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Value of NFTs in the Digital Art sector and Its Market Research

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Value of NFTs in the Digital Art sector and Its Market Research

Su Yeon (Esther) Jeong

2021

(word count: 12660)

Abstract:

NFT, as a digital asset, has the most significant advantage of making clear ownership and providing strong authenticity in any sector. It means anything such as a family Christmas video, a legendary game item, or meaningless tweet from Twitter can be NFT work and trade as a digital asset. How would NFT work in a digital art segment, and what would be the value of NFT in the digital art sector? What is really authenticating, collecting, and owning NFT artwork? NFT art as a digital asset, there is potential to open up a 'post-futuristic art market.' As a student willing to prepare for the future art market, it would be worth seeking how the NFT art marketplaces form and grow up.

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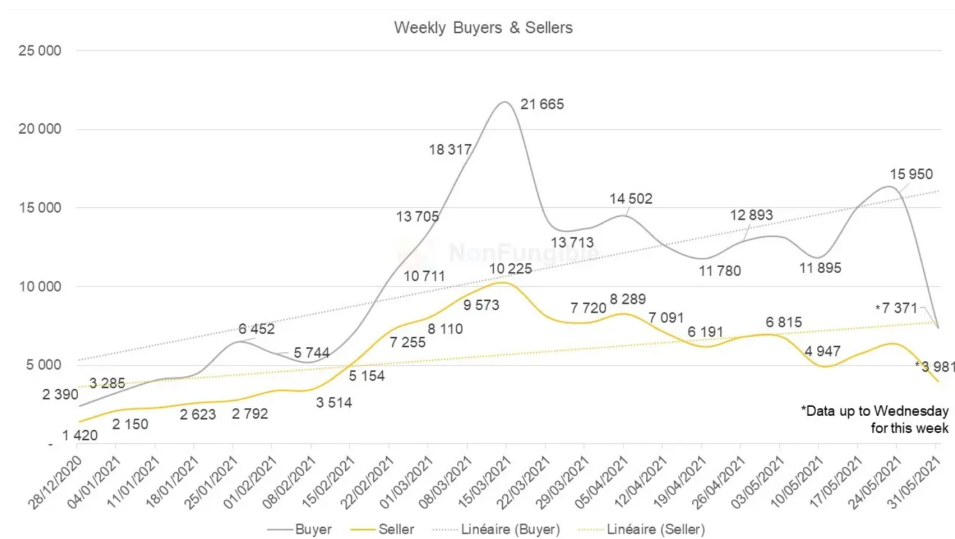
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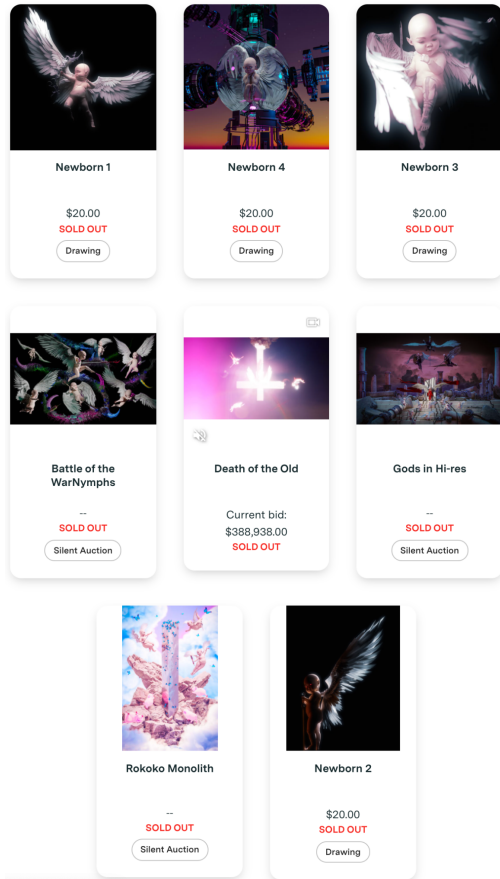
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Disaster Girl sold as an NFT on April 17 for 180 Ether(about \$495,000 at purchase)



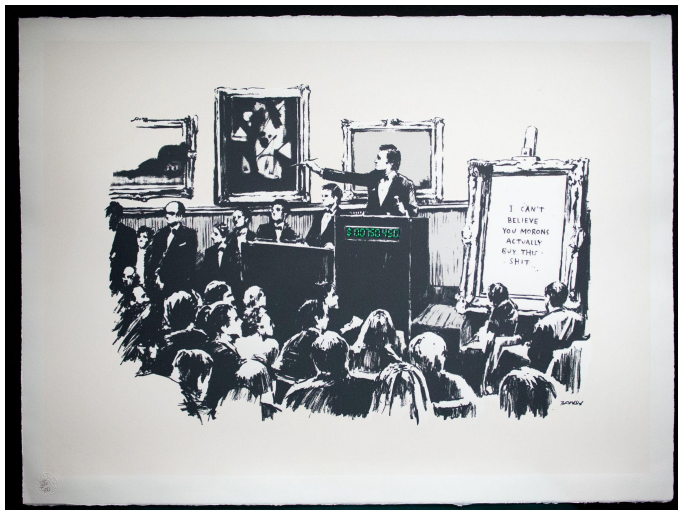
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(fig.5)

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Top NFTs

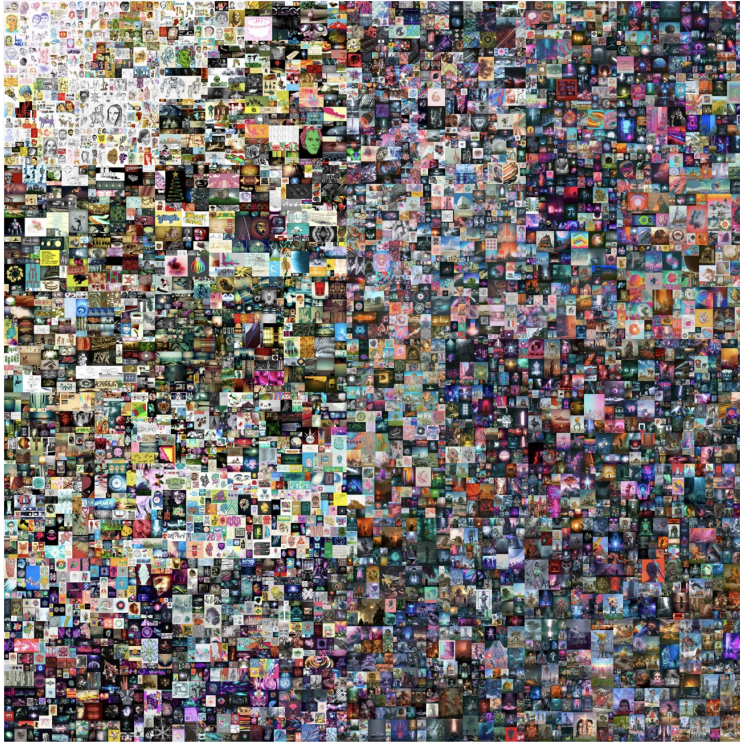
The top NFTs on OpenSea, ranked by volume, floor price and other statistics.

All time | Art | All chains

Collection	Volume	24h %	7d %	Floor Price	Owners	Items
1 CryptoPunks	‡ 706,997.15	-33.10%	-93.57%	---	3.2K	10.0K
2 Bored Ape Yacht Club	‡ 205,156.85	-21.85%	+0.64%	‡ 31	5.8K	10.0K
3 Rarible	‡ 96,953.9	-98.25%	-27.09%	---	196.7K	318.8K
4 SuperRare	‡ 54,592.47	-82.92%	+249.86%	‡ 0.21	5.4K	27.9K
5 Art Blocks Factory	‡ 47,243.82	-72.89%	+18.69%	‡ 0.05	18.3K	69.7K
6 Hashmasks	‡ 39,790.31	+99.97%	+0.08%	‡ 0.85	5.0K	16.4K
7 Fidenza by Tyler Hobbs	‡ 38,977.4	---	-62.25%	‡ 90	493	999
8 Art Blocks Curated	‡ 33,574.98	---	---	‡ 4.5	9	9
9 My Curio Cards	‡ 32,321.71	+84.59%	+9.95%	‡ 0.35	4.3K	30
10 LOSTPOETS	‡ 23,998.03	+171.94%	-43.02%	‡ 0.43	8.8K	27.5K

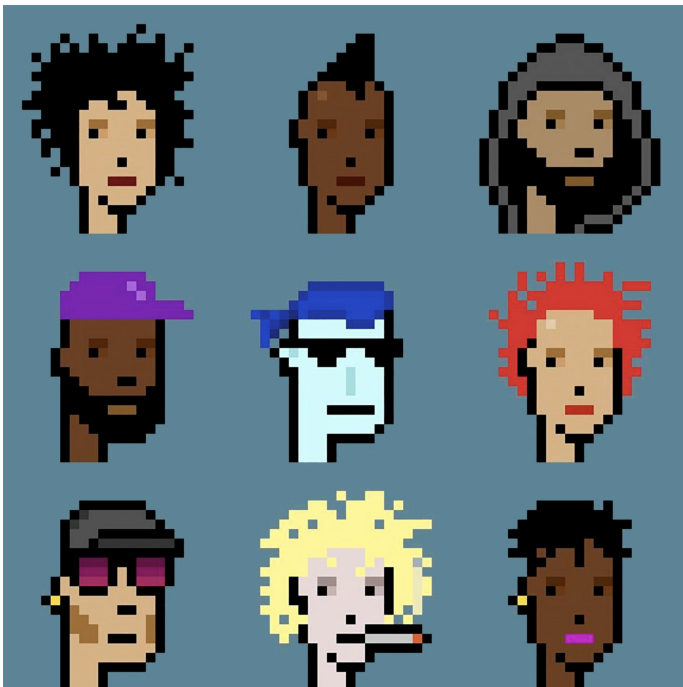
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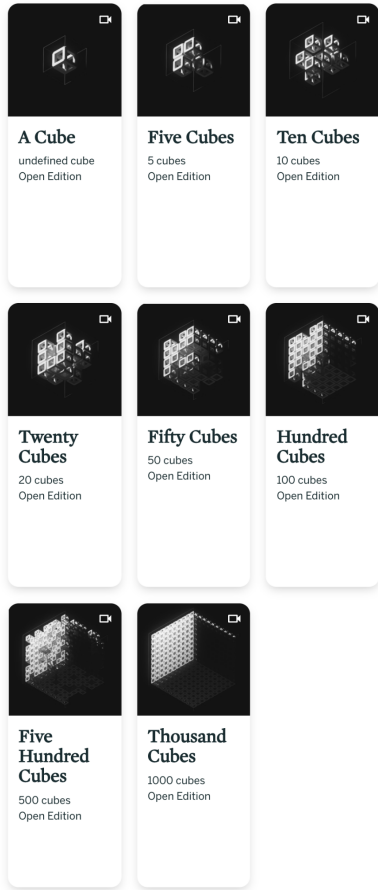
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(fig.9)

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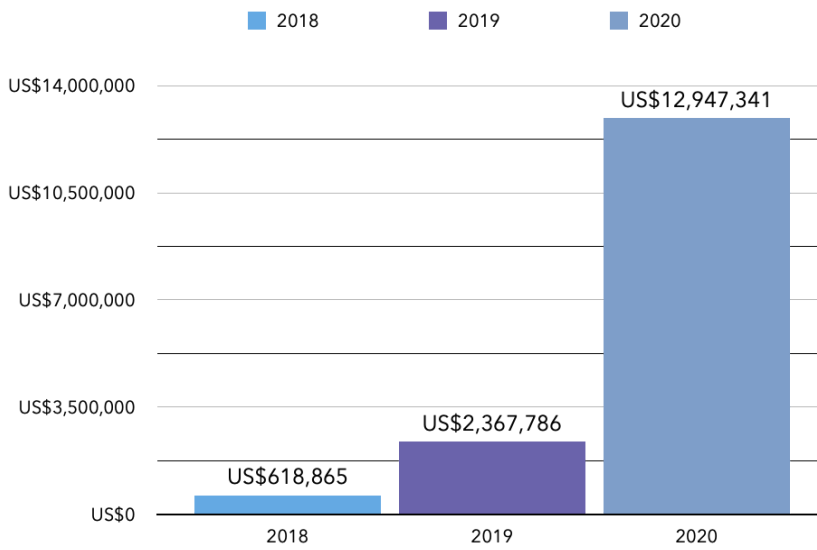
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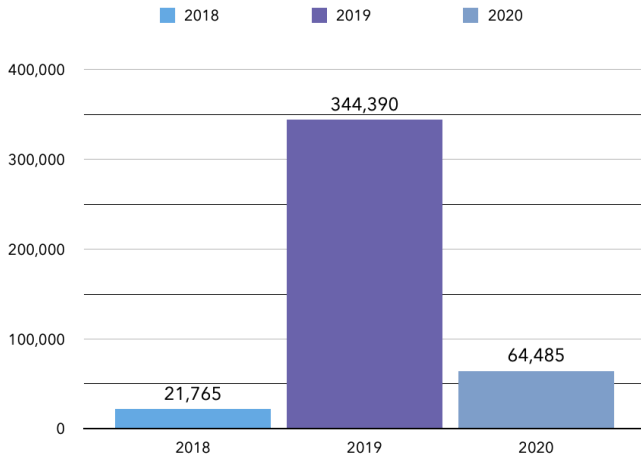
(fig.11)

Jang Koal 's NFT work *Mirage cat 3*, sold for 3.5 BTC (about KRW 254,000,000 and \$214,972 at purchase) at Seoul Auction



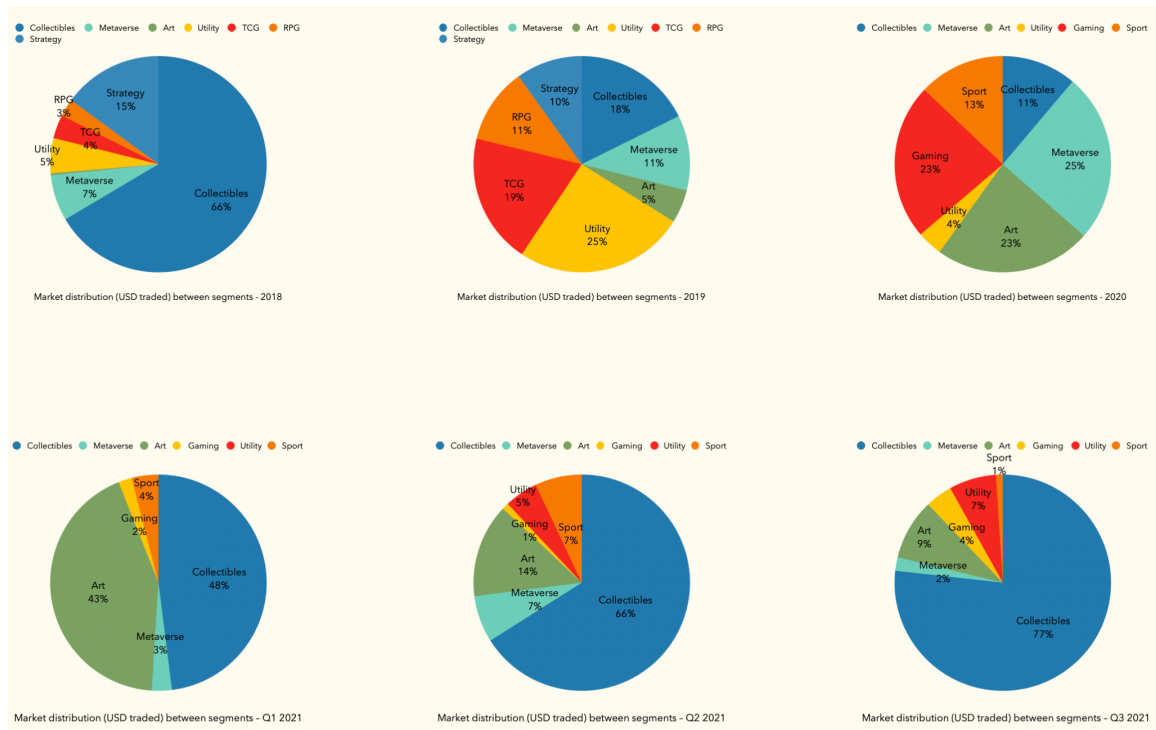
(fig.12)

USD Traded via Sales in Art segment (2018-2020)

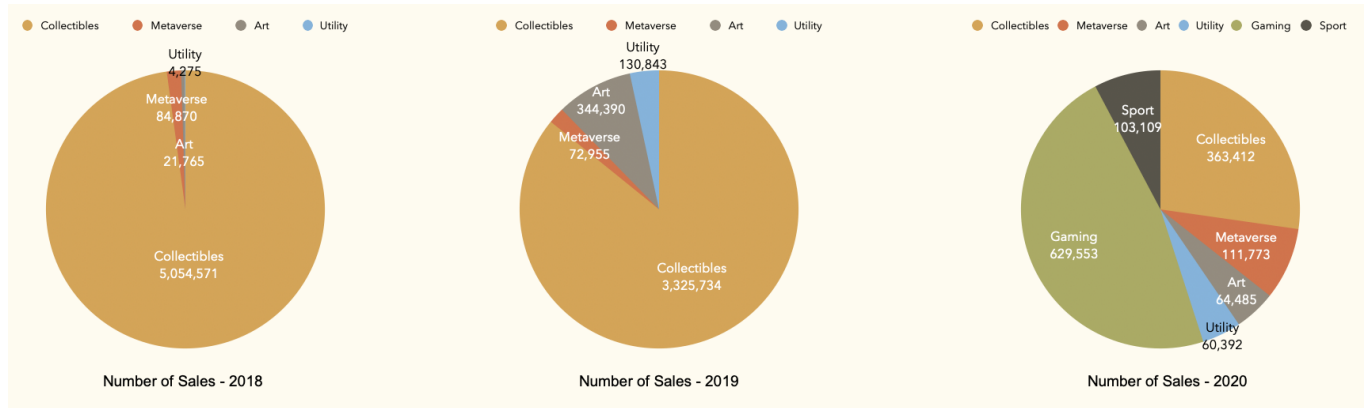


(fig.13)

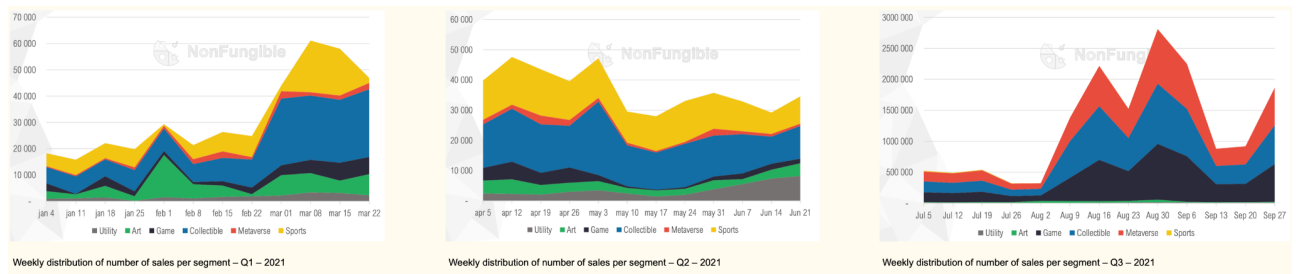
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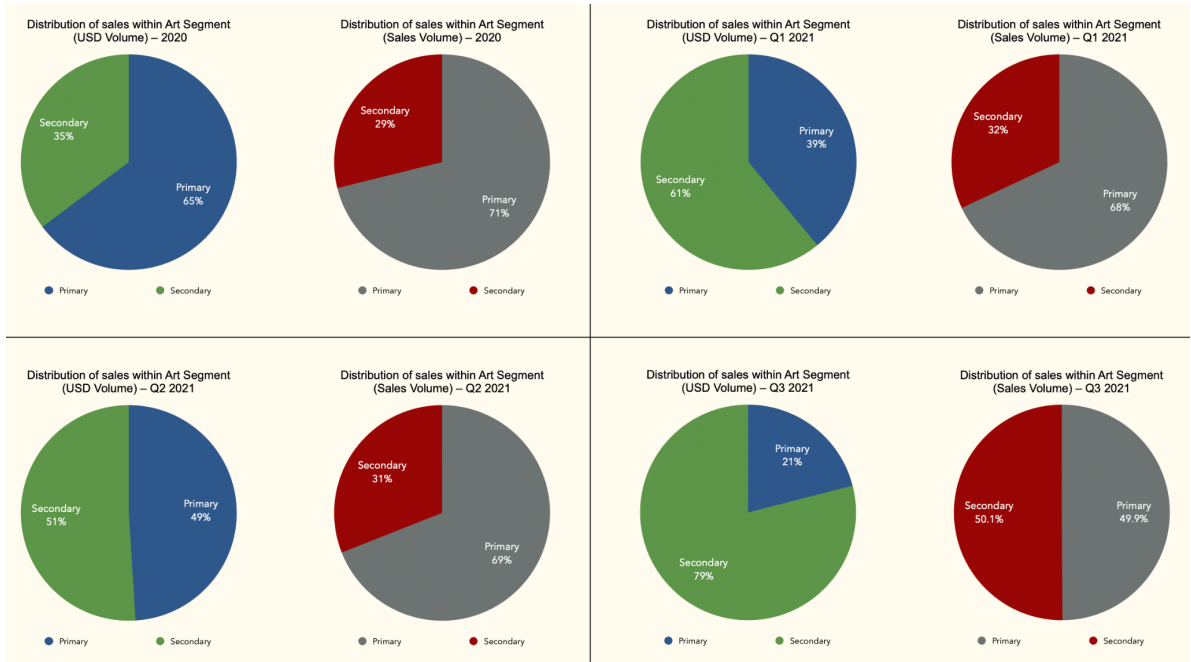
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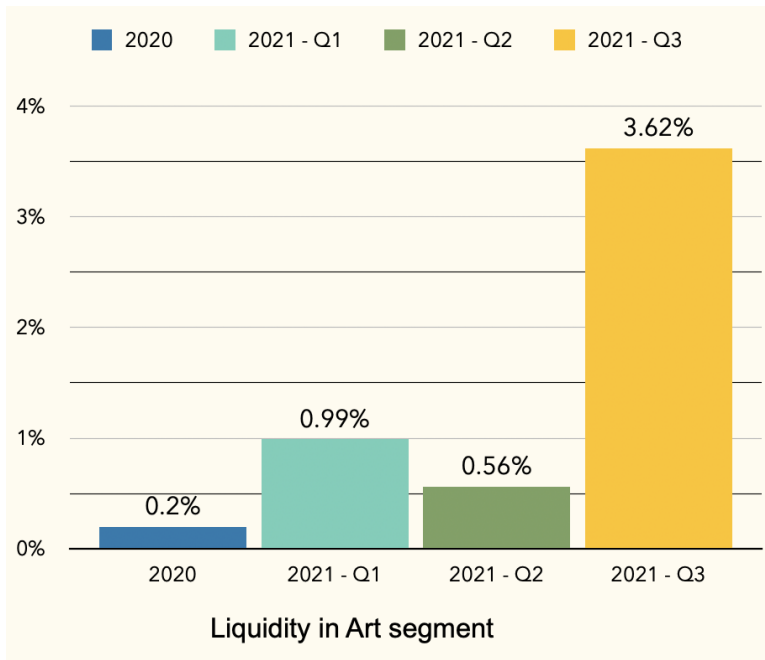
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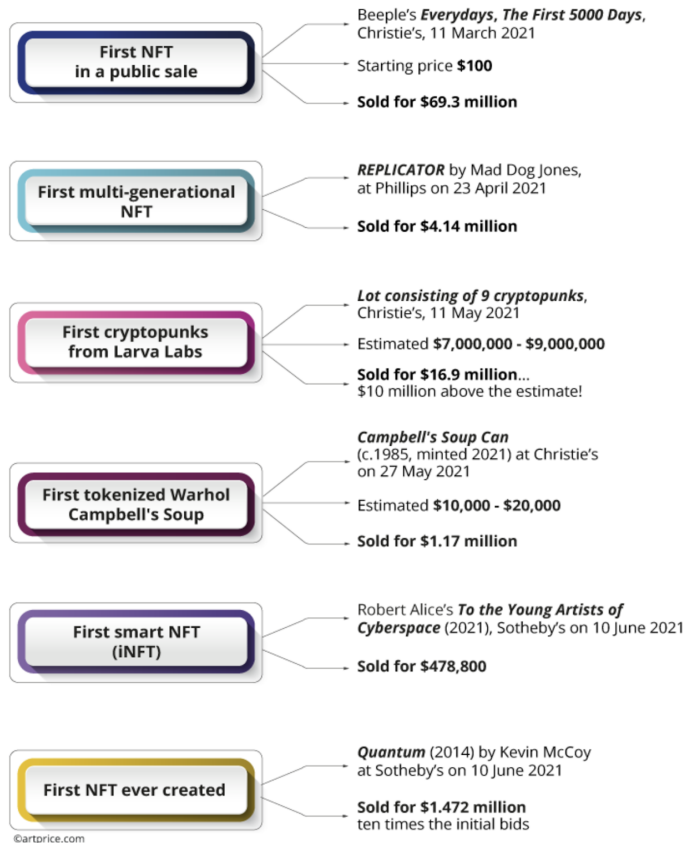


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(fig.18)

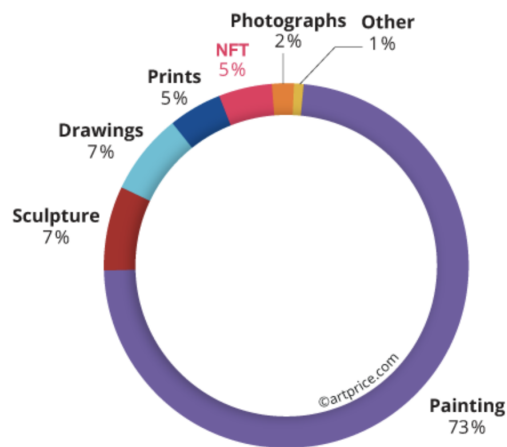
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Contemporary Art sales by medium

Ch. 1 What is NFT Art

Relies on a blockchain system, NFT(Non-fungible token) is a collectible digital asset, which puts non-fungible value on digital work and transmutes it into a unique asset. The blockchain system, which can record and save a digital database, significantly influences NFT. Digitalized element such as a digital image or online file has a sense of multiplicity in which anyone can make copies and duplicates. However, because the blockchain system facilitates recording and saving a digital database, it can convert a digital element into a unique asset. NFT is essential in the digital art world because it facilitates verifying ownership and authenticity in digital works of art. Because of the capacity to own and authenticate digital works, the NFT art marketplace is established.

Any kinds of digital elements such as moving images, short clips, or even tweets from Twitter can turn into NFT. NFT as a collective digital asset, collectors can own NFT from a diverse range of categories. Referring to *NFT Yearly Report 2020* from NonFungible.com, the largest database of blockchain gaming and crypto collectible markets, the categories where NFT is in use are divided into six different segments; collectibles, metaverse, utility, gaming, sport, and art.

Collectibles: It is the largest segment among the NFT market; regarding the recent third-quarter 2021 Quarterly NFT Market Report, collectibles take up the most portion, 76% in the market distribution (USD traded) between segments.¹ There are many different ranges collectors can collect, such as an image of characters in the same model but in a different style, and with different rarity from normal, rare, to super rare. They can even collect tweets from Twitter as a digital collectible asset. CryptoPunks and Bored Ape Yacht Club represent the most representative collectible NFT. CryptoPunks indicate a history of NFT because they are initial projects that emerged right after a

¹ "Non-Fungible Tokens Quarterly Report Q3-2021" (NonFungible, 2021), p. 15.

notion of NFT came out. Bored Ape Yacht Club is recent the most popular collectible NFT project next from CryptoPunks. Because the collectible NFT is limited, a large solid community has formed among the collectible holders.

Metaverse: In metaverse, collectors can own a virtual land, build virtual galleries or buildings. They can create their character and trade cloth, accessories, or different shapes of eyes, nose, mouth, and wearables to decorate characters. Decentraland, The Sandbox, and Cryptovoxels are the most representative virtual world. As a virtual space, access is possible without restrictions of place and time. Thus metaverse can be used as a venue for a community meeting.

Utility: Utility is used in a wide variety of projects on multipurpose. The utility would use cases in domain names, music, tickets, and assets that allow the owner to access or specific rights. ENS: Ethereum Name Service, for instance. 'There domains are secure domain names for the decentralized world. ENS domains provide a way for users to map human-readable names to blockchain and non-blockchain resources, like Ethereum addresses, IPFS hashes, or website URLs.'²

Gaming: In a game segment, NFT is used to register ownership of game items and characters on a blockchain system so that collectors can trade and earn cryptocurrency. Thus, P2E (play to earn) emerges as a game-changer in a game ecosystem. Collectors (players) can profit by trading or selling their gaming assets while playing P2E games. Another significant NFT in the gaming field is that collectors can still own their gaming assets even a gaming project stop operating. Many NFT games include Gods Unchained, Axie Infinity, and Zed Run.

Sport: In sport, NFT is used to record short clips of historical highlight scenes, such as LeBron dunk shoot highlight. Like Rob Gronkowski Championship Series NFTs, the

²"ENS: Ethereum Name Service - Collection | OpenSea," OpenSea, accessed December 6, 2021, <https://opensea.io/collection/ens>.

project is based on real-world players and teams. The scenes can be traded in a market platform like NBA Top Shot.

Art: The art segment includes any digital work of art such as 3D modeling images, moving images, and generative art. NFT art significantly impacted the art world because it gives digital works ownership and authenticity. Especially NFT coming into the digital art field, new trade market specialized in digital work of art established.

Blockchain systems take a role as an essential factor digital element to become NFT digital asset and NFT art. Since NFT relies on a blockchain system, blockchain is a core idea in NFT. Referring to Investopedia's description on a blockchain, 'it is a database shared among the nodes of a computer network. As its name implies, it structures its data into chunks (blocks) that are chained together. A blockchain collects information together in groups, also known as blocks, that hold sets of information. Blocks have certain storage capacities and, when filled, are chained onto the previously filled block, forming a chain of data known as the "blockchain." All new information that follows that freshly added block is compiled into a newly formed block that will be added to the chain once filled. The blockchain system is also inherently making an irreversible timeline of data when implemented in a decentralized nature. When a block is filled, it is set in stone and becomes a part of this timeline. Each block in the chain is given an exact timestamp when it is added to the chain.'³

Because of an irreversible timeline of blockchain data, NFT can have unbroken provenance. Every transaction is recorded in blockchain data when an artist mints his artwork, to whom, and how much the work sold gets.

³Luke Conway, "Blockchain Explained," Investopedia (Investopedia, November 4, 2021), <https://www.investopedia.com/terms/b/blockchain.asp>.

Understanding how the decentralization of blockchain works is essential. Besides the blockchain system transmitting its data, 'distributed ledger technology is a subcategory in the blockchain, making it decentralized. A standard ledger exists on one computer or server. A distributed ledger exists and is updated simultaneously on every computer in the network, where every individual and organization uses the ledger. Therefore, a blockchain is a decentralized ledger that operates on a peer-to-peer network. The decentralized architecture of a blockchain — a global network of computers simultaneously running the software and validating the chain of transactions — is what ensures that the transaction record is never compromised.'⁴

A smart contract also lives in the blockchain system as well as NFT does. Subject to the blockchain system implemented in a decentralized nature, the notion of a smart contract can be established. The smart contract no longer needs a central authority, legal system, or external enforcement mechanism since it operates as executor and enforcer.⁵ Internationally famous cryptocurrency trade market Binance defines 'A smart contract, as a piece of computer software that is designed as an automated self-enforcing contract, which means it triggers specific action after predetermined conditions are met. Smart contracts can be used, for instance, as digital agreements that intermediate the exchange of cryptocurrencies (or any other digital asset) between two parties. Once the terms of the agreement have been set, the smart contract verifies their fulfillment and the assets are distributed in accordance. Smart contracts are versatile enough to apply to practically any industry in which funds, digital assets, or any kind of digital information need to be transferred between parties.'⁶

⁴"What Is Blockchain Technology?," ConsenSys, accessed December 6, 2021, <https://consensys.net/knowledge-base/blockchain/>.

⁵ Mieke Marple and Tobias Vielmetter-Diekmann, "How Starving Artists Could Benefit from Smarter Contracts," Artsy, April 25, 2018, <https://www.artsy.net/article/artsy-editorial-starving-artists-benefit-smarter-contracts>.

⁶ "Smart Contract," Binance Academy (Binance Academy, September 17, 2019), <https://academy.binance.com/bg/glossary/smart-contract>.

Therefore, the smart contract revolutionizes the old paradigm, which used to be inherent in a traditional art market. Obviously, in the art market trade paradigm, artists sell their artworks, and collectors purchase their workpieces from a gallery, auction house, or art market field. However, after the smart contract and blockchain technology was developed, intermediaries were no longer needed. As a per-to-per system, without an intermediary such as an art dealer or a gallery commission, artwork trade can simply fulfill by using the smart contract. A collector makes trade NFT for instance after a purchase between the collector and an artist proved, an ownership and updated provenance which turns over to the collector is recorded on a blockchain and simultaneously a smart contract between the collector and artist forms and also recorded in the blockchain system without joining a third party. 'Blockchain technology is decentralized, and therefore the use of the technology in NFT minting inherently changes old systems in digital ownership, rights, and distribution. Creators and owners no longer need intermediaries for permission to own, create, share, buy or sell. Simply put, creators/artists can retain rights and capture revenue without a middle man by selling direct and coding the "rules" around the sale.'⁷

What is the difference between *Everydays: The First 5000 Days* Beeple's NFT artwork, significantly sold at Christie's in March, sold in \$ 69,346,250, and a digital work of art on iPad They are the same, but different in terms of a technical aspect. Digital art is an art form depicted as an image of a pixel. In contrast, NFT art is also a digital form but registers information regarding the work, such as artist, date of registration, how much the work got sold, on a blockchain system. It is easy to think of NFT artwork as a digital version of a silkscreen print work. Silkscreen print pieces, for instance. Even though an artist produces many silkscreened prints, only the pieces with the artist's

⁷Susie Batt, "Crazy about NFTs," Opera Blogs, March 20, 2021, <https://blogs.opera.com/tips-and-tricks/crazy-about-nfts/>.

signature on and an edition number are worth and have value. NFTs represent the signed pieces. Thus, even if many copies flow in the digital world, if an artist makes his original digitalized work as NFT, he eventually put a signature and asserts a work belongs to the artist. 'NFTs as a digital asset, because it authenticates whose origin or ownership by using blockchain technology, it is much like a digital "signature."' ⁸

⁸David Brancaccio and Daniel Shin, "You Can Now Own 'Authenticated' Digital Artwork. Is That a Good Thing?," Marketplace, March 2, 2021, <https://www.marketplace.org/2021/03/02/non-fungible-tokens-blockchain-you-can-now-own-authenticated-digital-artwork-is-that-a-good-thing/>.

Ch. 2 Valuation in Digital Art

House, car, land, and things capable of collectible refer to assets and can be valued at a high or low price. A piece of artwork as well; digital work, painting, drawing, sculpture in any form of art considers one's asset, and an art market puts value on them. However, one distinction between traditional art and digital art is, traditional art has specific criteria for its valuation since it physically exists. Whereas digital art is such a vague subject that does not have physicality, there is no criterion to evaluate. However, with the advent of NFT, digital art has become enable to evaluate.

An idea of value in digital art has been limited. Digital art has a short history, unlimitedly open access to the public, the ability to copy the work, and the work cannot be present without using a medium. It is a unique work of art that lives online, and anyone can access and indiscriminately create copies of the work. That limits digital artwork to keep its authenticity and makes it difficult to make its limited edition. The restricted components create a circumstance that collectors cannot buy digital artwork and ultimately obscure the value of digital artwork. However, by emerging a notion of NFTs, the art market can value digital art, and collectors can eventually collect digital works. It is the moment of the emergence of a new art market throughout art history.

If a collector buys Jenni Pasanen's '*Kevin the kitten strolling on a chair*' animated work without using a smartphone or computer screen, he cannot even see the image of the work he collects. Digital work does not physically exist without the medium which presents the work. Unlike traditional art like painting or sculpture, digital artwork cannot interact with viewers without a medium. There is a form of image in digital art, but the public cannot even see the work without a specific tool such as a monitor screen. 'Many

digital artworks are produced in a format that can only be viewed on a screen, resulting in artworks, which cannot exist without the technology that supports it.’⁹

The limitation of delivering images through a particular tool also makes it hard for collectors to collect digital work and decrease its value. In today’s art market, digital works are in the sale. However, it is difficult to phrase ‘a sale of digital artworks’. Like David Hockney’s iPad drawing, the artist sells his digitalized work after going through the printing process on a physical surface, like paper, then put on print and multiple sales.

Last June, David Hockney’s iPad piece, ‘*The Arrival of Spring in Woldgate, East Yorkshire in 2011 (twenty eleven)- 5 May*’, which was put up for auction in Bonhams London, Prints and Multiples sale on June 23, 2021, in Lot 00076 for instance. According to the sale result in Bonhams, the work was done in iPad drawing in colors, in 2011, on wove paper, signed, and dated and numbered 17/25 in pencil. There is a contradiction in collecting Hockney’s iPad drawing work because what collectors receive is his printed work, not a digitalized iPad drawing piece. Digital art only lives in pixelate surface refers to its characteristics. However, digital work lost its fundamental medium, digital, and has to transform into another medium to sell in an art market.

Digital art can only be present through a tool. Thus it limits work’s preservation and value. If the tool is no longer available for breakdown or is out-of-date, the digital artwork can no longer be present—Nam June Paik’s *The More the Better*, for instance. According to the Korean Times article, ‘*The More the Better*, is the largest video installation by avant-garde artist Nam June Paik (1932-2006), now at the National Museum of Modern and Contemporary Art (MMCA), Gwacheon, Korea. The work composition of 1,003 monitors, the 18.5-meter-tall video tower was installed at the nation’s flagship art museum back in 1988 in commemoration of the 1988 Seoul

⁹ “Digital Art,” The Art Story, accessed December 6, 2021, <https://www.theartstory.org/movement/digital-art/history-and-concepts/>.

Olympics. However, it is such an old piece, and due to safety issues, the museum has been switched off since February 2018. The museum eventually faced a fundamental problem as the out-of-date CRT monitors could not last forever in Paik's masterpiece.¹⁰ It would be challenging for the museum to seek the CRT monitors to maintain the masterpiece. It does not mean there is less value in Nam June Paik's work. However, his digital work especially reveals a limited aspect of difficulty in preserving digital art.

The fact that anyone can duplicate digital art unlimitedly decreases the value of digital work. The unique characteristics of digital art have also broken down an inherent formula in the art market; supply and demand. The notion of well-balanced supply and demand gives a proper value to an object. In the art market especially, if too much supply is driven compared to the demand, value in an artwork decreases. 'Just like any economic system, the art market depends on supply and demand, and so for art to increase in value and reach considerable recognition, there needs to be a low supply and a high order.'¹¹

This idea parallels a circumstance when an artist passes away, his work price increases. Death effect generally causes because an artist refers to a producer, supply(artwork) always comes from an artist in the art market. However, when the producer passes away, the supplies no longer inflow into the art market, supplies go down, demands will rise, and eventually, the artist's work's value will increase. However, digital art presents the opposite aspect. It is a work of art that can duplicate. A notion of duplication makes unlimited high supply. Therefore, it cannot accord to the formula of 'a low supply and a high order' duplication, and the idea leads to a decreased value in digital art.

¹⁰Mee-yoo Kwon, "Paik Nam-June's Video Tower to Keep CRT Monitors," KoreaTimes, September 15, 2019, https://www.koreatimes.co.kr/www/culture/2019/10/145_275567.html.

¹¹Marie Chatel, "What Brings Value to Digital Art?," Medium, November 30, 2018, <https://medium.com/digital-art-weekly/what-brings-value-to-digital-art-abbdc21117b>.

In the art market, the notion of collecting can not apply in digital art; therefore, value cannot be put into the work. Digital art generally refers to non-collectible, and value can not be calculated onto the work. However, traditional artworks - such as painting and drawing - have value because only a single work of art exists with a notion of originality. Apply this idea to a high value that comes from low supply and a high order formula. The limited supply, drawings, and paintings make high demand ultimately its value increase. However, non-collectible digital work, due to the ability to duplicate, implies an unlimitedly high supply, leads to decline value in digital work in the art market and may claim there is no value in digital artwork.

Valuing a digital work means making its limited edition piece, which refers to the role of NFTs. According to the article in Aesthetics for Birds (AFB), an author queried ‘when an artist issues an NFT—say, for Nyan cat or an ultra-rare Pepe—does this fundamentally change the artwork itself? He claims, consider a parallel case from more traditional art: the limited edition print. When an artist issues a limited run of prints of, say, a photograph, they indicate that some particular set of instances are licensed or genuine instances of the work. They authorize these particular prints as privileged compared to any other existing copies.’¹² Turning a digital work into NFT is an artist is granting his license to the piece and puts value on the work.

¹²Anthony C., “Beeple and Nothingness: Philosophy and NFTs,” Aesthetics For Birds, March 18, 2021, <https://aestheticsforbirds.com/2021/03/18/beeple-and-nothingness-philosophy-and-nfts/>.

Ch. 3 NFT Value in Digital Art

Digital work of art has unlimited access, and anyone can copy the work. Its unique characteristics limit a digital work of art from having an idea of its ownership, originality, and authenticity. However, NFT makes a work of art a digital asset capable of authenticating, collecting, and owning by collectors. By doing authenticate, an owner can verify his work. Therefore, ownership and originality occur. People collect and own NFT artwork because it is today's trend. Moreover, collectors can support NFT artists by owning and collecting their works. NFT's value reveals capacity in those three factors -authenticating, collecting, and owning- inherent in digital art, after the digital work of art encounters with a notion of NFT.

Authenticity

A notion of authenticity is essential in today's art market. Correct authenticity indicates the value of the work and protects creativity, an essential exclusive property that only artists have. We have all been completely obsessed with who makes a work of art and proving that it is the real thing.¹³ There is no doubt no one wants an artwork' copy of Rembrandt' instead of 'a work by Rembrandt'.

NFT functions as a certificate that validates the authenticity of digital art. Why does authenticity matter with digital art? Due to the nature of digital art, because of its unlimited access, it is hard to be authenticated. Even if an artist posts his artwork under the name of his blog, or personal social media, even putting a watermark, if an anonymous impersonates the artist and reposts the work without the artist's credit, then the work's authenticity would be authentic vague. Thus, make the artwork secure by registering the artwork on a blockchain system and avoid digital artworks vague authentic.

¹³David Brancaccio and Daniel Shin, "You Can Now Own 'Authenticated' Digital Artwork. Is That a Good Thing?," Marketplace, March 2, 2021, <https://www.marketplace.org/2021/03/02/non-fungible-tokens-blockchain-you-can-now-own-authenticated-digital-artwork-is-that-a-good-thing/>.

Since NFT is based on blockchain technology, it confirms who created a digital work and to whom the work got sold or transferred. An NFT is a blockchain-based timestamp that validates a digital asset's place in space and time in decentralized, verifiable, and secure ways.¹⁴ Referring to an article *Art & Technology: How to Use Blockchain to Authenticate Art?*, the blockchain-based timestamp works as if one computer tries to temper with these records, other computers in the network would know and reject the change, thus making the records almost impossible to forge. The record of transactions for every artwork can be accessed by following the artwork's blockchain URL, where people can see exactly how many times an artwork changed hands since its creation and easily trace it back to the artist. If the token associated with the artwork collector wants to buy originates from the artist's wallet, that is an undeniable proof that the artwork is real.¹⁵

An action of putting authentication on immaterial digital art, which only exists online, creates value. In work from French artist Yves Klein(1928-1962) *Zones of Immaterial Pictorial Sensibility*, in 1962, Klein sold three "Zones of Immaterial Pictorial Sensibility" in ritualized ceremonies held on the banks of the Seine. In exchange for a quantity of pure gold, the collectors received printed receipts; Klein then threw half the gold into the river, while the collectors burned their receipts, so that nothing material remained of the transactions.¹⁶ There is a parallel idea putting authenticity in digital artwork and the performance from Yves Klein write a receipt of selling the immaterial space. Content does not matter; neither is it important that collectors buy a work of

¹⁴<https://shinhyungchoi.medium.com/proof-of-provenance-why-nfts-can-be-valuable-1489ed1395fd>

¹⁵Milica Jovic, "Art & Technology: How to Use Blockchain to Authenticate Art?," Art Acacia Gallery, July 2, 2018, <https://www.artacacia.com/blogs/posts/art-technology-how-to-use-blockchain-to-authenticate-art>.

¹⁶Pepe Karmel, "Yves Klein: Art and Alchemy," ARTnews, April 26, 2010, <https://www.artnews.com/art-in-america/features/yves-klein-62841/>.

digital art nor printed receipts. The action of an artist putting authenticity on his work and Klein writing a receipt does matter.

According to New York Times, on April 17, a famous meme, 'Disaster Girl'(fig.1) has sold as an NFT for 180 Ether; at the sale, 180 Ether was valued at more than \$495,000. 'Disaster Girl' is a photo of Ms. Roth standing in front of a burning fire when she was four years old. One Saturday morning in 2005, her family went to look at a house on fire in their neighborhood in Mebane, N.C. Firefighters had intentionally set the blaze as a controlled fire, so it was a relaxed affair. Her father, an amateur photographer, asked her to smile. At the moment, with her smile, Ms. Roth's hair askew and a knowing looking in her eyes in front of the burning house established "Disaster Girl." After her father entered it in a photo contest in 2007 and won, the image has been edited into various disasters from history; in terms of a photo of Ms. Roth grinning impishly as a meteor wipes out the dinosaurs or the Titanic sinks in the distance. Over a decade, people endlessly repurposed her image.¹⁷

Authentication makes meme a work of art with validated value. Meme turns into a work of art after authentication. As a symbol of internet trends and popular culture, Meme functions as a society's visual depictions of entertainment, thoughts, feelings, ideas, or just jokes which belong to everyone. Before the famous meme, 'Disaster Girl', turned into NFT, it was an image showing various kinds of disasters rather than a work of portrait photography. However, after the meme was sold as NFT, it finally authenticated its originality among numerous copies and turned into a work of art. NFTs make memes no longer referred to as a joke.

Collecting

¹⁷ Marie Fazio, "The World Knows Her as 'Disaster Girl.' She Just Made \$500,000 Off the Meme.," The New York Times (The New York Times, April 29, 2021), <https://www.nytimes.com/2021/04/29/arts/disaster-girl-meme-nft.html>.

The idea of collecting artwork is fundamental to humanity because collecting is the essential way to protect and preserve a work of art pass it down to the next generation through the course of history. Old masterpieces hanging in primary museum walls, for instance, are the eminent inheritance people today able actually to see the works due to past collectors' great effort. Like Peggy Guggenheim, a remarkable art collector, who quickly amassed one of the most prominent collections of Cubist and Surrealist art, works by Brancusi, Georges Braque, Salvador Dalí, Ernst, Fernand Léger, and Pablo Picasso, among others during her frenzied trips to Paris during World War II and safely bring back to New York.¹⁸

NFT makes digital work of art collectible. What is collecting, and why do collectors collect NFT artwork? Some news articles and art critics claim the NFT art market may consider as a bubble and overstated. NFT art as intangible digital assets, a work of art that only exists online, is ambiguous on collecting them. However, there is value and reason for collecting and owning NFT. People collect and purchase NFT because it is digital scarcity, reflects today's trends, and supports artists using a royalty system.

Collecting NFT is another way of supporting NFT artists by a royalty fee. The traditional art market shows a circumstance that, even though work got resold at a higher price in a secondary market than a primary sale, the collector who puts the work on the secondary sale gets profit. However, the artist does not get anything from the sale. However, in the NFT market, a loyalty system makes an artist profit from his work's second sale. For instance, the NFT marketplace Foundation the artist makes 10% of that secondary transaction. Thus, collecting NFT works, the loyalty fee goes to an original creator, an artist. Trading NFT is just an act of buying and selling a work of art. However,

¹⁸"Peggy Guggenheim," The Guggenheim Museums and Foundation, accessed December 6, 2021, <https://www.guggenheim.org/history/peggy-guggenheim>.

beyond the trading, the royalty fee allows collectors to support artists in preparing for their next artwork. It is a unique system that royalty makes fair art market.

People collect NFT because there is a notion of scarcity in NFT. Online, a notion of scarcity is not generally used because content flows too freely; it is too easily copied, replicated, shared, and distributed.¹⁹ However, NFT is a digital scarcity because there are more collectors' demands than supplies limited in the NFT art sector and the overall NFT market. Referring to NonFungible's weekly buyers and sellers graph²⁰(fig.2) there is a high buyer than a seller from at the end of December 2020 to the end of May 2021. The value of scarcity comes from supply and demand. If there are more demands than suppliers, the element has a notion of scarcity. Its demand increases because NFT represents today's art market trend, especially the demand from a younger generation familiar with digital.

NFT is today's latest trend. Thus, owning NFT is owning today's latest trend. Starting from Beeple's work *Everydays: The First 5000 Days*, which caused the NFT boom, NFT markets such as OpenSea and Nifty Gateway, are operating actively. Moreover, Christie's and Sotheby's, who represent major auction houses in the traditional art field, even dive into NFT selling.

Following by trend, many celebrities jump into NFT creation and sell out works quickly. Canadian musician Grimes's NFT works, for instance. In March 2021, Grimes sold her collection of NFT artwork, *WarNymph Collection Vol. 1*,(fig.3) with eight other works sold for \$5.8 Million in less than 20 Minutes. According to Artnet News, 'The works went on sale via the NFT platform Nifty Gateway. It was collaboration work with her

¹⁹"NFTs: Redefining Digital Ownership and Scarcity," Sothebys. April 6, 2021, <https://www.sothebys.com/en/articles/nfts-redefining-digital-ownership-and-scarcity>.

²⁰Besancia, "Who Framed the NFT Market?," NonFungible.com, June 4, 2021, <https://nonfungible.com/blog/who-framed-the-nft-market>.

brother Mac Boucher in creating the works.²¹ The imagery includes a winged and tattooed baby floating in space and, strikingly for those who followed the great monolith mystery of 2020, an image of cherubs and piglets orbiting around a monolith coated in butterflies.²² Demand for celebrities' work indicates people follow after today's trend.

Owning

Since digital artwork is an immaterial feature, a notion of ownership could not be inherent to digital work. However, collectors can own digital art through NFT, and it allows owning a work of art form in moving images. Referring to chapter 2, a collector can buy and own Jenni Pasanen's '*Kevin the kitten strolling on a chair*' with NFT. Although he still cannot physically own the work, a certificate registered in the blockchain system proves he owns Jenni Pasanen's '*Kevin the kitten strolling on a chair.*' When collectors buy digital art, it is no longer necessary to use a print of the work as a certificate for purchasing.

Owning NFT is not owning an image of work; it owns a certificate. In other words, selling and buying an NFT work is like making a trade idea of a certificate. *Comedian*, Maurizio Cattelan, a banana on a gallery wall with duct tape on it, which was sold for \$120,000 at the Art Basel Miami Beach 2019, for instance. Although Maurizio created his piece *Comedian* using a banana and duct tape, what he created was a notion of selling an artist's certificate. Even though the gallery was quite stressed out after David Datuna ate the *Comedian* piece, the fact that they can replace it with another banana because he did not eat the *Comedian* itself, but the banana. The *Comedian* still remains as long as the artist's certificate is valid as authentic artwork. NFT refers to a smart contract, which also indicates a certificated work with an authentic artist and proves a trade

²¹"Grimes," Nifty Gateway, accessed December 6, 2021, <https://niftygateway.com/collections/warnymphvolume1>.

²² Brian Boucher, "We Regret to Inform You That Grimes Just Sold \$5.8 Million Worth of Her NFT Crypto Art in Less Than 20 Minutes," Artnet News, March 2, 2021, <https://news.artnet.com/art-world/grimes-sold-nft-art-1948177>.

between collectors. The value in NFT comes from a collector owning the certificate.

Owning NFT artwork is a parallel idea with owning a certificate.

Collecting a work of NFT work is not just collecting digital artwork. In some cases, it can be one way to entering in NFT community. Drop's Lounge membership, for instance. In Klip Drops, one of the NFT marketplace in Korea, collectors can get a Drop's Lounge membership card if they purchase a certain amount of multiple editions works or whoever wins in a single edition auction. Besides Drop's Lounge, provides differentiated benefits to the membership holder, it also facilitates an invitation to invite collectors into the Klip Drops community.

An article, *IP and Non-Fungibility: The Intersection of Intellectual Property and NFTs*, clearly states the notion of owning NFTs. 'As a purchaser of an NFT, what are you receiving? The buyer of the NFT receives ownership of the NFT (with that ownership being recorded on the blockchain), and also presumably some implied right or license to make limited use of the underlying artwork embodied within the NFT in order to buy, own or sell the NFT. By default, the purchaser of the NFT generally will NOT receive ownership of the underlying work of art embedded in the NFT, nor the right to reproduce, or transform that work of art. It is theoretically possible that this default rule could change, for example, if the work of art in question was issued pursuant to a creative commons license, or if the transfer of the underlying ownership were expressly stated in the terms and conditions governing the creation of the NFT.'²³

Owning NFT does not mean that owner can have a control license in intellectual property. It only provides authority on trading between collectors in the market platform.

NFT refers to a digital smart contract that validates work's ownership and provenance.

An article *NFT art & copyright: what you should know* claims, the individual who

²³Moish E. Peltz, "IP and Non-Fungibility: The Intersection of Intellectual Property and NFTs," Falcon Rappaport & Berkman PLLC, March 15, 2021, <https://frblaw.com/2021/03/15/intellectual-property-and-nfts/>.

purchases the NFT undoubtedly gets the ability to buy and sell that specific NFT. That is all they get. An NFT ownership interest does not give any rights to any intellectual property. Instead, it gives interest in the literal digital file purchased. The digital file could be anything. It derives value from the file's scarcity, not the image.²⁴

Collector buying NFT digital artwork does not mean he really owns the piece; because there is a lack of control over the work. In other words, there is no ultimate ownership in a collector purchasing NFT. The idea of ownership involves the ability to control a display and performance of artworks. Buying a traditional artwork like a painting, for instance. After a collector purchase it, he spontaneously gets to decide where to hang it, who gets to see it, and so on; but to the extent that the collector does not violate the copyright and moral rights, which artists still maintain.²⁵ He has control over the work because the painting has a sense of presence; the collector physically can touch, move, and handle the owned painting.

On the contrary, digital work with no sense of physicality and cannot even see without medium lacks a notion to hang and present to the public. A collector not having a right to control work does not mean he owns the work. NFT only functions as an ownership certificate. That does not mean a collector has control over NFT art.

NFT expanded another way of owning artworks, not limited to owning existing artwork with physicality, but also a capacity to own the physical artwork in the form of digital. It is possible to own work that exists in reality, even in the virtual world, by converting it into NFT. BurntBanksy's work *Original Banksy Morons*, (fig.4) for instance. In March 2021, the Twitter account, BurntBanksy, puts fire on Bankey's print work *Morons*, 2006, and recreated it as NFTs work, then uploaded the burning performance on

²⁴Brandon J. Huffman, "NFT Art & Copyright: What You Should Know," Odin Law and Media, March 11, 2021, <https://odinlaw.com/nft-art-copyright-what-you-should-know/>.

²⁵Anthony C., "Beeple and Nothingness: Philosophy and NFTs," Aesthetics For Birds, March 18, 2021, <https://aestheticsforbirds.com/2021/03/18/beeple-and-nothingness-philosophy-and-nfts/>.

YouTube. The work was reportedly purchased for \$33,000 at Christie's in December and came with a Pest Control certificate of authenticity. It is a printed piece, which features the line, "I can't believe you morons actually buy this shit," is a satirical poke at the shallow, over-inflated art market.²⁶ On March 07, 2021, the work under the title of *Original Banksy Morons* was sold in 228.69 ETH (about \$380,000 at purchase) to a user name 'GALAXY' through auction in OpenSea.

In the uploaded video, BurntBanksy claims the reason for this performance as follows: "If you were to have the NFT and the physical piece, the value would be primarily in the physical piece. By removing the physical piece from existence and only having the NFT, we can ensure that the NFT, due to the smart contract ability of the blockchain, will ensure that no one can alter the piece and it is the true piece that exists in the world. By doing this, the value of the physical piece will then be moved onto the NFT."²⁷

Referring to what they claim, comparing physical work and NFT correspond to the original work, of course, there is value in the physical piece because it is the original. However, even though BurntBanksy destroys Bankey's print work *Morons* and transforms the work into NFT, the idea of originality does not move into BurntBanksy's NFT work. It is because what they have done is they transfer the replica of the original Bankey's work into NFT. A *photograph* is a replica derived from the subject(original). Think about orange and a photograph of an orange. Generally, people would think those two different forms of orange are the same orange; one is the original orange, and another is a photograph of the same original orange. However, the idea of photography

²⁶Anny Shaw, "Art Enthusiasts' Burn a Banksy Print Then Sell It as an NFT," The Art Newspaper, March 4, 2021, <https://www.theartnewspaper.com/2021/03/04/art-enthusiasts-burn-a-banksy-print-then-sell-it-as-an-nft>.

²⁷Anny Shaw, "Art Enthusiasts' Burn a Banksy Print Then Sell It as an NFT," The Art Newspaper, March 4, 2021, <https://www.theartnewspaper.com/2021/03/04/art-enthusiasts-burn-a-banksy-print-then-sell-it-as-an-nft>.

is an action of a transcript. The transcript is a copy of the original; rather, it cannot be an original. Thus, the *Original Banksy Morons* BurntBanksy minted as NFT after taking a photograph from Banksy's print is a copy of *Morons*, which none of the value inherent.

Ch.4 NFT Art Market Research

From the end of 2019, the world has entered an unexpected phase. In 2020, due to COVID, every art fair, museum exhibition, and even auction house sales went through entirely online. Society makes people digitized. People became used to transmitting everything via digital, and virtuality became primary. Likewise, in today's unusual circumstances, attention in the art market moved towards NFTs. Many different NFT digital art market platforms such as SuperRare, Nifty Gateway, Foundation, OpenSea, Rarible, and Hic et Nunc formed and activated.

Among numerous NFTs art marketplace, each platform has a difference in medium focusing, fee calculation, currency usage, operating with curation or non-curation, and so on. A platform like SuperRare and Nifty Gateway are exclusive markets with good curation. In contrast, OpenSea and Rarible are non-curated markets where anyone can sell their works as long as they verify their digital wallet. Rarible is also a DAO market space, where well adopted an ideology of blockchain. Unlike other Ethereum-based markets, Hic et Nunc is a platform based in Tezos, another blockchain system besides Ethereum. Reflecting today's latest trend, traditional major auction houses such as Christie's and Sotheby's also jump into NFT sales.

Market Place

SuperRare

On April 5 of 2018, the first artwork was minted on SuperRare; over 1,400 artists have sold more than \$90 million in NFT art on SuperRare.²⁸ SuperRare is quality over quantity marketplace with carefully selected artists. It limits the selling into only single-edition of digital artworks to maintain a high-quality curated NFT platform. Aspiring

²⁸ "Announcing the \$RARE Curation Token and the SuperRare Network," Superrare, August 17, 2021, https://superrare.mirror.xyz/fkGKcN1xVNRvfZk5OiY52-T_WNSndC4ve1DPDmvZQ6E.

artists who want to present their work in SuperRare need to submit an artist profile form, and the platform approves their submitted works. Because SuperRare only admits a small number of artists each month, the entry barrier is high. It is a premier marketplace with a high price floor, but it is worth paying even if the price floor of works is high because of its high curation level.

Not only limited to selling digital works, but the platform also organizes new exhibitions, projects, and special releases. One function SuperRare has, artists, can curate and hold their digital exhibition under the 'Features' section. The platform explains, features is the hub of exhibitions, notable projects, and special releases happening in the world of SuperRare. Features are created on an ad hoc basis and are a curatorial decision made by the team.²⁹

SuperRare is known as a marketplace with significant curation. Along with their reputation, they recently strengthened their curation aspect by introducing a new currency, the \$RARE curation token, capable of a decentralized governance system. SuperRare announced their updated system by saying, the \$RARE curation token is a means to identify and empower new curatorial talent in the SuperRare community. The \$RARE curation token will be used as the primary vehicle to onboard a growing network of curators, galleries, and collectives - all functioning as SuperRare Spaces: independently curated storefronts on SuperRare. These curation decisions will be enacted using token-based voting with the community's participation and implementation by the SuperRare Council.³⁰

Nifty Gateway

²⁹Keegan Ead, "How to Curate an Online Exhibition on SuperRare," SuperRare Help Center, accessed December 6, 2021, <https://help.superrare.com/en/articles/5266447-how-to-curate-an-online-exhibition-on-superrare>.

³⁰ "Announcing the \$RARE Curation Token and the SuperRare Network," Superrare, August 17, 2021, https://superrare.mirror.xyz/fkGKcN1xVNRvfZk5OiY52-T_WNSndC4ve1DPDmvZQ6E.

In 2018, founded by Twin brother Duncan and Griffin Cock Foster, works from numerous major artists such as Beeple and Grimes have been sold through Nifty Gateway. They accept artists and their works through an application process parallel with SuperRare. However, since Nifty Gateway partners with top creators, brands, athletes, and artists, it is challenging to get accepted from the platform.³¹

In Nifty Gateway, its markets consist of three sectors; Curated Drops, Verified Drop, and marketplace, which function as a secondary art market. In Curated Drops, collectors can purchase directly from the creator during limited and specific sale times and dates. A system where sales are made within a limited and specific sales time makes the artwork more scarce. The marketplace is the only place where collectors can buy the works after the initial sales from Curated Drops. Famous works are often resold for a higher price in the marketplace because a sale goes only in a limited time in Curated Drops. WhIsBe's *Karma Chameleon* (133 editions over 1239),(fig.5) for instance. Initially, the work was sold for \$999.00 on March 16, 2021, but resold for \$2,769.00 on October 14, 2021. Lastly, Verified Drops is another type of sale but not curated by Nifty Gateway but has been verified by the platform.³²

Unique feature Nifty Gateway has, they set a price of an artwork in USD currency and accept credit card payment, which seems unusual in NFT market society. Setting a USD currency makes the platform as an ordinary digital art market without knowing that Nifty Gateway is an NFT market space. This feature makes it beginners in NFT collecting easy to collect digital work using a cryptocurrency.

Foundation

³¹"NFT License Breakdown: Exploring Different Marketplaces and Associated License Issues," The National Law Review, September 21, 2021, <https://www.natlawreview.com/article/nft-license-breakdown-exploring-different-marketplaces-and-associated-license-issues>.

³²"Verified Drops," Nifty Gateway, accessed December 6, 2021, <https://niftygateway.com/collections-verified>.

Foundation was launched in February 2021. Compared to SuperRare and Nifty Gateway, Foundation is a less curated platform. It is an invited-only operating platform, where creators need to join the Foundation through community members, fellow artists already part of the platform, or by the platform itself.³³ If a creator sells his first NFT, he can access the “Creator Invites” feature. The newly invited creator will be shown directly on the profile of the person who invited him.³⁴ By using an only-invite process, the quality of the work can be manageable as overall high quality and forms an NFT artist community.

Any NFT sales in Foundation only go through an auction. After an artist puts a reserve price on his selling piece, collectors can then place a bid. Once the first bid is placed, a 24-hour auction countdown begins. If a collector bids within the last 15 minutes, the auction extends for another 15 minutes.³⁵

OpenSea

Platforms like SuperRare, Nifty Gateway, and Foundation are good curation spaces, where a trustworthy art market guarantees a certain level of quality of the work. On the other hand, there is a non-curation space, a field of opportunity where anyone can present their works; OpenSea.

Launched by Devin Finzer and Alex Atallah in December 2017, OpenSea established itself as the first and the largest NFT marketplace. According to DappRadar, it is an open market where anyone can upload their digital work and sell it to collectors. They focus on diverse categories, such as artworks, collectibles, music, domain names, virtual worlds, trading cards, sports, and utility. Collectors can buy digital assets at a fixed price or through bidding in an auction.

³³ “About Foundation,” Foundation, accessed December 6, 2021, <https://foundation.app/about>.

³⁴ Samantha Ayson, “How Do Creator Invites Work?,” Foundation Help Center, accessed December 6, 2021, <https://intercom.help/foundation-529b3c2d3a16/en/articles/5015227-how-do-creator-invites-work>.

³⁵ “About Foundation,” Foundation, accessed December 6, 2021, <https://foundation.app/about>.

OpenSea has a function as an aggregator platform, where is eligible for cross-project flexibility. There is a lack of unification between each market platform. Collectors cannot trade their collection from SuperRare on Foundation or work from Foundation on SuperRare. However, they can trade both on OpenSea. Works created in other NFT markets such as Rarible, SuperRare, and Foundation can be viewed and manageable on OpenSea.³⁶ Cryptocurrencies such as Ethereum (ETH)/WETH, USDC, and DAI mainly use, they are also available over 150 other payment tokens like \$UNI and \$WHALE; but it is not currently possible to use non-crypto currencies like USD and the Euro³⁷

Unlike auction houses in the traditional art field, the only-focused second market has not yet formed. Secondary sales are mostly held in an NFT marketplace itself, along with primary sales. However, OpenSea's aggregator characteristic functions as a secondary market where usually project-based collectibles such as major projects like CryptoPunks and Bored Ape Yacht Club are traded. Bored Ape Yacht Club, for instance, announced, 'The initial sale has sold out. To get your Bored Ape, check out the collection on OpenSea.'³⁸ Their second sales begin in OpenSea after their initial sales.

OpenSea has a ranking system where a list of collections and works are ranked by volume, floor price, and other statistics. As of November 2021, referring to their all-time ranking under the art category, CryptoPunks takes first place with a total volume traded of 706,997.15 Ether, 3,203 owners, and 9,999 items. Bored Ape Yacht Club comes next with a total volume traded of 205,122.85 Ether, 5,750 owners, and 10,000 items. Then Rarible and SuperRare take up third and fourth place. Referring to the list of

³⁶ Will Gottsegen, "The NFT Market Is Already Centralized," CoinDesk, October 18, 2021, <https://www.coindesk.com/tech/2021/10/18/the-nft-market-is-already-centralized/>.

³⁷ "What Currencies Can I Use on OpenSea?," OpenSea, accessed December 6, 2021, <https://support.opensea.io/hc/en-us/articles/1500003082521-What-currencies-can-i-use-on-Open-Sea->.

³⁸ "Bored Ape Yacht Club," BAYC, accessed December 6, 2021, <https://boredapeyachtclub.com/#/home>.

top 10,(fig.6) collectives projects like CryptoPunks, Bored Ape Yacht Club, Hashmasks, and My Curio Cards account for most of the part. Collective projects actively trade in the OpenSea.

Rarible

Rarible is one of the NFT marketplace parts of a Decentralized Autonomous Organization, a platform where launches the first governance token in the NFT space. DAO stands for Decentralized Autonomous Organization. It is an idea of self-governing entities that establish transparency in decision-making and fund allocation to decentralize the power of a momentous community. The goal of “decentralizing” is to protect from power resting in the hands of few and distribute governance to all participating members.³⁹ The community takes control in governance, not the marketplace itself.

Similar to OpenSea, it is open to anyone, featuring diverse categories; Categories: Digital art, photography, music, games, metaverse, memes. However, a difference from OpenSea is, Rarible operates its platform via governance token, RARE. Rarible explains, RARI is the native governance token of the NFT marketplace Rarible, designed to reward active platform users with a voice on the platform’s future. RARI has been created to give Rarible community the power to influence decisions and incentivize active participation.⁴⁰ Community members who hold RARI tokens have the right to exert influence over the platform development and vote agendas such as Rarible’s trading fees, moderating creators on the platform, or curating featured artworks.⁴¹

³⁹ Lauren, “The Superrare Dao: Governance 101,” SuperRare Help Center, accessed December 6, 2021, https://help.superrare.com/en/articles/5429518-the-superrare-dao-governance-101#h_4b503f07b8.

⁴⁰ “Rarible FAQ - What Is \$RARI, and Why Is It Being Distributed?,” Rarible, accessed December 6, 2021, <https://www.notion.so/rarible/Rarible-com-FAQ-a47b276aa1994f7c8e3bc96d700717c5>.

⁴¹Rarible, “Introducing \$RARI-the First Governance Token in the NFT Space,” Medium, July 15, 2020, <https://rarible.medium.com/introducing-rari-the-first-governance-token-in-the-nft-space-5dbcc55b6c43>.

Hic et Nunc

On March 1, 2021, Rafael Lima launched Hic et Nunc, the first NFT art marketplace based on the Tezos blockchain. According to its website, Hic et Nunc aims to be a decentralized application that allows its users to manage decentralized digital assets, serving as a public smart contract infrastructure on Tezos Blockchain.⁴²

Hic Et Nunc is distinct from the marketplaces listed above, based on the Ethereum blockchain system. Tezos is a gamechanger in NFT society. Tezos is the fifth-most-used blockchain for non-fungible tokens today. Compared to other networks, a characteristic of more energy-efficient, cheaper transaction fees, and quickly gaining momentum in the NFT space, making Tezos significant. Unlike other Ethereum based marketplaces, because Hic Et Nunc operates through Tezos' smart contracts, minting prices for NFTs remain very low, making the concept more approachable to users. For instance, one can mint an NFT on Tezos for under \$0.255, whereas doing the same on Ethereum would cost \$50 or more.⁴³ Those who cannot bear with expensive Ethereum's gas fee prefers to use Tezos

However, because Hic Et Nunc is in the Tezos blockchain system, it has a limitation on incapable of cooperating with OpenSea or other Ethereum based marketplaces. Besides the art segment, as a whole, NFT projects and platforms based in Tezo are limited. Ethereum accounts for the majority of the NFT marketplaces. Tezos-based marketplaces and projects do not cooperate with Ethereum-based platforms, meaning it may limit its market growth.

Christie's

⁴² "Hic Et Nunc About," accessed December 6, 2021, <https://www.hicetnunc.xyz/about>.

⁴³ "The Current NFT Marketplace Landscape Becomes More Competitive Thanks to Tezos," Micky, October 20, 2021, <https://micky.com.au/the-current-nft-marketplace-landscape-becomes-more-competitive-thanks-to-tezos/>.

Christie's is NFTs early adopter among many traditional auction houses, and where NFTs boom begins due to Beeple's sale. Beeple's work *Everydays: The First 5000 Days*(fig.7) is a collage piece, a collection of his digital work he created every day for 13-and-a-half years. The work was minted exclusively for Christie's and sold as a single lot Online Auction sale, which went through from February 25 until March 11, 2021. With a significant record price, *Everydays: The First 5000 Days* was sold in \$69,346,250.⁴⁴ For Christie's, it was their first historical sale on the work of NFTs. After the work was sold at a remarkable price, many major presses include the New York Times and the BBC report regarding Beeple's NFT sale. It would not be an exaggeration to say that due to global media coverage regarding Christie's Beeple sale, starts NFT boom.

After their successful sale from Beeple, Christie's turned their eyes on a historical work of NFT, CryptoPunks, created by Larva Labs. As an initial NFT project launched in 2017, CryptoPunks(fig.8) is 24 by 24-pixel icons of algorithmically generated cartoon character heads in profile portraits, which are unique and only exist in a limited number of 10,000. According to Larva Labs, who created CryptoPunks, most are punky-looking guys and girls, but a few rarer types are mixed in: Apes, Zombies, and even the odd Alien. No two are exactly alike, and each one of them can be officially owned by a single person on the Ethereum blockchain. When Larva Labs created CryptoPunks, they claimed free by anybody with an Ethereum wallet, but all 10,000 were quickly claimed. Now they must be purchased from someone via the marketplace that is also embedded in the blockchain.⁴⁵

On May 11, 2021, in 21st Century Evening Sale, Christie's Offers 9 CryptoPunks(fig.8). Matt Hall and John Watkinson, the founder of Larva Labs, originally

⁴⁴"Beeple's Opus," Christies, accessed December 6, 2021, <https://www.christies.com/features/Monumental-collage-by-Beeple-is-first-purely-digital-artwork-NFT-to-come-to-auction-11510-7.aspx>.

⁴⁵"CryptoPunks," Larva Labs, accessed December 6, 2021, <https://www.larvalabs.com/cryptopunks>.

own the collection of the 9 CryptoPunks. The sale was estimated to be \$ 7,000,000 up to \$ 9,000,000, but the hammer price realized was overestimated by \$ 16,962,500.

CryptoPunks is the very first NFT work, representing a history of NFT. Historical NFT work sold from one of the major traditional auction houses, Christie's, indicates the traditional art world accepts the emerging digital field and is willing to accompany it in the new medium.

A significant in Christie's CryptoPunks sale is, it is the first time auction house (off-chain market) that sells a history of NFT. "The CryptoPunks are the alpha and omega of the CyptoArt movement,' explains Noah Davis, a specialist in Post-War & Contemporary Art at Christie's, New York.⁴⁶ Refers to what Noah Davis said, the sale of Cryptopunks was the historic sale of Alpha and Omega.

Sotheby's

From April 12 through April 14, Sotheby's first NFT sale on Pak's digital cube works, 'The Fungible,' collaborate with Nifty Gateway as a first auction house that collaborates with the NFT market platform. The sale was conducted not as an ordinary sale, but it was more likely an interactive project with collectors. According to an article referring to the Sotheby's sale, 'generally, the sale was divided into three categories: open editions, auctions, and reserved pieces. One function, a notion of digital work has 'multiplicity.' In on open edition sale, Pak presents an interactive sale with collectors, using 'multiplicity.' In Open editions, collectors can buy as many fungible cubes as they want during the limited sale period. Based on the total number of fungible cubes the collector own, they would receive a different set of NFT among eight different types of cubes(fig.9); *A Cube, Five Cubes, Ten Cubes, Twenty Cubes, Fifty Cubes, Hundred*

⁴⁶ "10 Things to Know about CryptoPunks, the Original NFTs," Christies, April 8, 2021, <https://www.christies.com/features/10-things-to-know-about-CryptoPunks-11569-1.aspx>.

Cubes, Five Hundred Cubes, Thousand Cubes. Two single pieces went for auction; ‘*The Switch*’ and ‘*The Pixel*,’ sold for \$1,444,444 and \$1,355,555.

Lastly, works in different edition numbers were given to collectors with different criteria in reserved pieces. A unique “one of one” work, *The Cube*, was given to the individual who purchased the most Open Edition cubes during the sale. A collection of hundred, *Complexity*, were given to the following 100 individuals who purchased the most Open Edition cubes during the sale. Four of four edition *Equilibrium* was given to the winner of specific criteria⁴⁷; A set of 30 edition *The Builder* was given to artists, builders, and creators who have paved the way for Pak and other NFT artists. The recipients, determined by Pak, are those without whom extraordinary leaps in the evolution of media and art would not have happened. Throughout the sale, in total, the sale generated \$16.8 million in three days across the open editions and the two auction pieces.⁴⁸

After their successful sale on Pak’s collection, Sotheby’s operated on a venue to exhibit NFT artworks. In their Natively Digital: A Curated NFT Sale on June 10, 2021, highlights in the sale were presented in Sotheby’s Metaverse gallery in the Decentraland. After the Natively Digital sale, in Natively Digital 1.2: The Collectors sale on October 18 to October 26, 2021, Sotheby’s present their NFT exclusive marketplace, Sotheby’s Metaverse. They introduce their new sale venue, Sotheby’s Metaverse, as ‘an immersive destination for collectors of digital art, offering a curated selection of NFTs.

⁴⁷ According to work description from Nifty Gateway, The Cryptographer (#1 of 4): The person who solves Pak’s puzzle.; The Hunter (#2 of 4): The collector who acquires any piece of art by Pak from its initial marketplace for the highest amount on the secondary market.; The Influencer (#3 of 4): The individual that posts #PakWasHere to the biggest social media audience.; The Oracle (#4 of 4): The person who most closely estimates the total sale of the entire collection prior to the auction beginning on 12 April.

⁴⁸“\$17 Million Realized in Sotheby’s First NFT Sale with Digital Creator Pak,” Sothebys, April 16, 2021, <https://www.sothebys.com/en/articles/17-million-realized-in-sothebys-first-nft-sale-with-digital-creator-pak>.

Sotheby's Metaverse is a home for this new art movement built on the foundations of crypto and NFTs.⁴⁹

Metaverse Gallery

A virtual world, Metaverse, is oriented as a perfect venue for virtual galleries. Numerous virtual galleries exhibit their shows in Cryptovoxels and Decentraland, a virtual world powered by the Ethereum blockchain. They are a giant place digital world where players can buy land and build stores and art galleries. While collectors are looking around the space and stop in front of the piece, they can directly link to various marketplaces to buy or bid on the piece and see details about the work. Sotheby's and a marketplace like SuperRare operate their virtual gallery.

In June, Sotheby's announced they open their first-ever virtual galleries in Decentraland.(fig.10) Occupying a prime location in Decentraland's Voltaire Art District, the building replicates the auction house's iconic New Bond Street Galleries in London. The structure features all five ground-level gallery spaces as well as the figure of Sotheby's London Commissionaire, Hans Lomulder, on hand to greet visitors.⁵⁰ As the first virtual exhibition in Decentraland, they present Natively Digital curated NFT sale on June 10, 2021. Followed by the first sale, virtual gallery exhibit two of Banksy's works, *Trolley Hunters* and *Love is in the Air*, auction lots from 'The Now Evening Auction' sale, which was held on November 18, 2021, New York. Their virtual gallery follows Sotheby's current sale and supports their NFT sale.

Physical Exhibiting gallery

Numerous physical NFT exhibitions occurred right after the NFT boom, followed by Beeple's historical sale in Christie's sale. "Virtual Niche—Have you ever seen memes

⁴⁹"Natively Digital 1.2: The Collectors," Sotheby's Metaverse (Sotheby's), accessed December 6, 2021, <https://metaverse.sothebys.com/natively-digital>.

⁵⁰ "Sotheby's Opens a Virtual Gallery in Decentraland," Decentraland, June 4, 2021, <https://decentraland.org/blog/announcements/sotheby-s-opens-a-virtual-gallery-in-decentraland/>.

in the mirror?” exhibition, for instance. From March 26 to April 4, 2021, at UCCA Center for Contemporary Art in Beijing, China, being billed as “the world’s first major institutional crypto-art exhibition,” works by more than 60 artists, including Beeple was shown in the exhibition.⁵¹

Exhibiting NFT works in a physical gallery seems contradictory. On the outside, there is no distinction between NFT work and general digital work; NFT work is a piece of digital work likewise. Even though people visit a physical gallery and see the work, they may not realize what they are seeing is the work of NFT before someone tells them in advance. They may think ordinary graphic works are on display. Thus, exhibiting NFT work in physical value, a gallery is pointless. However, on the other hand, a gallery is a specific venue where people can see the original work of art rather than reproduction. NFT is a certificate verifying ownership in work. Thus, it stands to reason to see the original certificate in the gallery where the original is displayed. As long as the ownership has been verified, it is a work with originality.

Physical NFT exhibition supports the NFT artist community and facilitates as a bridge that connects virtual and reality. It is a venue where the NFT community can meet and communicate in reality and provide an opportunity to introduce and approach NFT to the public. It is the ultimate space where exhibits today’s latest trend.

NFT Art Market in Korea

Korea’s NFT art market is still in its infancy compared to the markets in the United States. Although the NFT boom begins from Beeple’s remarkable NFT sale on March 11, 2021, in Christie’s, gives a massive effect in Korea. However, since the notion of NFT is new to Korean artists and collectors, it starts from a small and niche community. The Korean NFT art community was formed around social media such as

⁵¹Sarah Cascone, “The World’s First ‘Major’ NFT Art Exhibition Is About to Take Place in Beijing, Headlined by Beeple, Fewocious, and Mad Dog Jones,” Artnet News, March 5, 2021, <https://news.artnet.com/art-world/crypto-art-show-ucca-beijing-1949592>.

Clubhouse, KakaoTalk, and Twitter. Not many domestic proper NFTs marketplaces like OpenSea or Rarable are placed in Korea. Among very few NFT art marketplaces, Klip Drops and UPbit NFT, cooperating with Seoul Auction, are the well-known NFT marketplace in Korea.

Klip Drops

Klip Drops is the most popularly known platform in Korea among NFT collectors. In July 2021, a Klaytn blockchain company, Ground X, launched Klip Drops cooperates with KakaoTalk, a major messaging platform similar to WeChat in China and WhatsApp in the US. Klip Drops has poor accessibility. Different from the NFT marketplaces in the US, Klip Drops's accessibility seems complicated. Because they do not have their independent platform, collectors only can access through the KakaoTalk application. Despite their complexity, since Klip Drops linked into Korea's most in use messaging platform, KakaoTalk, They could become the most reliable and the most well-known NFT market in Korea.

On July 28, Klip Drops had their first sale on Mr. Misang's work. Klip Drops is well-known because they rely on KakaoTalk, and their high level of curation cooperates with galleries. Works they are put on for sale are artworks from famous artists such as Mr. Misang, Charles Jang, and even Jung Woo Ha, a famous actor in Korea. The sale only runs five days a week from Wednesday through Sunday 9 a.m to 9 p.m, one single artist per day. They have high sale activity refers to a circumstance famous artist's sale sold out with 1-2 minute after the sale starts. Parallel with other NFT marketplace, there are two different sale types; multiple editions and a single edition auction. In some sales, a special benefit occurs, such as offering printed NFT work with an artist's signature or painting or sculpture work related to purchased NFT work.

Another interesting feature in Klip Drops is, they build a limited community, Drop's Lounge. It is limited space for collectors who purchase a certain amount of

multiple edition works or win in a single edition auction. In October 2021, a community meeting was held in Seoul, Korea, with those who hold Drop's Lounge membership cards and artists who participate in the Klip Drops sale. A limitation in Klip Drops is that a secondary market is not yet running. However, their announcement will begin their secondary market in the fourth quarter of 2021 and their active market sale. There is huge potential Klip Drops would draw into the leading NFT community in Korea.

Seoul Auction

Seoul Auction, one of the major auction houses in Korea, jump into the NFT market field for the first time as an auction house in Korea. On November 23, they started their first sale on Jang Koal 's works; *Mirage cat 3* (a single edition) and *You are not alone 1* (900 Editions). *Mirage cat 3*(fig.11) sold at a remarkable price of 3.5 BTC (about KRW 254,000,000 and \$214,972 at purchase). The reason for such a high sale result can be assumed the sale was the first NFT sale from Seoul Auction and the first sale from among traditional auction houses in Korea.

Like Klip Drops, Seoul Auction has an intricate selling process and shows a different aspect than other auction houses generally do. Christie's and Sotheby's NFT sales, for instance. Usually, curation and selling progress directly on their platform. On the contrary, in Seoul Auction, their affiliated company, XXBLUE, curates the sale and progresses their sale on another NFT market platform, UPbit NFT.

Parallel in Binance NFT, UPbit NFT is an NFT marketplace operated by one of the cryptocurrency markets in Korea, UPbit. In the marketplace, there are two sections, Drop and Marketplace, where put works for sale. In Drop, primary sales are running, like Seoul Auction's first NFT sale, for instance. The Marketplace is a venue for a secondary market divided into four categories; K-Pop, sport, game, and digital art. Because it has not been that long, Seoul Auction started selling NFT artworks, collectible NFT from

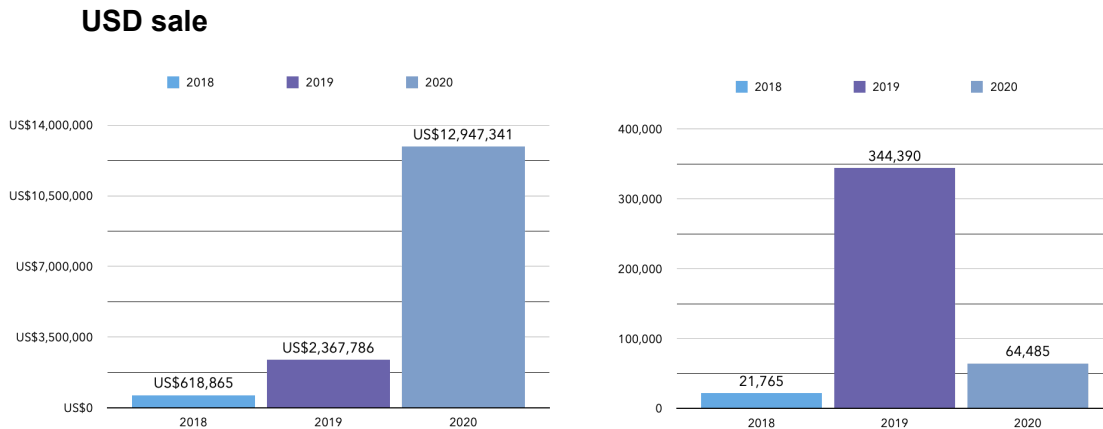
major companies in Korea is mainstream yet. Collectives such as official drawings of celebrities in Korea are on sale.

Currency UPbit NFT uses BTC in an initial sale and KRW in a secondary sale. They are running two different styles of an auction, Dutch Auction and English Auction. English Auction is a famous bidding method which the most in use in other marketplaces. On the contrary, Dutch Auction is unusual, opposite way with English Auction. In an English Auction, a work is sold to the highest bidder. However, in Dutch Auction, a bid starts from the highest price, and the price declines every few minutes. In Klip Drops, for instance, the marketplace sets a price for a multiple edition sale, so collectors only can purchase the edition work at a fixed price. However, in UPbit NFT, because the Dutch Auction is held in multiple edition sales, a price on the edition is determined by demand. Thus, collectors buying the edition work at a fixed price can purchase in a more reasonable amount.

NFT marketplace in Korea shows complexity compared to the US NFT marketplace, assuming the Korean art market itself is less aware of NFT than the United States. The community's level of awareness toward NFT has not been long since Korean NFT started to form in March 2021. Because the NFT art market in Korea is minor, it would be difficult for individual artists to get an opportunity to present their works at least they have a certain amount of fame. Thus, most artists chose to work in the US market, such as OpenSea or Foundation, outside Korea.

Ch. 5 NFT Art Market Analysis

NFT is used in various segments, such as metaverse, sports, utility, art, game, and collectible. This analysis mainly focuses on USD trade values, sale volumes, and primary and second market sales in art segments. Statistics and its resources refer to NonFungible's Non-Fungible tokens yearly report (2018, 2019, 2020) and a 2021 quarterly report(Q1, Q2, and Q3). The reports claims, NonFungible currently only supports transactions that occur on the Ethereum Blockchain in the main standard of NFT (ERC-721) and does not support data from Nifty Gateway, Rarible, and off-chain sales such as Christie's and Sotheby's. However, off-chain NFT sales sources and statistics' resources are from Artprice.

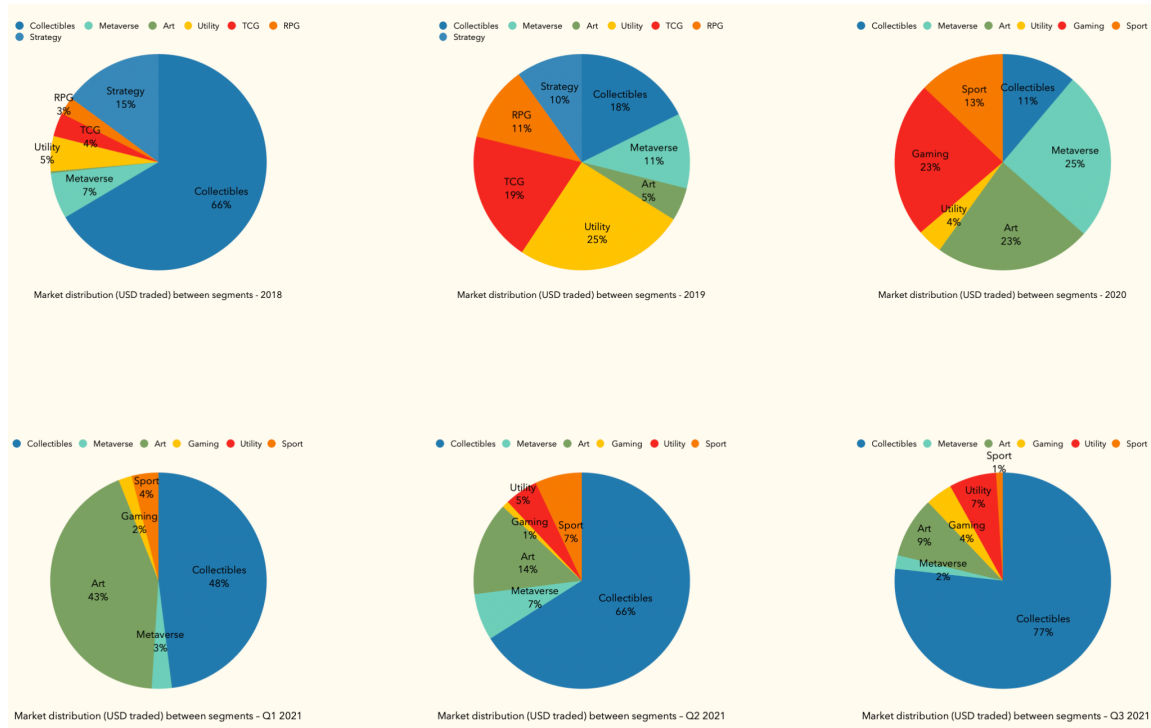


(fig.12) USD Traded via Sales in Art segment (2018-2020) (fig.13) Number of Sales in Art segment (2018-2020)

From 2018 to 2020, the value of USD trade in an art segment shows a significant increase. USD trade value in 2020 is about 20 times higher than 2018's trade value. However, the number of sales from 2018 to 2020 shows a different indicator. Sales volume increased in 2019 but sharply went down. Compared to the number of sales in 2019 and 2020, the number of sales in 2020 is relatively low but has a higher USD trade

value. This phenomenon indicates that work of art's average price in 2020 is increased compared to previous years.

Market distribution USD Traded



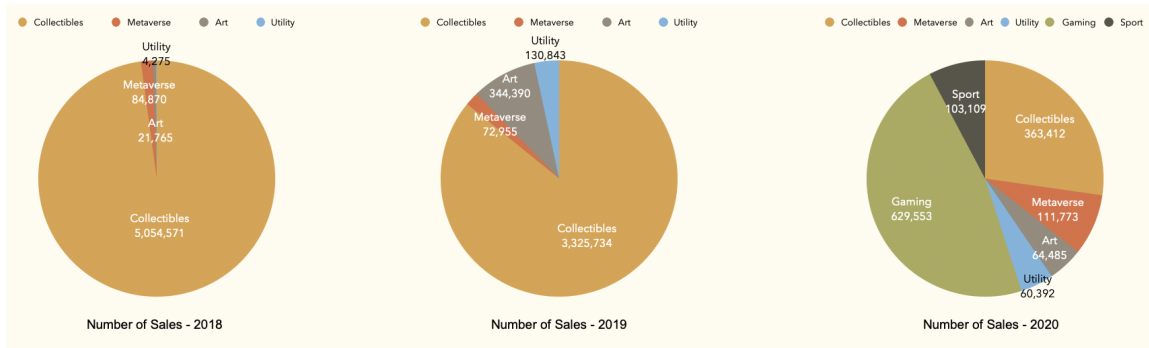
(fig.14) Market distribution USD Traded from 2018 to 2021 Q3

In 2018, the beginning of NFT history, the value of USD sales on an art segment was limited among different categories. However, starting from 2020, the price of USD sales increased, and ultimately category of art placed in second high trade value next to collectibles. At the beginning of 2021, the art segment shows a similar ratio to the collectible segment. However, the latest record in Q3 shows a USD trade value in collectible dominates among all segments.

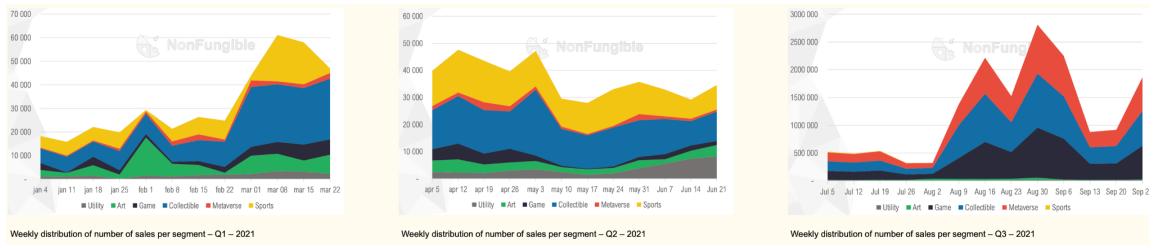
In Q1 2021, art constituted 43% as the most significant portion. The reason is assuming that because of 'NFT hype' regarding Beeple's Christie's sale in March. His successful sale would significantly influence increasing sales value in other NFT works. As the quarters continue, a percentage in USD value decrease; Q2 shows 14%, and Q3

shows an even less percentage, 9%. However, the art segment still has the second-largest position among other categories.

Market distribution Number of Sales



(fig.15) Market distribution Number of Sales from 2018 to 2020



(fig.16) Weekly number of sales per segment 2021(Q1, Q2, Q3)

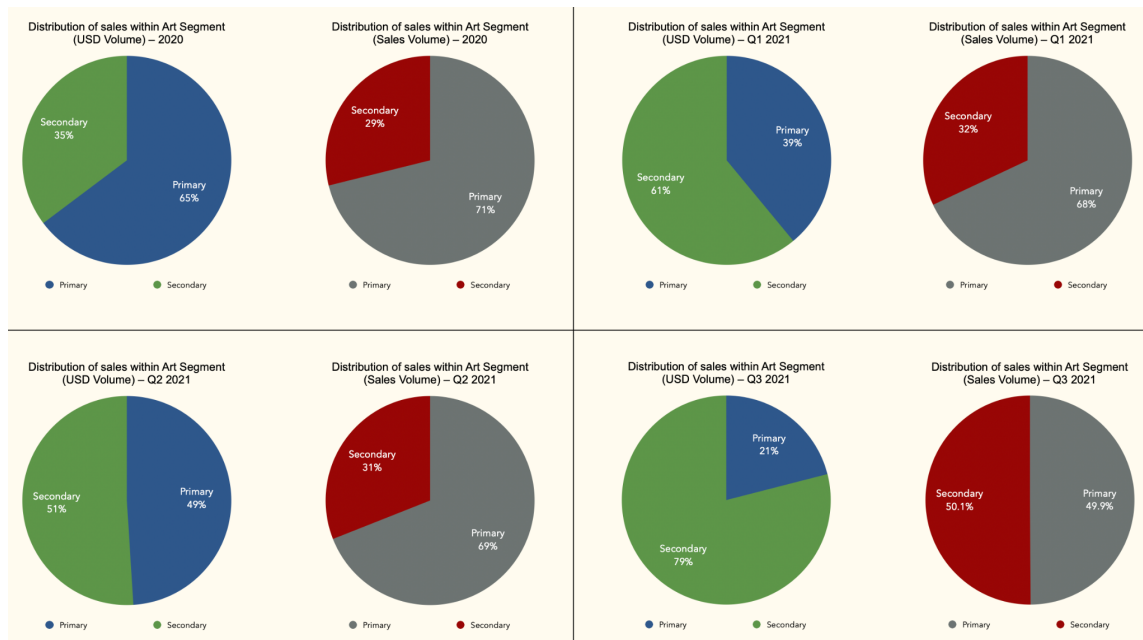
In 2018, there was not much sales volume in the art segment. However, the sales volume increased in 2019 but went down in 2020. According to the 2020 yearly report, the dramatic increase in gas costs during 2020 has impacted sales volume. Network costs (gas) had become so expensive that it was no longer profitable to sell mid-priced assets (\$1 to \$50), the transaction would have cost more than it would have earned. It is interesting to note how the volume of USD traded has increased significantly, while the volume of selling has decreased.⁵²

It was challenging to get an exact percentage portion of the art segment from 2021 Q1, Q2, and Q3. Due to a massive number of sales in a metaverse, the sales volume in the art segment is hard to determine, but assuming that Q1 shows a relatively

⁵² “Non-Fungible Tokens Yearly Report 2020” (NonFungible, 2020), p. 48.

high number of sales among other records. According to a Q3 report, in comparison, the volume of the other three segments (Utility, Art & Sport) [in Q3] is barely visible, indicating that the average value of these assets is particularly high, this is especially evident in the Art segment. In Q3, although there is not much sale volume, refer back to the Market distribution (USD traded) between segments – Q3 2021, art segment is only at 9% but still takes in second place among the entire segment. This tells Q3 has a high average value in USD trade volume.

Primary Market vs. Second Market



(fig.17) Primary market and second market in both USD Volume and Sales Volume from 2020 to 2021 Q3

Art segment secondary market statistics in 2018 and 2019 are limited to find. Hence, secondary record statistics start from 2020. The secondary market in NFTs is growing. The secondary market shows significant growth from 2020 to the latest 2021 Q3. According to the 2020 yearly report, the secondary market remains very limited. The common behavior of buyers at the moment is essential to build a collection.⁵³ However,

⁵³ “Non-Fungible Tokens Yearly Report 2020” (NonFungible, 2020), p. 57.

moving forward to quarters in 2021, in Q1 2021 the value of assets in the secondary market has increased significantly, from 35% in 2020 to 61% in Q1 2021. It is a clear sign of speculation from collectors who are trying to get their hands on the most works already issued by promising artists.⁵⁴

In Q2, the primary market gained 10% on the secondary market in terms of USD traded volume compared to the first quarter. At the same time, the distribution between secondary and primary markets remained precisely the same as in the first quarter from the point of view of sales volume.⁵⁵ In Q3, the distribution between Primary and Secondary Markets has evolved considerably, the Primary Market has accounted for 49% of the market value against only 21% during Q3. It means that works issued by already recognized artists are increasingly seen as stores of value. The level of risk of art issued on the Primary Market still seems too high for most collectors.⁵⁶

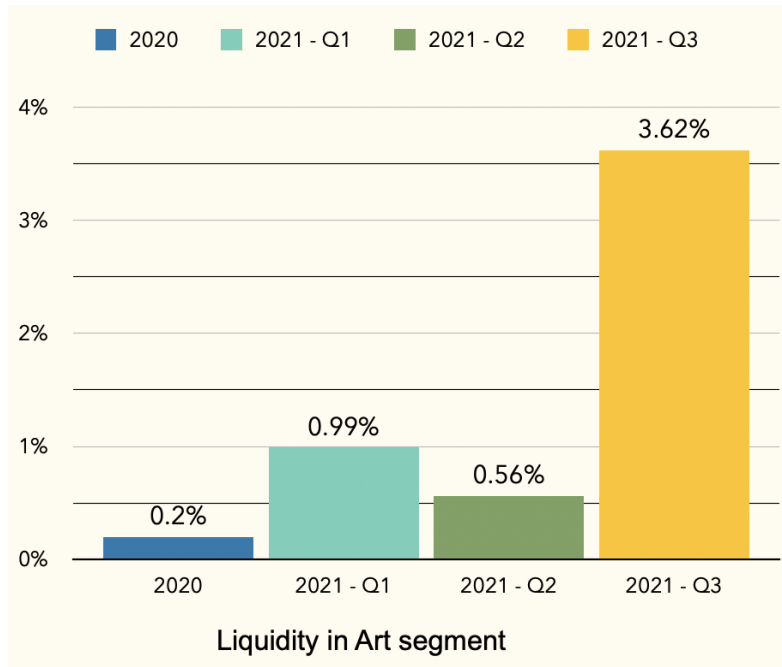
The problem with the secondary market in NFT art is no proper valuation formula. For instance, in a traditional secondary art market like auction houses, professional connoisseurship and valuation must progress when work is put on auction. However, in the NFT secondary art market, a work's owner put a price perhaps based on the public's interest as supply and demand ratio.

Liquidity

⁵⁴ “Non-Fungible Tokens Quarterly Report Q1-2021” (NonFungible, 2021), p. 25.

⁵⁵ “Non-Fungible Tokens Quarterly Report Q2-2021” (NonFungible, 2021), p. 25.

⁵⁶ “Non-Fungible Tokens Quarterly Report Q3-2021” (NonFungible, 2021), p. 24.



(fig.18) Liquidity in Art segment

2020 yearly report defines a liquidity rate as percentage of the total supply of a specific type of asset that has been traded on secondary markets. The report calculated by dividing the volume of unique assets that have been traded on the Secondary Market, with the total supply available for each type of asset.⁵⁷

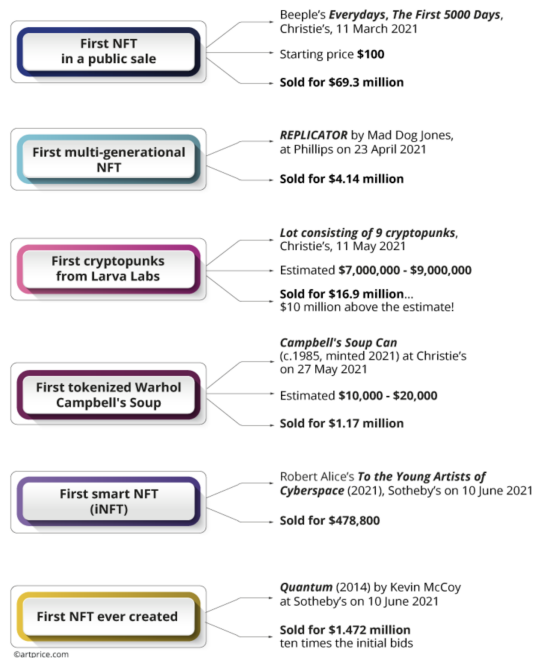
Liquidity in 2020 shows a relatively low portion speculate on both sale number(64,485), and secondary sale volume(18,622) is low. However, starting from 2021 Q1, the art sector liquidity rate increased due to an overall volume of a sale rise in Q1 and Q2. Q3 shows the highest liquidity assuming due to activate secondary market sales value rate(50.1%).

The value of a marketplace comes from an active trade between collectors. That is to say, a notion of liquidity is essential. A notion of value comes from when artwork's ownership transfers from artist studio to gallery, from gallery to collector, and from collector to another collector. The continuation of transferring the ownership makes

⁵⁷ "Non-Fungible Tokens Yearly Report 2020" (NonFungible, 2020).

work's history, provenance, and unique value. There is no value in a work of art that is just stored in an artist's studio. Parallel to the NFT marketplace, a piece of digital artwork registered in a blockchain system is just a work of art with authenticity. However, a value forms when ownership is transferred into another collector. Thus, a high liquidity rate gives a high value in NFT because the demand on willing to buy increases. Its ratio represents people's interest in NFT, and their interest makes value.

Off-Chain Market



(fig.19) Initial steps NFT takes place in off-chain market in 2021

(fig.19) indicates numerous initial steps NFT takes place in off-chain market in 2021. After Beeple's *Everyday, The First 5000 Days* was sold as the first NFT public sale in Christie's in March with remarkable price, numerous other initial steps achieved throughout months. Replicator by Mad Dog Jones was put into an auction at Philips on April 23, with a record of \$4.14 million. Mad Dog Jones's sale indicates as the first multi-generational NFT sale. On May 11, the first CryptoPunks from Larva Labs sale was held at Christie's. Lot consisting of 9 Cryptopunks was sold for \$16.9 million, which was

\$10 million above the estimate; it was estimated at \$7,000,000 up to \$9,000,000.

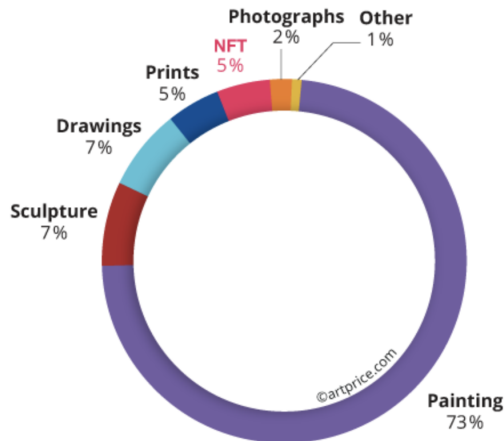
Following by on the same month, on May 27, *Campbell's Soup Can* (c.1985, minted 2021) was put on sale at Christie's as the first tokenized Warhol *Campbell's Soup*. The work was estimated at \$10,000 up to \$20,000 but sold for \$1.17 million. For the first smart NFT(iNFT), Robert Alice's *To the Young Artists of Cyberspace*(2021) was sold for \$ 478,800 in Sotheby's on June 10. On the same day, the first NFT ever created *Quantum* (2014) by Kevin McCoy was sold for \$1.472 million at Sotheby's.⁵⁸

From Artprice's The Contemporary Art Market report in 2021, 'in four months, NFTs generated \$127.6 million in auction turnover, twice the total generated by the Photography medium and from just 100 NFT lots sold, versus 6,500 photographs. Another astonishing figure: the unsold rate for NFTs is the lowest on the market, only 6% versus an average 30% for other mediums such as painting, sculpture, drawing, photo, and print.⁵⁹ Referring fig. Contemporary Art sales by medium down below, NFT's higher turnover than a photograph, which came out first, indicates sudden rapid growth in NFT.

⁵⁸thierry Ehrmann, "The Contemporary Art Market Report in 2021" (Artprice, 2021), <https://www.artprice.com/artprice-reports/the-contemporary-art-market-report-2021/the-viral-madness-of-nfts/>.

⁵⁹ thierry Ehrmann, "The Contemporary Art Market Report in 2021" (Artprice, 2021), <https://www.artprice.com/artprice-reports/the-contemporary-art-market-report-2021/the-viral-madness-of-nfts/>.

Contemporary Art sales by medium (2020/21)



(fig.20)Contemporary Art sales by medium⁶⁰

Referring (fig.) Contemporary Art sales by medium, After drawings, the fact that NFT could occupy 5 percent of contemporary art sales by a medium is largely impacted by Beeple's sales. Artprice's art market analyses claims, NFTs represent a third of the value of online sales, or 2% of the global secondary art market in H1 2021. Beeple alone accounted for exactly 1% with his very first sale at Christie's generating \$69 million.⁶¹ Artprice's The Contemporary Art Market report in 2021, his successful sale made him in second place after Jean-Michel Basquiat and before Chen Danqing among the top 3 contemporary artists by auction record in 2020/21. With the sale of just two lots, Beeple alone accounted for 3% of the global Contemporary Art market auction turnover.⁶²

Market Value

⁶⁰ thierry Ehrmann, "The Contemporary Art Market Report in 2021" (Artprice, 2021), <https://www.artprice.com/artprice-reports/the-contemporary-art-market-report-2021/the-viral-madness-of-nfts/>.

⁶¹"Artprice Analyses the Art Market's Dazzling Recovery from the Health Crisis in H1 2021, Fortified by Its Digital Transformation," Artprice, August 4, 2021, <https://www.artprice.com/artmarketinsight/artprice-analyses-the-art-markets-dazzling-recovery-from-the-health-crisis-in-h1-2021-fortified-by-its-digital-transformation>.

⁶²thierry Ehrmann, "The Contemporary Art Market Report in 2021" (Artprice, 2021), <https://www.artprice.com/artprice-reports/the-contemporary-art-market-report-2021/two-new-major-signatures/>.

Assuming NFT is no longer read as an instant trend, the NFT report tells its outstanding growth compared from 2018 to today. 5:5 ratio of a primary and secondary market in the latest quarter tells today's market is healthy. Moreover, in the chart(fig.2), where the percentage in demand is higher than supply, there is still active collector's interest in NFT artworks.

People's interest in the NFT market operates the trade and its value formed. According to an article from the New York Times, there are four categories of NFT buyers. 'There is the crypto diversifier, who has bought cryptocurrencies for years and sees NFTs as another form of currency. The digital native, who is used to paying real dollars for virtual stuff in online games. The enterprising collector, who is also financially driven but is attuned to art history and sees NFTs as the beginning of something new. The segment specialist, who is focused on the content, be it a piece of art or a LeBron James dunk.'⁶³ Although those four groups of buyers buy NFT for different reasons, their ultimate demand comes from their interest in NFT. Thus, although the four different buyers have different purposes, their demand - in other words, their interest- forms a marketplace and determines the value of the NFT market. 'NFT value is determined by what someone else is willing to pay for it and nothing else.'⁶⁴

Interest from not only individuals but also from major institutions, such as Christie's and Sotheby's, increases NFT art market value and makes certainty on its future. Besides major auction houses holding NFT sales, one of the financial representatives, VISA, also announced they would support NFT artists by partnering with former baseball player but current NFT artist Micah Johnson. Their announcement

⁶³ Paul Sullivan, "A Painting or an NFT of It: Which Will Be More Valuable?," The New York Times, July 23, 2021,

<https://www.nytimes.com/2021/07/23/your-money/nft-art-lebron-james-damien-hirst.html>.

⁶⁴ Dragan Boscovic Research Professor of Computing, "How Nonfungible Tokens Work and Where They Get Their Value – a Cryptocurrency Expert Explains NFTs," The Conversation, March 31, 2021,

<https://theconversation.com/how-nonfungible-tokens-work-and-where-they-get-their-value-a-cryptocurrency-expert-explains-nfts-157489>.

claims' partnering with Micah to build a program designed to help creators understand this technology and how to harness public blockchains for producing and selling digital goods.⁶⁵ Major firm's support toward NFT indicates its solid future on its market.

NFT market value comes from a solid gathered community. NFT art community is well established. They primarily use Twitter for their community gathering, where artists and collectors support each other by retweeting their artworks and collections. Major marketplaces such as OpenSea also participate community interaction by retweeting artists' works and hosting events regarding artist talk or particular projects to promote.

Work of art is a product for profit. Thus, the ultimate value in the NFT art market comes from it is a field that gains profit. In *Against Interpretation*, Susan Sontag claims, 'The earliest experience of art must have been that it was incantatory, magical; art was an instrument of ritual. (Cf. the paintings in the caves at Lascaux, Altamira, Niaux, La Pasiega, etc.)'⁶⁶ The purpose of painting on a cave wall was a mythical action, giving worship to nature and praying for their successes in hunting and surviving. Refers to what Sontag claims, art was used for the ritual, which was an act of praying to hunt successfully. In other words, the work of art painted by Homo sapiens reflects as a product for profit on their successful hunting. From the beginning of the prehistory period, humanity has been engaged in creating artwork for our good.

⁶⁵"Visa Partners with Artist Micah Johnson to Support the Creator Economy," Visa, accessed December 6, 2021, <https://usa.visa.com/visa-everywhere/blog/bdp/2021/10/12/visa-partners-with-1634070524844.html>.

⁶⁶ Susan Sontag, "Against Interpretation," in *Against Interpretation and Other Essays* (New York: Farrar, Straus and Giroux, 2001), p. 3.

Ch.6 Future In NFT Art and Its Marketplace

NFT is a niche field yet. Yearly Report 2020 claims, ‘the Non-Fungible Token industry is an extremely young sector that only emerged in the final quarter of 2017’ (p.110). It is such a new world where many queries and uncertainty emerge regarding its future. However, regarding its market value from the previous chapter, and other sectors, there is future value in NFT art and its marketplace.

Blockchain technology verifies ownership and authenticity despite a notion of aesthetic in NFT art. Thus, there is high potential growth in NFT art depending on a blockchain system’s commercial usage and development. According to Hiscox Online Art Trade Report 2020, more online platforms have started to embed blockchain technology, with 11% having already done so (compared to 7% in 2019) and 30% saying they are currently considering it (no change since 2019).⁶⁷ It is less than a third of the usage rate, but there is a growth potential if it is more known to people.

A limitation the NFT art market has is that the market has not yet come up with a proper formula to evaluate the price of work. Criteria of valuation in a traditional art market are straightforward in theory. The valuation is usually determined by the size of work and the kinds of medium an artist uses; sculpture, installation piece, work on paper or paint on canvas. Even condition, provenance, subject matter, rarity, and a work’s past records impact valuation. For instance, a work of art with unbroken provenance and was a part of an unusual collection has a high valuation. However, since the NFT art market is still in its infancy level of development, no particular criteria regarding its valuation yet. The amount of price presented by an artist and collector is the work’s value.

NFT established a new futuristic art marketplace. With NFT, a marketplace exclusively for digital art emerged. Prior to the appearance of NFT, when purchasing

⁶⁷“Hiscox Online Art Trade Report 2020 PART ONE: THE ONLINE ART TRAD” (Hiscox, 2021), p. 25.

digital work of art, collectors would receive a physical ownership certificate such as a printed copy of work. However, with the advent of NFT, ownership can be claimed, referring only with the trade information registered on the blockchain. David Hockney's iPad drawings, for instance. His printed copy of the digital drawing no longer be validated as a certificate proving the work's ownership.

Will NFT stay forever, or will it disappear and a traditional art field dominant again? Damien Hirst's NFT work *The Currency* would answer the query. On July 14, 2021, Damien Hirst released *The Currency*. With a collection of ten thousand NFTs and another ten thousand unique physical artworks corresponding to the NFTs. Collectors are invited to apply to buy an NFT through July 21, 2021. Within a year, collectors have to choose whether to keep the NFT or trade it for the physical artwork; whichever is not selected will be destroyed. Gagosian gallery explains the project as, '*The Currency* is an experiment in belief in which every participant is confronted with their perception of value, testing the boundaries of the digital and physical worlds and our role in both.'⁶⁸

It seems art market society is standing in the middle of innovation. *The Currency* is an NFT project to find out what people will choose, whether the NFT art or the physical work of art in the future. Parallel to Damien Hirst's project, what will happen to NFT art in the future? Will society lose their interest in innovation and go back to an ordinary art world or continue their future-oriented challenge.

⁶⁸"Damien Hirst: The Currency," Gagosian, accessed December 6, 2021, <https://gagosian.com/news/2021/07/14/damien-hirst-the-currency-nft-heni/>.

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