts with a higher tolerance for risk and enjoy trying out innovations; the mainstream market - starting with the early majority - is substantially more risk-averse and requires more convincing before they're willing to adopt new tech (Moore, 2014). For a product or an innovation to be successful, this is a critical place to overcome.

In related research, Clayton Christensen, in his book "The Innovator's Dilemma," argues that major companies are often hesitant to invest in new technologies as they would like to protect their existing market, customers, and method of operation (pp 83-84) - at times causing their untimely demise. The book recognizes the importance of responding to innovations promptly (pp 172-174); not doing so risks the company's future success (Christensen, 2013).

2.3 Technology adoption of NFTs

Having introduced the theoretical frameworks for technology adoption, it is worth considering where NFTs lie in both frameworks. I will start with the first framework, Gartner Hype Cycle.

Lori Perri, 2022, wrote on Gartner.com in August 2022 to analyze where different technologies are currently on the hype cycle and the time frame it would take them to reach the plateau of productivity. Conveniently, NFTs are shown on the graph (see Figure 3) and are stipulated to have just passed the Peak of Inflated Expectations and heading downwards into the Trough of Disillusionment. Perri's model specifies that NFTs should reach the Plateau of Productivity reasonably soon, within 2-5 years from publishing the findings in August 2022.

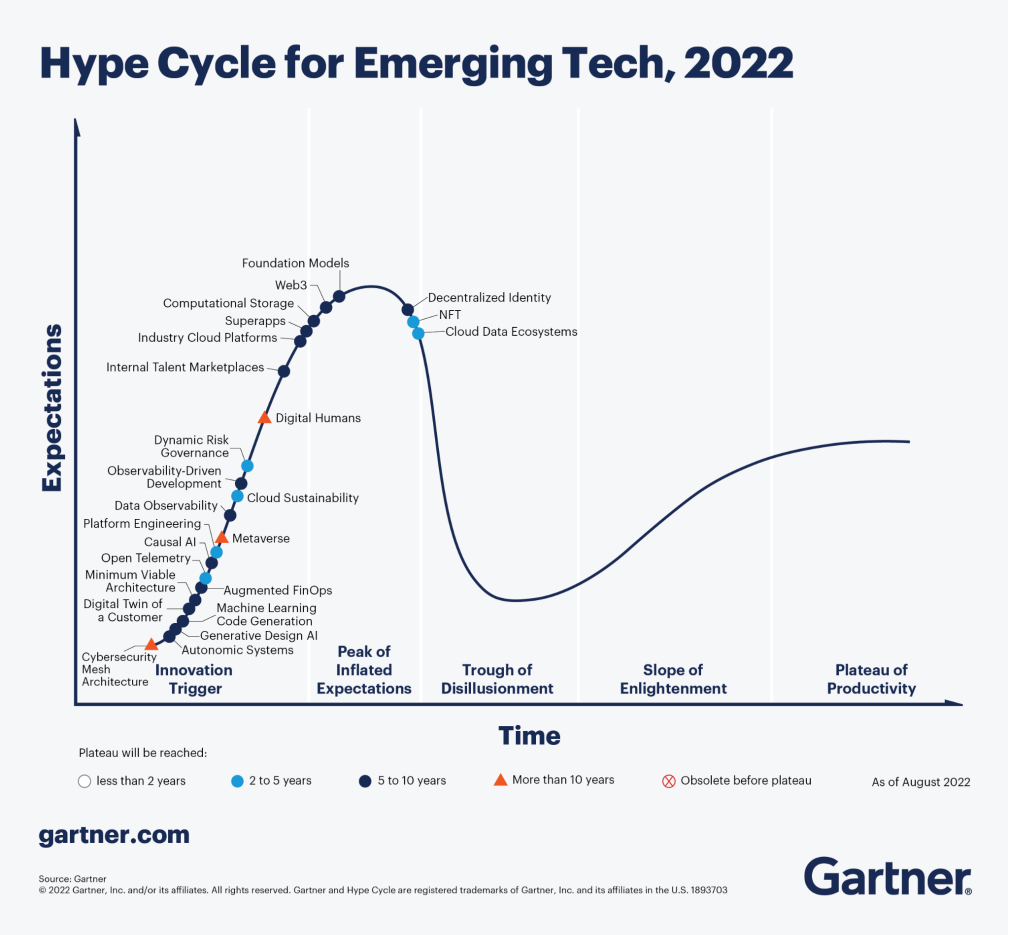

Figure 3. Technologies currently on The Hype Cycle by Gartner (Perri, 2022)

Given the state of the NFT markets in 2022, it is hard not to agree with Perri's assessment. 2021 was indeed the time when expectations about NFTs and blockchain technology were incredibly inflated; in 2022, the market tremendously slowed down, and there seems to be disillusionment with the technology and the crypto/blockchain markets. The amount of interest and media attention on NFT has been steadily decreasing - making it likely that we're going into the Trough of Disillusionment. However, one can expect that as knowledge about the technology - and its limitations - grows, it is likely that adoption will rise again within the next few years, with the Plateau of Productivity being achieved.

Analyzing which group is now adopting NFTs according to the Diffusion of Innovation cycle is much more complicated. There doesn't exist comprehensive research to place NFTs on the scale; however, there is research on the market maturity and the number of people who own NFTs, allowing for informed guesstimates.

Rebekah Carter, 2023 writes for BanklessTimes that there are approximately 360 000 NFT owners worldwide. This number is tiny compared to the world's population, and the article further states that almost 80% of the people in certain countries have no knowledge about NFTs. This would represent NFT adopters as Innovators or Early Adopters on the Diffusion of Innovation chart. However, when examining the art market, the Artsy report by Benjamin Sutton, 2021 states that 83% of respondents said they had purchased art online at least once, a jump from 69% in just two years. More exact numbers are hard to find, and numbers of artists who use NFTs vs. those who don't are impossible to come by; therefore, we could draw an informed guess that we're roughly in the "early adopters" stage as far as NFT adoption goes - with large portions of the population oblivious to NFTs yet significant percentage of art collectors buying art online. As discussed previously, NFTs are in a somewhat precarious position, as a dangerous chasm exists between early adopters and the early majority (Moore, 2014).

2.4 Traditional artists' business model and its disruption

There are many ways artists can monetize their creative practice. The most obvious is sales, with many artists selling their artworks to collectors, galleries, or museums. Offering commissions, or creating artwork on demand, is another lucrative monetization technique for artists. Finally, many artists teach art to earn a living.

With the advent and rise of the Internet in the last decades, artists' way of making a living, or their business model, has undergone a significant transformation (Li, 2020). According to the study by Li, 2020, 90% of the creatives they included in their research have transformed their relationship with customers. The Internet enables artists to reach consumers easier and maximize revenue according to a customer's ability to pay. The Internet has also made distributing art to the final consumer much more accessible. Partnerships with brands have become easier to achieve. Finally, NFTs allow for fractional art ownership - making investing in art a possibility for a broader market than ever before (Willemsen, 2021).

Interestingly, however, while the Internet has transformed how artists market their creations, it has not fundamentally changed the sources of income for people in the creative industry. According to the study by Li, 2020, "many of them continue to rely on funding from public

sources (e.g., the Arts Council), or incomes through traditional means such as selling products (e.g., artworks) and services (e.g., live performances and singing lessons, dancing and performing arts), or renting out facilities and spaces (e.g., studios and art galleries to independent artists).” Digital technologies are essential tools to enhance the business model.

Much has been theorized about the impact of digital transformation on artists’ livelihoods, often in a negative light. Manjoo, 2017, however, argues that more recently, an interesting phenomenon started to take shape - more and more people can support their art practice and creation through subscription-based tools. The paper quotes Jack Conte, the founder of Patreon, one of the companies leading the subscription revolution: “Patreon allows you to subscribe to artists — but instead of funding specific, one-time projects, as on Kickstarter, you fund people on a recurring basis.”

There is an argument that subscription revenue-based companies leave little for the artists, and content platforms like Spotify have been criticized for the way they treat artists. However, social media allows artists to build and monetize an audience via tools like Patreon (Wikstrom, 2022).

Overall, I can summarize that the advent of digital technologies has not essentially disrupted artists’ traditional business models - artists still produce and sell art, do live performances, continue teaching, etc. However, digital technologies allow for a new way for every fan to communicate with their favorite artists and support them continuously, thus creating a revenue stream based not purely on sales and activity.

2.5 Theorized benefits and drawbacks of NFT technology

2.5.1 Theorized benefits of NFTs for artists

There are several theorized benefits related to NFTs from the artists’ perspective.

First, artists enjoy more independence from traditional institutions and gatekeepers in the art world. Online platforms where NFTs can be bought and sold could replace galleries and auction houses while charging significantly lower fees. (Bsteh and Vermeylen, 2021). A lower barrier to creating and presenting an artwork has also been theorized (Sharma et al., 2022).

In addition, considering the global reach of these platforms, artists are no longer confined to one city or one country where they can build a community of aficionados - with the advent of NFTs, artists get the possibility to make themselves a brand and nurture a genuinely global community (Bsteh and Vermeylen, 2021). For example, Refik Anadol, one of the most successful digital artists of the 2020s, has amassed over 15 000 members on his Discord server - a platform popular in gaming and NFT circles.

In addition, a crucial benefit of NFTs for the artist is the possibility to program a smart contract to capture a percentage of each resale value for a given artwork - as long as it is attached to an NFT. The standard mark set so far is approximately 10% (Bsteh and Vermeylen, 2021; Jung, 2022; Kugler, 2021). This benefit is also mentioned by Sharma et al., 2022: “Every time the NFT is (re)sold, the original creator could earn a portion of the sale price.”

The uniqueness of NFTs and the ability to track and prove ownership of artworks are additionally some of the other reasons why artists engaged with NFTs (Sharma et al., 2022): “NFTs are valued for their traceability, rarity and ownership with the help of underlying blockchain technologies.” In addition, “the principles of ownability and verifiability may notionally see NFTs emerging as a means for creative entrepreneurs to build new revenue streams by monetizing previously non-monetizable outputs” (Chalmers et al., 2022).

2.5.2 Theorized drawbacks of NFTs for artists

Now we shall consider the theorized drawbacks of NFT technology; there are several.

One significant drawback is that transaction fees associated with various cryptocurrencies can be extraordinarily high - making it harder to sell art at larger edition runs or lower prices. In addition, the cryptocurrency market is notoriously volatile, making it impossible to have a more or less constant revenue stream. These factors can eat into artists' profits to a large extent. (Dowling, 2022 as well as Chalmers et al., 2022).

Somewhat related is the theorized issue of the complexity of the NFT technology: “Despite support from the community, many [study] participants … repeatedly emphasized the challenges of learning and understanding the sophisticated concepts and terminologies of

blockchain technologies especially during the early stage" (Sharma et al., 2022). An argument is also made that this complexity is unnecessary and does not provide the benefits of scarcity and ownership that it claims to (Frye, 2021).

Another issue is that for a long time (from its inception in 2015 until September 2022), Ethereum, the largest blockchain for NFTs, has been operating on a Proof-of-Work consensus mechanism, which caused a significant consumption of energy. It has been theorized that some artists did not want to associate with the technology due to reputational concerns (Erdogan et al., 2022, as well as Calma, 2021).

It is also mentioned that the quality of artworks available in the NFT circles may be low. Prior reputation and the number of followers on social media are seen as more important factors than the quality of the artwork. Artists may be discouraged from seeing their work, in which they may have put significant effort, selling worse than a lower quality work (Sharma et al., 2022).

Another issue comes from artists having always enjoyed the copyright of their artworks - unless they specifically signed it away. NFTs and the decentralized system are challenging the whole concept of copyright and have the potential to make it obsolete. Nevertheless, NFTs can shift the balance of power currently held by distributors of copyrighted works to individual artists - potentially enabling artists to exercise greater control over their work (Carroll, 2021).

Finally, an issue of security and the proliferation of scams in the NFT spaces has been mentioned, as well as the creation of "fake" NFT collections meant to undermine the original creations (Sharma et al., 2022).

3 Method & process

3.1 Qualitative research methodology

In this thesis, I used a qualitative research method.

Qualitative research explores, understands, explains, and theorizes complex phenomena that cannot be easily, reasonably measured, or quantified. It usually involves data gathering via open-ended interviews, observations, or other techniques. The data collected through qualitative research is then analyzed; the analysis aims to identify patterns, recurring themes, and additional meaningful insights. Qualitative research analyzes data using inductive reasoning - identifying the underlying patterns and themes. (Strauss and Corbin, 1990, as well as Creswell and Creswell, 2017).

The article "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology" outlines the basic principles of rigorous qualitative research (Gioia et al., 2013). The article states that the heart of qualitative research is a semi-structured interview. According to the methodology, extraordinary attention should be paid to the interview process to ensure it is both thorough and, at the same time, not leading. However, interview questions also must change as the research progresses - they should reflect learnings from previous interviews and not be completely standardized (Gioia et al., 2013).

Once the data from the interviews is gathered, it is then analyzed. Even the first interviews yield dozens of unique first-order concepts; however, with the progression of research, the count of categories starts to reduce through combination. Afterward, a second-order analysis is done to combine the concepts into broader themes, and finally, themes are integrated into aggregated dimensions (Gioia et al., 2013). An important difference to note is that the first-order codes are something that the study participants bring up themselves, and then the researcher's analysis creates 2nd order themes.

3.2 Reasoning behind the applied methodology

In my thesis, I used qualitative research methods and conducted inductive research. In this sub-chapter, I briefly outline my reasoning for this.

First of all, as mentioned in both Pawelzik and Thies, 2022 as well as Sharma et al., 2022, due to the novelty of the topic of NFTs, there simply needs to be more theories formulated to start proving or disproving any theories. The slate is almost clean, making rigorous qualitative inductive research more valuable: when there are virtually no theories to prove or disprove, one must make theories first.

Secondly, there needs to be more literature on the topic and data that has been previously gathered to justify conducting a structured literature review. Again, the subject is novel, and with little existing literature, such an approach would not be scientifically sound. In addition, since I am looking to understand the root causes, quantitative research does not work out as it would need to start with existing presuppositions to build a survey.

Finally, as far as the data analysis goes with transcribing the interviews, coming up with codes that interviewees brought up, and then through rigorous analysis combining them into second-order themes and finally into aggregate dimensions, seems to be the standard process outlined in multiple articles reviewed and referenced so far, not to mentioned outlined in the "Seeking Qualitative Rigor in Inductive Research" paper by Gioia et al., 2013.

3.3 Process explanation

This chapter outlines my approach to methodological procedures, data collection, and data analysis strategy.

I conducted ten semi-structured interviews, all approximately half an hour to one hour in length. The total duration of the interviews was 6 hours 55 minutes. In addition, one artist submitted their answers in writing, so 11 people participated in this qualitative study (for the presentation of results, these participants have been coded R1-R11, where R stands for "respondent"). I had discussions with both artists who never used the technology and could be viewed somewhat as opponents of it and with artists who have actively used NFTs and can be seen as the technology's advocates - and even some of those who were opponents in the past.

All interviews were conducted in English using remote communication software, with the interviewee's consent obtained beforehand via email and again before the interview's

commencement. The interviewees were guaranteed that their responses would be anonymized, however, used for the research that would then be made public. All the interviews were recorded, and all participants were told that the recording would not be made public and would be destroyed within six months after the completion of the thesis project. All interviewees consented to have the interview recorded. No incentive or compensation was offered to the interviewees for participation in this study; their participation was voluntary and optional.

The interviews were transcribed after they were conducted, which was necessary for a thorough and rigorous analysis. I conducted rigorous analysis utilizing Gioa's methodology as outlined in the Seeking Qualitative Rigor in Inductive Research paper (Gioia et al., 2013). Codes were identified in the interviews (based purely on the interviewees' responses) and were then combined into second-order themes by analyzing them. Finally, second-order themes were incorporated into aggregate dimensions.

On a few practical notes, artificial intelligence-assisted software was utilized for, inter alia, transcribing the recordings of the interviews. However, for the avoidance of doubt, I find it essential to stress that no artificial intelligence written text is present in this master's thesis (besides the rewrites generated by Grammarly during final proofreading). However, utilizing AI-assisted software to assist with transcribing was deemed necessary as the recordings yielded approximately 100 pages of transcript text. The author of this thesis had access to artists and was able to discuss the research questions of this thesis with them due to his employment at Sedition, which is a digital art platform.

To review the selection of interviewees, all interviewees were practicing artists whose practice had already taken them to produce works in digital form. There was a presupposition that while awareness of NFTs is relatively low in the general public, practicing artists do have existing knowledge of NFTs. The attempt was made to select artists who have already verifiably used the NFT technology and those who have yet to. In addition, an attempt was made to interview artists practicing in different art forms and living in various countries to create better variety. Only artists residing in the Western world were interviewed to delimit the artists further. All artists interviewed were, at the time of the interview, residents of either the United Kingdom, the United States, the Netherlands, or Slovakia. This was a deliberate

delimitation as acceptance of technology differs in various parts of the world: attempting to understand NFT usage among artists worldwide would have been a more significant and challenging undertaking, falling beyond the scope of the master's thesis.

Interviews were semi-structured; the following questions were examples of what was asked. The questions were broken down into three groups - related to the research question they aimed to answer. The questions slightly evolved and reformulated as the interview process progressed.

What is the level of NFT literacy and NFT exposure among the research participants? (RQ1)

- How familiar are you with NFTs?
- How familiar are you with the influence of NFTs on the art world?
- Have you ever used NFTs?
- How do you understand/perceive NFTs? / Could you define NFTs in your own words?
- How quickly do you adopt technologies in general (using the Diffusion of Innovation chart)?

Assuming a basic understanding of NFTs by the research participants, what are the perceived benefits and drawbacks of the technology for the artists? (RQ2)

- What do you think are the benefits of NFTs for artists?
- What do you think are the drawbacks of NFTs for artists?
- Do you think NFTs can help artists monetize their artworks?
- In your view, can NFTs help to increase an artist's exposure and reach a wider audience? Why or why not?
- Do there exist any ethical or legal issues related to NFTs that are of concern to you?
- What are your thoughts on how NFTs might affect copyright rules and regulations?

Why do research participants accept or oppose NFT technology, and do they think the shift to NFTs will be permanent? (RQ3)

- Which do you think outweighs - the benefits or drawbacks of NFT technology?
- What do you think about NFTs? What is your opinion on NFTs?

- What has been the primary factor influencing your opinion on NFTs?
- Have discussions with other artists influenced your opinion on NFTs?
- Do you think other artists agree with your opinion? / Have you discussed your opinion on NFTs with other artists?
- Do you view NFTs as a fad or a long-term shift in how artists monetize their art?
- Are there any specific factors that would make you more or less likely to use NFTs in the future?
- Where do you feel NFTs fall on the Gartner Hype Cycle?

4 Results

4.1 Preface and overview

This chapter outlines the interview results following the Gioia methodology. After the interviews were conducted and transcribed, over 200 first-order codes were identified. These codes were then grouped to become second-order concepts, with second-order concepts, in turn, forming the aggregate dimensions. A total of 23 second-order themes relevant to answering the research questions were identified, in return forming four aggregated dimensions: four second-order themes formed the first aggregate dimension (NFT literacy and exposure to NFTs), six second-order themes formed the second (Perceived positives of NFTs by the research participants), eight second-order themes formed the third (Perceived negatives of NFTs by the research participants), and five order themes formed the fourth and final aggregate dimension (Evaluation of NFTs by artists and the perceived future). Many of the first-order codes ended up being dropped due to being out of scope for this research and could open up other possibilities for research, as outlined in the discussion.

This chapter outlining the results is structured in sub-chapters of the aggregate dimensions. These sub-chapters are, in return, broken into sub-sub-chapters of the second-order themes. Those sub-sub-chapters outline the results of this study by using the participants' quotes (first-order codes) and identifying relevant patterns.

4.2 NFT literacy and exposure to NFTs

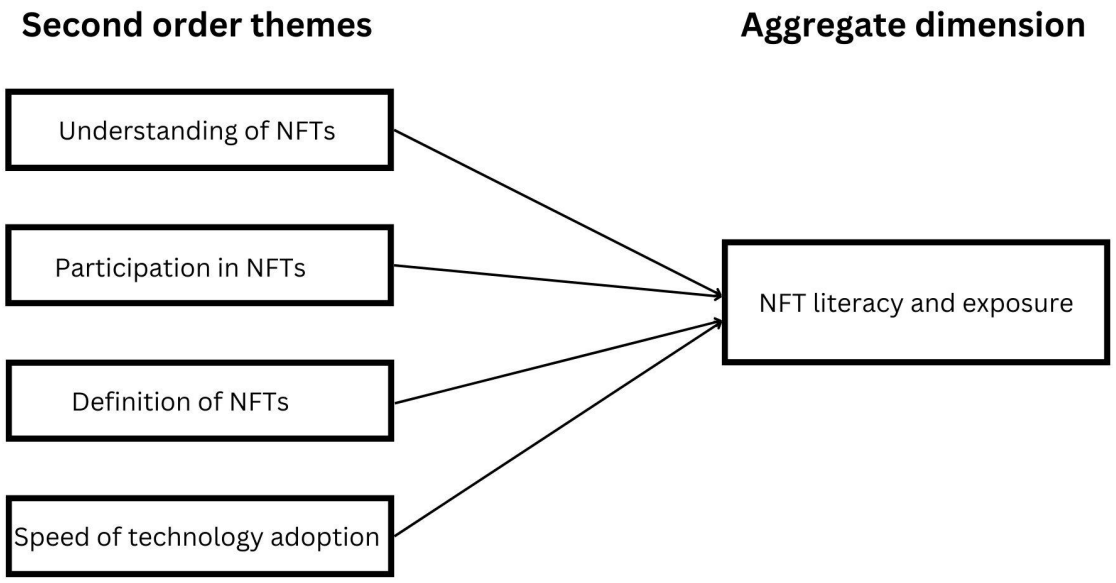

Figure 4. Summary of second-order themes forming "NFT literacy and exposure to NFTs" aggregate dimension

4.2.1 Understanding of NFTs

The understanding of NFTs varied considerably among the research participants, as was the intention. While some subjects reported a clear understanding of NFTs (R1), some mentioned they were "quite familiar with NFTs, especially during the prime of the NFT discussion, but feeling slightly less engaged in recent time" (R2). Others said that they are "fairly familiar with NFTs but not an expert" (R4), and a point was made by one research participant: "I feel nobody really is [familiar], and I'm trying to be informed (R5)". Another participant mentioned, "I haven't got a huge amount of experience with NFTs or the crypto world" (R9). One stated, "I was quite early, not with creating NFTs, but with actually purchasing and exploring the space" (R7).

Overall, the understanding and familiarity with NFTs among the research participants can be rated as moderate, i.e., not high or extensive but not lacking familiarity completely nor having basic or some understanding only.

4.2.2 Participation in NFTs

Out of the eleven research subjects, only three had never bought (R4, R8, R11) nor sold NFTs as artists by the time of the interview. Several artists reported making NFTs sales on various platforms and briefly shared their experiences with different platforms. Most artists interviewed mentioned selling their artworks on Sedition as NFTs; however, some artists launched NFTs on other platforms but not on Sedition.

4.2.3 Definition of NFTs

The research participants gave various definitions of NFTs, illustrating a varying degree of literacy with NFTs. To present several well-crafted definitions, “It's a stamp on the blockchain that is attached to some digital object. And it's forever, as long as the blockchain survives, the NFT survives” (R1), “a way to verify someone's creation, like a much more secure digital autograph” (R7), and “unique computer code sort of pointer to an artwork” (R10).

An important observation has been made by some artists that people “mix up NFTs with art. Art is a very small part of NFTs, and [an] NFT is just a non-fungible token” (R5).

4.2.4 Speed of technological adoption

During the interview, research participants were asked to place themselves on a Diffusion of Innovation theory graph. Of the eleven participants, two put themselves as innovators (R7, R11), six as early adopters (R1, R2, R3, R6, R8, R10), and three as the early majority (R4, R5, R9, with all 3 interestingly saying they’re towards the tail of the early majority or right in the middle between the early and late majority). No one reported themselves being late majority or laggards. Overall, one can consider the average place on a graph of the research participants as an “early adopter.” It is worth noting that some people mentioned that “I have often been an innovator, but only in my own professional field” (R11) or said that it would depend on the industry and the technology being considered.

4.3 Perceived positives of NFTs by the research participants

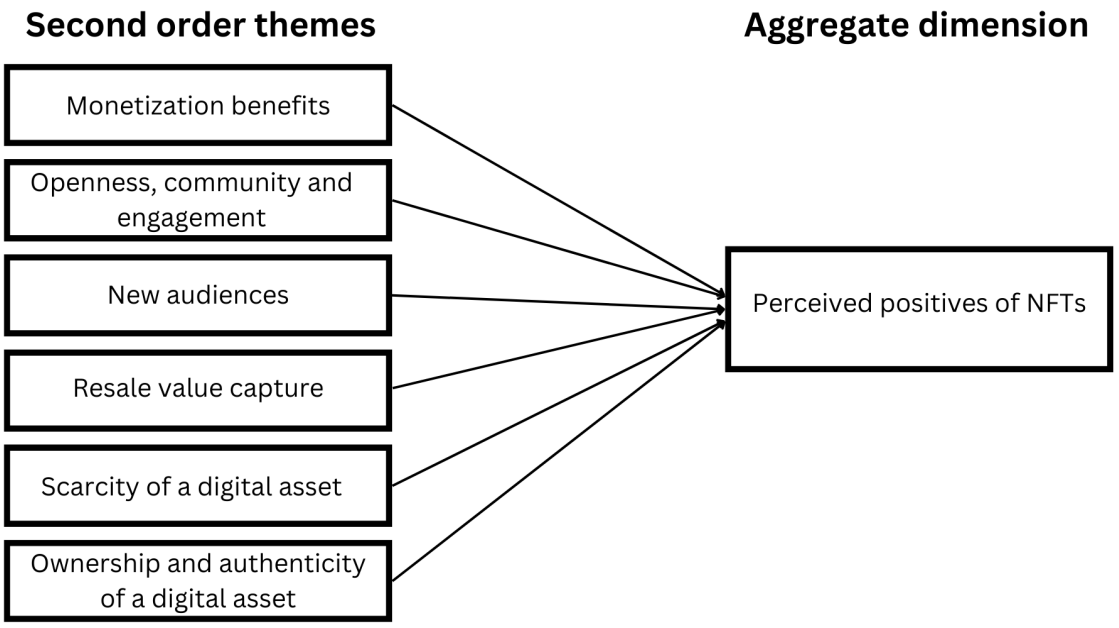

Figure 5. Summary of second-order themes forming "Perceived positives of NFTs" aggregate dimension

4.3.1 Monetization benefits

Multiple artists reported that NFTs help artists monetize their work. Artists mentioned that "it's … a great opportunity for artists to maybe make a little living from this or even big living (R1)" and "for sure, it has helped me monetize [my art practice]" (R7). It was mentioned that "there are artists that think I cannot make money from art, but there's NFT, so now I can make art, and then it's true art" (R7), which clearly shows that the monetization benefit of NFTs can be of strong appeal to many artists who would not pursue creative practice otherwise. In addition, it was mentioned that "maybe people will more easily buy digital artwork" (R11). One artist further shared that "I had a show, and then someone want[ed] to buy my artwork, but the deal didn't go through because both of us [were not] so sure how to trade this artwork [before NFTs]" (R8).

It is worth pointing out that NFTs cannot be viewed as the panacea for monetization for artistic practice, as outlined in point 4.4.7.

4.3.2 Openness, community, and engagement

Another theme that emerged was that NFTs are “open for many people all around the world” (R1) and can be helpful in “democratizing the art market” (R10). It was mentioned that “[artists] can approach different types of audiences more easily, so [they can] get their work seen more globally without them having to travel … [and] use a lot of expenditure to get around the world” (R4). NFTs were said to “make the art world more democratic and more open” (R3).

It was mentioned that NFTs open up the art world not only to new and established artists but are also enabling community interaction and engagement among artists & collectors: “Not only that artists can connect to the art world, [but] collectors who historically [have] been excluded can [also be more connected to the art world]” (R1) & “there's a lot of communication that can be done between artists and between collectors. It's very interactive and accessible online” (R1). At the same time, though, the NFT-related interaction can extend into the real world, with an artist remarking that “when I went to South Korea, … I was quite surprised they have an NFT gallery. So the whole big massive gallery is dedicated to the NFT” (R8). Another one shared that they attended “NFT Paris… [at the] end of last month [and that there were] … many people within … a specific type of circle” (R2).

NFTs were also mentioned to allow artists to “bypass [the traditional] gatekeepers of the art world” (R1).

4.3.3 New, previously untapped audiences

NFTs were said to expand the art world and bring in people who may not have been interested in the arts before: “Many of them … would not buy art without NFTs and some of them would buy less art and some of them would want to buy art, and we wouldn't know how” (R1). In addition, NFTs and the possibilities offered by the digital medium have brought in younger people, with a remark that NFTs help in “reaching younger audiences specifically, ... reaching young people who really understand this world” (R9).

4.3.4 Resale value capture

An essential benefit of NFTs that was mentioned was that they could bring the artist back a resale value on secondary sales (i.e., collector-to-collectors sales), therefore not excluding the artist from the growth of the value of their artwork: “covers not only the first sale but the future sales” (R10).

4.3.5 Scarcity of a digital asset

According to several artists participating in the study, NFTs “solve easy reproductivity of digital images and [art]works” (R2) & NFTs are “giving your digital work some scarcity so you're able to sell it” (R6). This refers to the fact that a photo or a video artwork can be sold with the understanding that there will only be X number of copies in circulation, ever.

4.3.6 Ownership and authenticity of a digital asset

It was mentioned that NFTs are “allowing some ownership over copies of your work” (R6) and that the artwork “gets verified in the digital medium that was not before possible” (R7) and that “you have ownership and share ownership with someone else, like collectors” (R6). It was also mentioned as “a sense of knowing who owns your art” (R10).

4.4 Perceived negatives of NFTs by the research subjects

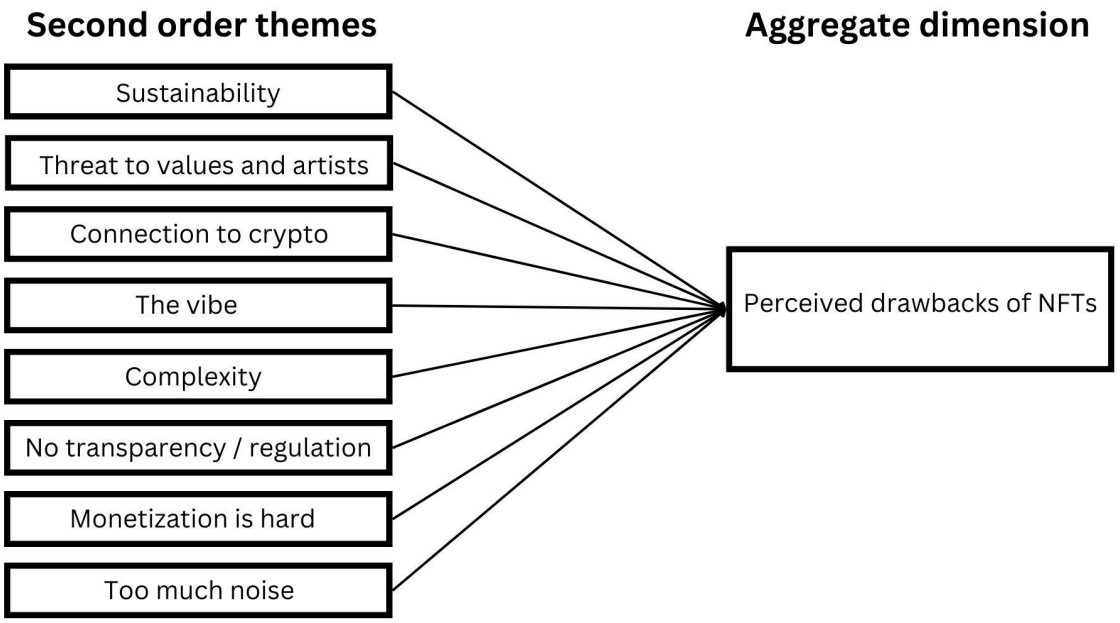

Figure 6. Summary of second-order themes forming "Perceived drawbacks of NFTs" aggregate dimension

4.4.1 Environment and sustainability

While this is not per se a negative of NFTs for artists, virtually every conversation mentioned environment and sustainability at or near the top of the negatives of NFTs (all except R3, R7 & R11). For instance, "everything that is done in the world also has a price. You know, everything we do is producing energy, and that's an issue" (R1), and "[cryptocurrency] mining is really problematic." An interesting argument was made: "The artist is the first one to go out and do the pickets and let's save the earth. So if it kills the environment, [and] there are a lot of voices … that NFTs kill the Earth" (R8). It was mentioned that "[my] friends, artists, some of them strongly feel bad about NFT. … As soon as there was the environmental issue, the artists turned their backs right away" (R8).

However, it is worth noting that after mentioning to the interviewees that Ethereum's energy consumption has been significantly reduced, the comfort level with NFTs has dramatically increased. Despite that, one artist said, "I don't know how that compares with other transactions in the amount of energy an NFT uses compared to an email or sending [and]

uploading a video file" (R10). Another one mentioned, "I'm a realist... [I run] my CPU during the day; whatever I'm processing at home uses intensive energy" (R6).

4.4.2 Threat to traditional art world values and established artists

A recurring theme concerns the threats that NFTs can pose to established artists and galleries. For instance, "If you are a very big artist with … a gallery, it's maybe threatening you a bit because it makes the art world more democratic and more open. And maybe you would become less relevant because you're from the old world" (R1) & "The more you're comfortable in the old art world, it works for you, the less likely [you need] NFTs" (R1). Though on the contrary, it was also mentioned that NFTs could "exacerbate the divide between successful and less successful artists, making it difficult for emerging artists to gain traction in this competitive market" (R9) and that "if you're Tracey Emin or you're the Chapman brothers or you're … a big name artist, then you can [monetize your art via NFTs]. …Damien Hirst. Another one" (R10). It was further mentioned that NFTs and digital art could lead to "a less controlled presentation of artwork, less curated than a gallery" (R4) as well as a "diminished physical experience of art" (R8).

An example was given: "Does [the] name Nam June Paik sound familiar to you? … He is a pioneer of video art. Probably the first person who opened up the TV tube … and created these very interesting abstract techno images … [with] flickering stuff, and [he] did a lot of not just that, but very insightful works. I saw his piece alongside a name that I've never heard before of an artist …, and the second sold for way more than this iconic piece from Nam June Paik" (R5). There is somewhat a fear that while democratization of the art world is good, the problem is "that [the current art community may often] lack knowledge of … art history in general because art today is very much open, the sky's the limit" (R5). A reflection was shared that "unknown artists who were jumping onto NFTs early on were able to benefit massively" (R9).

4.4.3 Connection of NFTs to cryptocurrency

While the interviewed artists view blockchain technology fairly positively, cryptocurrency is not at all viewed positively: "NFTs are connected to crypto money, and crypto money is very dubious. I wouldn't really want to be involved very much in crypto money unless it was

connected to art" (R1) & "The cryptocurrency sounds very dodgy. Yeah, sounds very dark" (R8) & "[The negatives?] I guess there's the payment thing of crypto" (R9). Bitcoin is viewed particularly negatively: "this dark side of bitcoin and association with the dark web crypto bitcoin" (R8). Another example can be this response to my question on if NFTs and blockchain became commonplace in the world, would you be happy to engage with them: "Yeah. If it doesn't become like bitcoin, yes" (R8).

Several people mentioned ongoing world events involving negative coverage of the crypto industry, such as "cryptocurrency world, it's … open to fraud on all … levels, from copyrights infringements to whatever happened with the Friedman-Bank. And it's a lot. So. I think all these things are a little bit like the Wild West" (R5). Several respondents (R2, R6) shared confusion about keeping sales profits in cryptocurrency or turning them into a government-backed currency. In addition, others (R9) even recalled stories of losing substantial money due to cryptocurrency investment. Ethical concerns on the origin of the crypto money were raised: "Could the black market be an issue? Like trading through the black market?" (R9).

4.4.4 The vibe and the overcommercialization

It was mentioned by several artists that one reason that some artists are not happy to be in the NFT space is the vibe of the NFT community: "People don't like it [NFTs], don't like the vibe" (R4). It can be presumed that it refers to the overcommercialization by the NFT community, i.e., buying art to make a profit rather than to enjoy the artwork collected: "People in the business look at it from [a] business point of view, and that's not good. But that's like all that can be said also … [about the] old art world" (R1). It was repeatedly mentioned in the discussions that "people … enter the market only for financial gain" (R3): "It's [a] kind of financial markets [people] that aren't really interested in the art, but more interested in the financial benefit of collecting art. Because I think from the offset of NFTs, it's a huge hype around making huge money" (R9) & "the negative is that … they're not actually interested in the work, energy, and meaning behind the work, which is quite sad" (R10).

Finally, several artists mentioned that they weren't happy with the quality of artwork in the NFT market (R3, R5, R7).

4.4.5 Complexity of the technology

Multiple artists mentioned that learning about NFTs takes time, as it is “a lot of information” (R2); the negative is that the “process is quite tricky even for people who are really technological” (R4). Artists claim that “[NFTs are] very difficult, technologically difficult” (R9) and that the time spent researching the technology behind NFTs could have been better spent creating art.

4.4.6 Lack of transparency, regulation, and security

It was repeatedly mentioned that the lack of transparency in the space, the lack of regulation around NFTs, and the lack of security in this new development are the perceived negatives: “security, people getting scammed, hacked” (R2), “regulate [the NFT and crypto world] and people's comfort level will rise” (R2). People’s negative experience with crypto can sometimes also dictate their attitude: “[my problem is] the lack of security of this whole development. NFTs in the arts are carried by a system where huge speculative profits … are often intertwined with criminal milieus. My son had a wallet that was stolen completely empty” (R11).

4.4.7 Monetization and gaining an audience are hard

While point 4.3.1 outlines that the NFTs can carry the benefit of monetization and point 4.3.3 talks about a previously untapped audience, NFTs are not viewed as a panacea for monetization or for gaining and building a community. Instead, NFTs are viewed as another platform, which will be further explored in point 4.5.4. The statements include: “Have NFTs helped with exposure? I think the answer that most people would have is yes. But I think I will have to say no” (R7) & “[NFTs are] ostensibly meant to be helping artists, but maybe other people are capitalizing on it more” (R4). It was mentioned that very few artists make a lot of money with NFTs, and while NFTs can help to gain a “bigger audience …, [it is] very hard” (R6). An argument goes that “[with NFTs,] it's not [like you are] going to suddenly find [an] audience. So I think ultimately you come back to the same old things of, like, it's not just having great work, it's not even just having a platform, NFT, YouTube, whatever. It's actually finding a way of getting people to discover what you have created” (R10).

4.4.8 Too much noise

A final theme observed is the presence of too much noise in the space precisely due to the advent of NFTs. This is partially related to the previous point 4.4.7, that “I could mint [my work] as an NFT and then put it on the Internet and tons of people see it, or no one sees it either because there's so much noise” (R6) and that there are people for whom “it's like their hobby and they generate some drawings or whatever, but they're not like serious artists” (R6). It was mentioned that “a lot of people [are doing NFTs] … for the wrong reasons[, they] want to make money: if you really dive into what an artist has done and you see the whole journey that they've gone through to get to that painting or to their work, then it's very easy now to grab a canvas or a digital canvas or whatever, do something for an hour, and then say, this is art here” (R7). This noise “wouldn't be there if NFTs weren't the thing” (R7); however, the counter-argument also goes that “otherwise [without NFTs many] people would never have the incentive to create art. I think that there's a lot of art coming from a place where people think: I can make money from it” (R7).

4.5 Evaluation of NFTs by artists and the perceived future

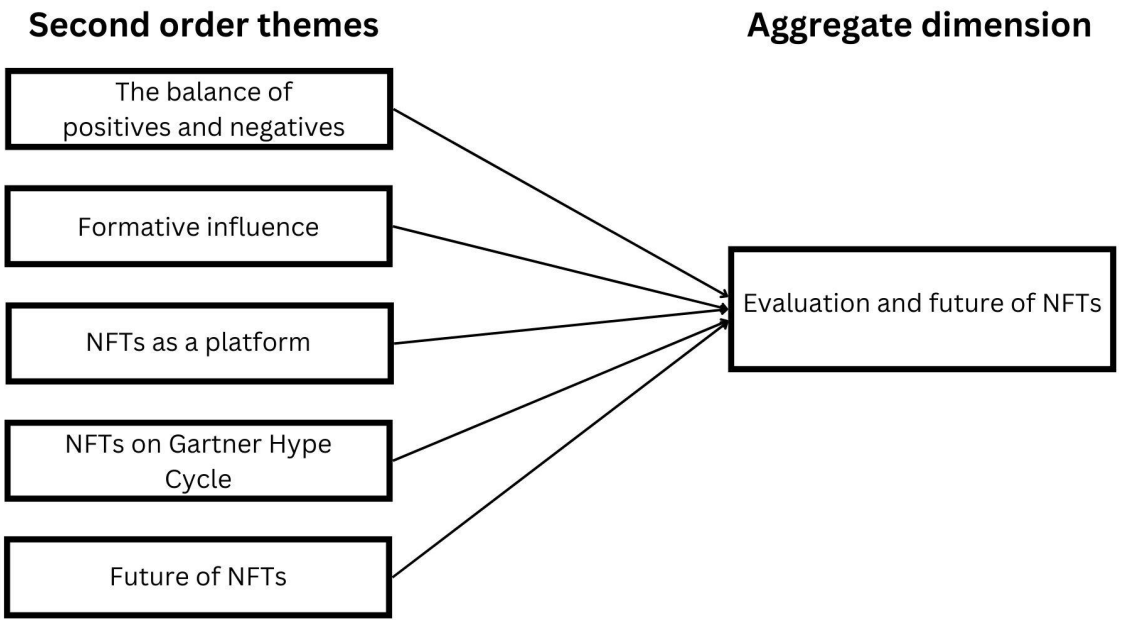

Figure 7. Summary of second-order themes forming "Evaluation and future of NFTs" aggregate dimension

4.5.1 Opinions: The balance of positives and negatives

Some of the research participants were 50/50 (R5, R8) or undecided (R10, R11) on the balance of the positives and negatives of NFTs. In addition, many (R1, R2, R3, R4, R6, R7, R9) thought that the benefits of NFTs outweigh the negatives, either strongly or somewhat: "[I believe] in the potential of blockchain technology and the development of Web3" (R3) & "[I think] more benefits to drawbacks" (R3) & "I think the benefits of NFT technology fairly outweigh the drawbacks as of this moment" (R6). No study participant took the definitive position that the negatives of NFTs strongly or somewhat outweigh the positives. However, it is also interesting that some were relatively undecided and chose not to take a stance: "I think it's too early to say. I think we're in a big experiment" (R10).

4.5.2 Formative influence on the opinion

The main formative factors influencing the research participants on NFTs are their research, experience, and conversations. For many (R1, R2, R5, R6, R7, R8), the "research from a technical side has come from the Internet" (R7) and via personal observation (R2). As far as

influences from other people, it was said that the fact that “more veteran artists that went into NFTs” (R1) and “seeing kind of bigger artists … use it, but then also sometimes it's also about seeing kind of less well-established artists using it” (R4) was formative. It is important to note that it was not only fellow artist influence but also conversations with people in close circles and the representatives of art platforms.

It is worth noting that some respondents stated that other artists had no influence on their opinion regarding NFTs: “No. Most of the artists in my world are sculptors, physical artists” (R9).

4.5.3 NFTs as a platform

A curious observation relates to several people perceiving NFTs as a platform akin to YouTube or Google rather than a technology: “NFT is just another platform” (R3) & “I think … I see NFTs as a platform. And YouTube's a platform, Vimeo is a platform, Apple Music is a platform, and Spotify is a platform” (R10). This line of thinking could position NFTs on par with other ways to sell art and monetize the artworks rather than a technology meant to disrupt the art world and the market.

4.5.4 NFTs on Gartner Hyper Cycle

The interview participants positioned NFTs in different places on the Gartner Hype Cycle. While every research participant agreed that the “Peak of Inflated Expectations” is behind for NFTs, there was no consensus on whether it had passed the “Trough of Disillusionment.” For some, the argument was that the technology is “coming down from the Peak of Inflated expectations, but I don't think we're down very far” (R10) and that it is “between Peak and Disillusionment” (R11) & “still going down towards the Trough of Disillusionment” (R3). However, many more said that NFTs are “just on the very edge of coming out of the Trough of Disillusionment” (R9), “At the bottom of the Trough of Disillusionment” (R6), “in the middle of the Trough of Disillusionment” (R8), and “We might still go down a bit more to hit the Trough of Disillusionment, but I don't think my disappointment level will go down more” (R7). Several others stated that NFTs are at the “beginning of Slope of Enlightenment” (R4) & “past the Trough of Disillusionment, going into the Slope of Enlightenment” (R2) & “we might be on the slope of enlightenment” (R1).

Overall, the consensus of the artists who participated in the research is that NFTs are either at the bottom of the Trough of Disillusionment, about to start, or possibly already beginning the ascent into the Slope of Enlightenment.

4.5.5 Future of NFTs

Most interview participants believed NFTs would be a long-term shift in how artists monetize their art. The opposing arguments went: “All new developments are permanent, but few are successful” (R11) & “It seems like a fad. I can't think of it any other way right now because just again, it's like not being adopted. There's so much hype and then nothing” (R6). The optimistic respondents outright stated that NFTs would be a long-term shift, saying, “I don't think it's going anywhere” (R5) and “I'd be surprised if it's something that just disappears” (R4). Others weren’t so sure: “I would say the jury is still out. I don't know whether, in five years' time, we'll be going, do you remember NFTs? Or whether we'll be going, do you remember when we didn't do things as NFTs? It could be either” (R10), with many unsure yet expressing hope: “I don't know. I hope it's long-term. I really hope it's long term” (R7) & “I wish it would be the long term shift for an artist” (R8) & “We need [such technology]. We need technology to trade digital artworks safely, securely, to [be able to] make [something of] value because we need to put the value in the artwork” (R8).

Despite some negative sentiments, most research participants (R1, R2, R3, R4, R5, R7, R8, R9) expressed confidence or hope that NFTs are not just a fad.

5 Discussion

5.1 Key findings based on the interviews

This sub-chapter summarizes each aggregate dimension into a concise answer to each research question.

What is the level of NFT literacy and NFT exposure among the research participants?

The results indicate a moderate level of understanding and familiarity with NFTs amongst artists, with the majority of artists researched having participated in NFTs. This, however, could be skewed due to the average self-identification of being an early adopter.

Assuming a basic understanding of NFTs by the research participants, what are the perceived benefits and drawbacks of the technology for the artists?

The perceived benefits of NFTs for artists include the monetization benefits, possibilities for more openness in the art world, giving extra tools for building community and engagement, opening new, previously untapped audiences of collectors for artists, the ability to capture a resale value capture, scarcity of a digital asset, and ownership and authenticity of a digital asset.

The perceived drawbacks of NFTs for artists include the concerns over the sustainability of the NFT technology and its environmental impacts, a threat to the traditional art world values as well as established artists, the connection of NFTs to cryptocurrency, the general vibe of the NFT community and the overcommercialization of the space, the complexity of the blockchain technology, lack of transparency, regulation, and security, the aspect of monetization and gaining the audience being difficult, and, finally, there being too much noise in the NFT space.

Why do research participants accept or oppose NFT technology, and do they think the shift to NFTs will be permanent?

Despite the negatives, most research participants still view NFTs as a mostly positive development for artists. The formative influence for most had been their research and

experience, conversation with other artists and people in the industry, and seeing established artists using NFTs. Most research participants perceive that NFTs, in one form or another, will be a permanent shift. NFTs can also be perceived as a platform rather than just a technology. Finally, NFT technology is perceived at the Trough of Disillusionment on the Gartner Hype Cycle, about to start, or possibly already beginning the ascent into the Slope of Enlightenment. Many artists hope that NFTs will become a positive long-term shift for artists.

5.2 Key findings compared with the literature review

The study's key findings correspond partially to this thesis's literature review section; however, they offer a more nuanced and balanced approach to the perceptions of NFTs, uncovering many additional perceived positives and negatives of this technology.

Interestingly, the theorized benefit from the literature review of artist independence from the traditional gatekeepers of the artworks (Bsteh and Vermeylen, 2021, as well as Sharma et al., 2022), while featured in the research results, did not occupy a prominent space and has been summed up in the point 4.3.2 of openness, community, and engagement. Another theorized benefit of amassing a global community (Bsteh and Vermeylen, 2021) was primarily dismissed with a strong argument against it (point 4.4.7). The perceived benefit of capturing secondary resale value (Bsteh and Vermeylen, 2021; Jung, 2022; Kugler, 2021) surfaced but was not the center of the discussions. The benefit of the ability to track and prove ownership of an artwork and, therefore, the possibility of creating a new revenue stream (Chalmers et al., 2022) featured strongly in the research.

On the perceived negatives front, the research participants did not touch on high transaction fees associated with NFTs (Dowling, 2022; Chalmers et al., 2022). The related technology's complexity was discussed in the literature review (Sharma et al., 2022, as well as Frye, 2021) and by the research participants. Reputational risks due to sustainability concerns of NFTs (Erdogan et al., 2022, as well as Calma, 2021) featured particularly strongly. The lower quality of some artworks available as NFTs has been featured in the literature review (Sharma et al., 2022) and by the research participants alike, particularly in point 4.4.2. While discussed, the theorized drawback of affecting copyright (Carroll, 2021) did not produce coherent results to be summarized in a relevant second-order theme. Finally, the dangers of

scams related to NFTs and blockchain, in general, were discussed in both the literature review (Sharma et al., 2022) and by the research participants.

On the theoretical model of the Gartner Hype Cycle (Blosch and Fenn, 2018), the research participants almost overwhelmingly disagreed with Gartner's model of the position of NFTs (Perri, 2022). This can be partially explained by the lag between the conduct of the interviews for this research (between 13 March and 8 May 2023) vs. the time when Gartner's model showing NFTs was released (August 2022).

Overall, this study aims to have contributed to the artists' perception of NFTs. At the moment of writing, a large majority of academic and other content of NFTs has been written during the "Peak of Inflated Expectations" on the Gartner Hype Cycle, therefore somewhat skewing the results towards separating people into different camps. This research aims to provide a more balanced view of both positives about negatives of the NFT technology while shifting the focus away from the underlying tech and focusing more on perceived benefits and drawbacks rather than actual benefits and limitations of the technology.

5.3 Implications

The implications of this research are far-reaching for both artists and companies involved in the art world.

First, it is wise to still pay attention to NFTs despite them not being so prominently a subject of the news. It is a typical trajectory for a new technology to go into the "Trough of Disillusionment," a course that virtually every new technology runs through. It is highly likely that NFTs will leave a profound impact on the art world and will not be just a fad; however, it remains to be seen how deep of an effect they will have. One cannot be entirely sure if this technology will find its place beside the "Early Adapters," but it is likely.

Secondly, more education on NFT technology is needed for the general public and artists. More research could be done to assess the environmental impact of the NFT technology; however, it stands clear that while the energy consumption of Ethereum has been dramatically reduced, the stigma in the community still somewhat remains.

In addition, more transparency and turn-key solutions that utilize NFTs under the bonnet but do not force the artist to engage with the whole process could be helpful to spur adoption. In addition, regulation is seen as key to making the industry trustworthy, reliable, and more acceptable for many. One of the perceived negatives of NFTs is their association with cryptocurrency; overcoming this negative could be done by positioning NFTs as far away from crypto (especially bitcoin) as possible.

Importantly, community adoption and adoption by opinion leaders will play a crucial role in bridging the gap between the "Early Adopters" using NFTs and the "Early Majority." Key opinion leaders play a critical role in shaping opinions; for most artists, their opinion on NFTs is formed at least partially by outside influence.

Crucially, NFTs are not a panacea to cure all the shortcomings of the art world. Many of the older problems are still present in the world of NFTs, and simply putting one's work out in the universe as an NFT will likely not suddenly provide any monetization or community-building benefits; those take work, dedication, and time to develop. NFTs can be viewed as a platform akin to YouTube or Spotify more than a cure-for-all technology.

Finally, the calming down in the NFT markets and the technology running the full Gartner's Hype Cycle will likely help to understand the proper place of the technology as well as its benefits and limitations. This technology matured extraordinarily fast, possibly already starting its ascent into the Slope of Enlightenment, and this process is critical for the future of NFTs.

5.4 Limitations

There are several limitations to this study.

First, artists are involved in various creative disciplines: Visual Arts, Sculpture, Literature, Music, Dance, etc. While this study did feature participating artists with a different primary creative field, visual arts, specifically digital art, is their primary discipline for many research participants.

In addition, the research focused on the artists who live in the Western world, with Western world opportunities, such as education, job markets, and the overall standard of living, and

Western values. While a few of the research participants interviewed were not born in the Western world, living in it for an extended period will likely shift a perspective toward the Western mindset.

Another significant limitation of the study is the homogeneity of the economic profile of the research participants. The artists who took part in this research are presumed to fall into a middle-tier income bracket (with a presumed wide range of income in the tier). It is worth noting that all research participants have a solid artistic background, such as art education and/or a lengthy career in the creative field. However, none of the research participants were, at the time of the research, considered at the top echelon of the art world (income or audience-wise). Therefore, this study cannot be considered to reflect the experiences of the top earners in the art world, such as e.g., Damien Hirst, Tracey Emin, and Refik Anadol. This study further cannot be considered to reflect the experiences of aspiring wanna-be artists.

5.5 Possibilities for future research

This study presents countless opportunities for future research.

First, a different way to delimit the research participants could be chosen. For example, artists with another primary discipline could be selected as research participants. Alternatively, artists in a specific country or a different part of the world could be interviewed. Finally, an artist group with a different economic profile could be interviewed: either aspiring wanna-be artists or the top earners in the art world.

Secondly, a quantitative study could be done based on the research results to validate and quantify the findings: conducting a survey based on the theories formed as a result of the qualitative research would be a logical next step to validate further or disprove those theories. For the Master's Thesis research, the quantitative study falls outside the scope of this research.

Additionally, and somewhat broader, a study could be done to assess the impact of NFTs - perceived or theorized - on a different group entirely, such as art collectors. NFTs could profoundly affect many spheres of our lives; therefore, another study could be done to assess what impact NFTs could have on a specific industry.

Lastly, a broad, large-scale study could be done to understand the impact of blockchain and what it would take to accept blockchain technology across the board in society. This study could also focus on whether or not decentralization is something that society should strive for or currently strives for and whether or not humans tend to attract centralization (some of those themes were lightly touched upon in the research interviews).

6 Conclusions

This study explored artists' literacy and exposure to NFTs, the perceived positives and negatives of NFTs for artists, and the perceived way forward for NFTs. This study has identified a moderate level of understanding and familiarity with NFTs amongst artists, with most researched artists participating in NFTs.

Not everything is black and white; NFTs are a perfect example.

Multiple positives of NFTs were identified, including the ones present in the literature, such as the ability to track and prove ownership of an artwork (Chalmers et al., 2022) and the option to bypass the gatekeepers of the art world, thus creating a more open community (Bsteh and Vermeylen, 2021). In addition, some positives were identified that were not yet present in the existing literature on the topic, such as opening new, previously untapped audiences of collectors for artists. One theorized positive of amassing a global community (Bsteh and Vermeylen, 2021) was primarily rebuked.

Multiple negatives of NFTs were also identified, including the ones present in the literature, such as the complexity of the technology (Sharma et al., 2022 as well as Frye, 2021), reputational risks due to sustainability concerns (Erdogan et al., 2022 as well as Calma, 2021) and the lower quality of some artworks available as NFTs (Sharma et al., 2022). Interestingly, the research participants did not touch on high transaction fees associated with NFTs (Dowling, 2022; Chalmers et al., 2022). Some negatives not found in the existing literature on the topic were also seen, such as a threat to the traditional art world values and artists, the connection of NFTs to cryptocurrency, and the need for more regulation, transparency, and security.

While multiple negatives were identified, most research participants still viewed NFTs as a mostly positive development for artists and believe that it is a significant, overdue development for the art world. Albeit not the consensus, few believed that NFTs would disappear without a trace.

It is interesting to think that while not a silver lining, not the magic panacea, NFTs offer some important benefits. It seems true that NFTs can help artists monetize their art and democratize

the art world to some extent; however, the full extent remains to be seen. NFTs, above all, although being technology, currently serve merely as an additional platform for artists to monetize their work. Interestingly, NFTs do not seem to hurt the art world's gatekeepers, even though some established artists may be threatened by their development.

All in all, like with so many things this decade, the topic of NFTs has been over-polarized, with some almost fetishizing the technology and the idea of decentralization and others shying away from it completely. However, this research shows that, at least among some artists, there exists a lot of consensus on the subject, and the perception is somewhat shaped by the fact that, to quote one of the research participants, "we're making like atom bombs here." Some things and concepts can only be used to create great good. Some things and concepts can only be used to cause great evil. But most things in the world, most ideas, most of the technology that has ever been created, almost everything, NFTs included - is neither.

The 2020s may still go down in history books - despite all the bad that has happened - as a decade when unprecedented technological breakthroughs alleviate billions from poverty, where peace and common sense prevail, and senseless wars are no longer fought. NFTs, albeit a small part of the puzzle, may help write this utopian future by benefiting artists and making their lives and livelihoods easier.

The 2020s may still go down in history books - because of all the bad that has happened so far or because of something else lurking on the horizon - as one of the worst decades in the contemporary history of mankind. Countless threats, from the usage of weapons of mass destruction to the potentially dangerous experiments playing out with artificial intelligence - put the survival of human civilization in great peril. NFTs, albeit a small part of the puzzle, may help write this dystopian future by ultimately hurting artists, exacerbating the divides between the haves and the have-nots, and for most artists, making their lives and livelihoods worse.

It's not black and white. It's never black and white. Chances are it will be neither a utopia nor a dystopia. But it's up to us. All of us.

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8 Appendix

This appendix outlines the questions that were asked of the research participants. Since the interviews were semi-structured, other questions were also asked; however, the ones below covered most of them.

How familiar are you with NFTs?
How familiar are you with the influence of NFTs on the art world?
Have you ever used NFTs?
How do you understand/perceive NFTs? / Could you define NFTs in your own words?
How quickly do you adopt technologies in general (using the Diffusion of Innovation chart)?
What do you think are the benefits of NFTs for artists?
What do you think are the drawbacks of NFTs for artists?
Do you think NFTs can help artists monetize their artworks?
In your view, can NFTs help to increase an artist's exposure and reach a wider audience? Why or why not?
Do there exist any ethical or legal issues related to NFTs that are of concern to you?
What are your thoughts on how NFTs might affect copyright rules and regulations?
Which do you think outweighs - the benefits or drawbacks of NFT technology?
What do you think about NFTs? What is your opinion on NFTs?
What has been the primary factor influencing your opinion on NFTs?
Have discussions with other artists influenced your opinion on NFTs?
Do you think other artists agree with your opinion? / Have you discussed your opinion on NFTs with other artists?
Do you view NFTs as a fad or a long-term shift in how artists monetize their art?
Are there any specific factors that would make you more or less likely to use NFTs in the future?
Where do you feel NFTs fall on the Gartner Hype Cycle?