

Understanding **Non-Fungible Tokens (NFT)** in CryptoArt Industry





Author:
Nadya Olga Aletha

Editor:
Sri Handayani Nasuton

Design and Layout:
Naufal A. Radityasakti

Background

Technology is rapidly evolving especially in the field of digital trade as society is seeking for more efficient and easier way to live. One of the recent technological fronts is blockchain which is a record database of transactions that is distributed, validated, and maintained by a network of computers around the world.¹ This system then encourage the development of cryptocurrency. Cryptocurrency is a method of constituting virtual ‘coins’ and providing for their secure ownership and transaction using a cryptographic problem.² Cryptocurrency is the implementation of the usage of blockchain technology and also becomes the most-talked about uses.³ One of its type, namely ETH. ETH, the currency of Ethereum apps, is a scarce digital money that can be used to trade on the internet—similar to Bitcoin.⁴

In line with those developing industry, the new trend of digital assets in form of art arises namely CryptoArt. CryptoArt is a recent artistic movement in which the artists produces work of art, typically still or animated images, and distributes them via a CryptoArt gallery or their digital channel using blockchain technology.⁵ This variant of art—can be described as ‘super rare art’ because of their exclusivity—works when an artist uploads an artwork to the art gallery, a transaction to trade this art then is created in the Ethereum. This transaction is digitally signed by the artist using asymmetric encryption, to prove the authenticity of the work and the distribution of artworks relied on a peer-to-peer InterPlanetary File System (“IPFS”) network that uses unique code that enables arts to distributed over several codes of the network and identified as a single resource.⁶ Those unique code is known as Non Fungible Tokens (“NFTs”).

The idea of NFTs actually comes from the long history of art as an investment tool for aesthetic pleasures and prestige.⁷ For instance, works among artist such as Pablo Picasso, Gerhard Richter, Jean-Michel Basquiat, Andy Warhol is dominating at traditional arts auction and has been sold for hundreds of million dollars.⁸ People are willing to buy expensive arts because investments are made in such works of art and they maintain their value for decades or even centuries because of their uniqueness.⁹ The same principle can be applied to the digital version of art and investment. Therefore, NFT comes along with the idea of attaching unique code to arts—or even memes—that can be bought and traded digitally.

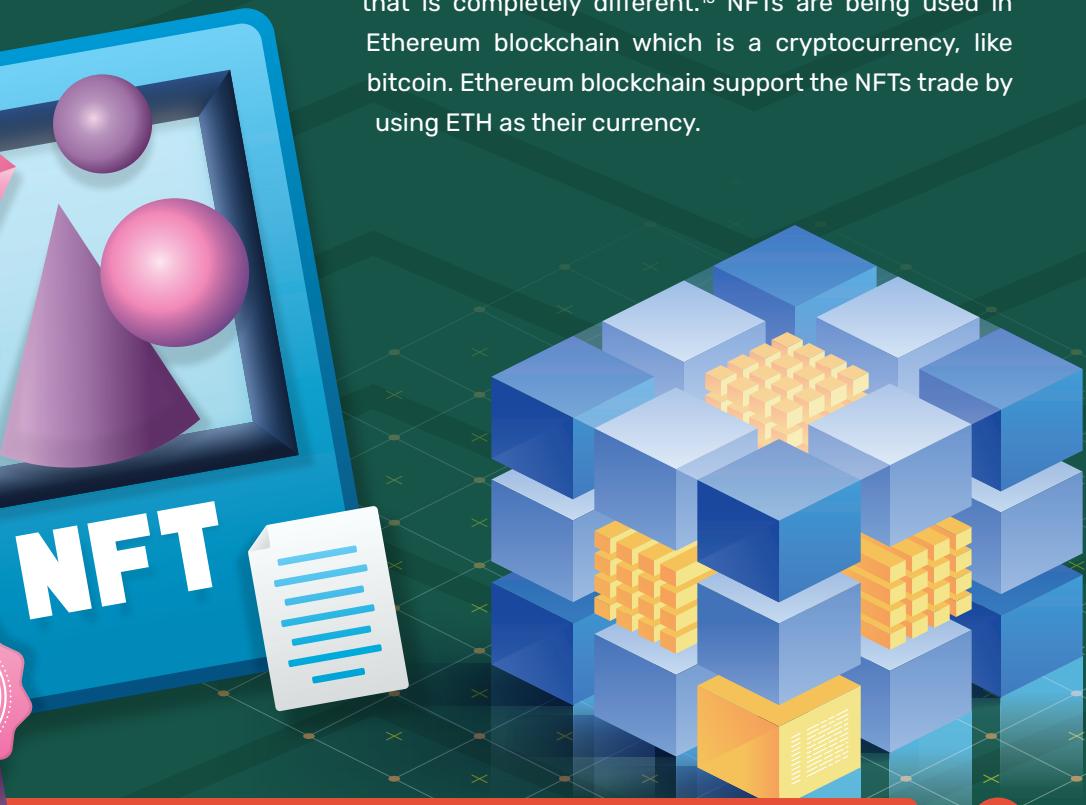
NFTs is the newest platform which can empowers artists with the accessible and easiest safe tools. It allows artists to monetize their work in quicker and efficient process. However, there are a numerous legal and technical issues stand behind NFTs. For instance, the clarity of NFTs owner intellectual property rights, since the owner does not directly own the real assets.¹⁰ The owner only owns a record and hash code that shows ownership of the unique token associated with the digital asset. As the exclusivity of NFTs complies with its main purpose which is to avoid any form of plagiarism as a violation of the intellectual property rights of the artists, the implementation remains difficult since it lacks of transparency—considering NFTs is run in blockchain system which encompass anonymity. Anyone can claim a digital art as their own by purchasing a token to it, even if they did not create it. As mentioned before, the transaction on the blockchain are recorded publicly in an immutable digital ledger which means there is no requirement for people to attach their identity to those transactions, which then makes it much harder to recognize and enforce the ‘art theft’ if the work is stolen.¹¹



Thus, this study examines a wide range NFTs potential along with its drawback. It highlights the obstacles that exist in generating the system. This study focuses on intellectual property issues emerged in the world of NFTs including the artists and token owner rights in the scope of copyright law along with its technical issues. The author also provide a recent and prominent case related to NFTs and CryptoArt.

Non-Fungible Tokens (NFT)

NFTs are unique certificates of authenticity on blockchain that are usually issued by the creators of the underlying assets.¹² The asset both can be in digital and physical nature.¹³ The term 'fungible' means that if you trade for another bitcoin, then you will have the exact same thing.¹⁴ While the term 'non fungible' means the opposite of it—you will get something that is completely different.¹⁵ NFTs are being used in Ethereum blockchain which is a cryptocurrency, like bitcoin. Ethereum blockchain support the NFTs trade by using ETH as their currency.



NFTs have existed in a while for now. Back then, Colored coins were created to issue and transfer assets on the bitcoin blockchain. Colored coins are considered as the origins of NFTs since it has so much similarity. Colored coins were issued in 2012, essentially in a form of bitcoin that were 'colored' to distinguish them from the others bitcoin and had a value independent of the face value of the underlying bitcoin.¹⁶ In 2014, *Counterparty*—open sourced peer-to-peer financial platform, distributed internet protocol constructed on top of the Bitcoin blockchain—exist as way for users to craft their own tradable currencies or assets, which then concealed the idea of tradable collectibles item on the blockchain.¹⁷ Afterwards, *CryptoPunks* was built. *CryptoPunks* is the oldest project to test the NFT markets. It was launched between June 2017 and May 2021.¹⁸ Following with *CryptoKitties* as the most 'successfull' project with the most transactions per day.¹⁹ *CryptoKitties* is a game centered around collectible and breedable 'digital' creatures so called *CryptoKitties* in form of cat that 100% owned by the buyer and cannot be replicated, taken away, or destroyed.²⁰



As the previous project becomes 'huge', the popularity of NFT then continued to arise and reach its peak in 2021—and expected to be present in a long term. In first half of 2021, the volume of sales in has reached \$2.5 billion.²¹ The role of celebrities and brands are inseparable from this. For instance, Katy Perry²², Snoop Dog²³, Lindsay Lohan²⁴ or even luxury brands such as Gucci²⁵ and Louis Vuitton²⁶ has joined the NFT craze. Other reasons why NFTs became increasingly popular are also because of its numerous high-profile sales and skyrocketed price of the digital assets—doubling more than the number of sales while using traditional way to trade the assets, and also its inclusivity and easier system for art trading.²⁷ This system is promising and is 'expected' to protect the artist moral and economic rights of their works.

CryptoArt

CryptoArt is limited-edition digital art that cryptographically registered with a token—known as NFTs—on a blockchain. The CryptoArt phenomenon is intimately linked to the values of the blockchain technology itself. It is entangled with the characteristic of blockchain which is decentralized, democratization, and individual control that came from the artist, and collectors or owners.²⁸ In artists perspective, the value of the CryptoArt is no other than to keep control for their artwork and reap related material benefit.²⁹ In collectors or owners perspective, the value of the CryptoArt includes a long term investment tools and also self satisfaction or appreciation for arts itself.





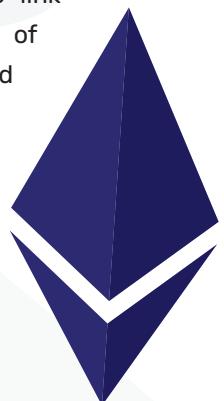
There are several galleries or commonly known as CryptoArt marketplace that the collector can visit such as SuperRare, Art0lin, AsyncArt, InfiNFT, OpenSea, AtomicAssets, BAE, and Portion.io. From these platforms, artist can securely display their digital art through outright sale or auction. The form of CryptoArt also varies from music, visual graphic, digital illustration, painting, digital photography, etc. The highest sold NFT CryptoArt is Beeple's *Everyday* that was sold for almost 40,000 Ether which is now worth around 100 million euros.³⁰

The Intersection between NFTs, CryptoArt, and Intellectual Property Rights

In the scope of Intellectual Property Rights ("IPR"), NFTs are considered as intangible or incorporeal personal property. Intangible property is an item that cannot be touched or held but, has some level of value assigned to it. It is needed to be highlighted that the ownership of NFTs does not make the owner have the indefinite rights for the property. If the artists wants to transfer the

copyright ownership or exclusive rights towards the collector, it has to be done through smart contracts. Nonetheless, the usage of smart contracts on blockchain is still premature both technically and legally. Basically, smart contract is a computerized transaction protocol that automatically executes the terms of contract when pre-defined conditions between parties are met.³¹ Its aim is to reducing malicious behaviors of bad faith parties; cutting down administration and services costs since it can be automatically triggered in a decentralized way through blockchain system; and to improve the efficiency of business process considering the financial settlement of trade can be automatically done through the system.³² However, as smart contract have been identified to replace the traditional contract, the issue evolving the contracts violations or operational risks such as error in smart contract—because once it published, it cannot be corrected due to the characteristic of blockchain—remains common. In regards to that, both parties have to trully understand the technical and legal issue while constituting the agreement. It is difficult since the user of the blockchain system having diversified background which means that not every person is well-aware and understand how the smart contract system technically work as well as its legal risks.

The origin idea of the NFTs itself is actually to appreciate the artists artwork and to prevent the IPR violations since the platform was built in a 'high security' system. Nonetheless, there are a loose link between NFT and the CryptoArt asset. What's the point of purchasing an NFT when anyone can access the IPFS and download the asset for free?³³ Eventough the token's owner has the password to unlock the file, it is contrasting from the nature of IPFS and CryptoArt nature which publicly visible. It is hard to hide the password when every user can see everything on-chain.³⁴





Indonesia Regulatory Framework of NFTs and CryptoArt under Copyright Act

There is no specific regulation that constitutes and mentioned the term 'CryptoArt' nor NFTs. However, the artist or creator rights are protected under Law Number 28 of 2014 on Copyrights ("Copyrights Act"). Copyright means an exclusive right of the author vested automatically on the basis of declaratory principle after Works are embodied in a tangible form without reducing by virtue of restriction in accordance with the provisions of law and regulations.³⁵ Works mean any scientific, artistic, and literary works resulted from inspiration, ability, thought, imagination, dexterity, skill in tangible form.³⁶

CryptoArt is implicitly protected under the Copyrights Act. Article 1 (11) of Copyrights Act stipulated, "*Publication means any reading, broadcasting, exhibition of works using any means, either electronically or non electronically, or performing in any way so that works can be read, heard, or seen by other*" Indonesian copyrights law uses first-to-announce system which means the copyrighted works do not have to be registered, the rightful owner is the one that publish it first either electronically or non-electronically.

Regarding the duplication, Article 44 stipulates that duplicating and taking an entire or substansial portion is prohibited except if it is used for education, research, scientific writing, report wrting, security and governance, or science—which is not the case since CryptoArt mainly crafted to collect material or economic benefits. Moreover, every person that unlawfully infringes the economic rights will be sentenced to penal sanction such as imprisonment or fine payment.

However, the validity of NFTs has yet to be regulated under Copyrights Act. Copyrights Act did not explicitly differentiate the rights between NFTs owner and the artists right. Related provison that can be used to defined each rights and legal status as reffered on Article 1(4). "*Copyright holder means an Author as the Copyright owner, the party acquiring a lawful right from the Author, or other parties who acquire subsequent rights from the pary such acquiring lawful rights*". The absence and uncleareness of the regulation then create legal uncertainty between involved parties and ought to be constituted under specific provision.

'The Curious Case' in NFTs and CryptoArt World: Plagiarism? Scam?

It is worth noting that plagiarism issues will always exist around artwork, especially when it is uploaded and publicly visible in the internet. It is one of the downside of digital artwork. Recent alleged plagiarism case arouses showed that there are a clash between CryptoArt and physical art. In March 2021, Indonesian illustrator Kendra Ahimsa received reports from his friends that there are crypto artist under the name of Twisted Vacancy is plagiarising his work. The art that had been plagiarized was in form of collages that have plenty elements similar to the origin, Kendra Ahimsa illustration. The fact that the team members behind Twisted Vacancy came from tech background other than arts and then using it for commercial use violates Kendra Ahimsa moral rights is unacceptable to art industry.³⁷ In the end, Twisted Vacancy's artworks has sold in several CryptoArt marketplace such as Async, SuperRare, and Known Origins with one bids on the artwork came for more than \$46,000.³⁸

Next, a well known artist, Derek Laufman fired off a few messages on Twitter about the impersonation of him in NFTs marketplace.³⁹ Laufman works has minted as NFTs and listed for sale without permission in the platforms.⁴⁰ Similar with Laufman case, Simon Stalenhag, the author for *Tales From The Loop* also found his art displayed as NFTs.⁴¹ Now, people are starting to steal the art and turn it into NFTs, and the authenticity or verification for artist has been questioned. The only way to safeguard the



artwork is by tokenizing and minting it before someone else does. Minting refers to turning the digital art into a part of the Ethereum blockchain so that the digital art would be tamper-proof and immune to any modifications.⁴²

While dealing with plagiarism or copyrights issues, other media sharing platform such as social media, will immediately take down either the account or the objects displayed since the subject that infringe the copyright is clear and easy to track. However, it is difficult to find out the 'copycat' of arts that are being displayed in blockchain system, since its characteristic which are decentralized and anonymous.

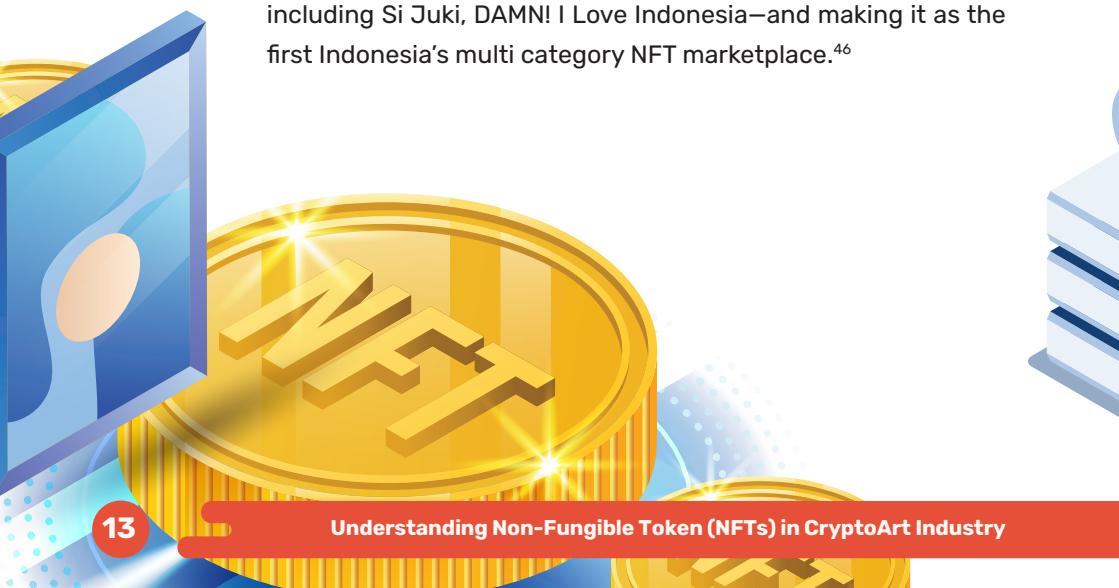
Each CryptoArt marketplace platforms actually has already provided the term of condition regarding the prevention of copyright infringement for the original artist. For instance, SuperRare add its community guidelines that artist should follow as follow:⁴³

1. *Mint only original, non-fringing works that artist actually and personally created;*
2. *Mint only works that artist have the legal authority to mint (i.e., the owner of the copyright and have not transferred the copyright to another parties);*
3. *Refrain from minting stolen, knock-off, or infringing content;*
4. *Refrain from minting content created by other SuperRare Artists, unless expressly permitted;*
5. *If the work incorporates unoriginal content, artists have to make sure that either the appropriated content is in the public domain or have a valid "fair use" defense*

However, SuperRare also add they have no power to prevent an infringing work from being minted.⁴⁴ They only can take down the infringing works, revoke minting privileges, or restrict the use of the SuperRare platform from posting infringing content or violation against these Guideline.⁴⁵ It is similar to other CryptoArt marketplace. The nature of NFTs is that the system is inclusive and open to everyone that indicates that everyone can easily tokenizing and minting everything, even if it is not originally crafted and created by them. This the loopholes of NFT and CryptoArt sytem that needed to be improved.

The future of NFTs in Indonesia

The development of NFTs in Indonesia is still in early stage. However it has caught the attention of artists varies from musician, painter, photographer, etc. The future of NFTs in Indonesia is bright and promising since in the year of 2021, the creative industries in Indonesia began to develop. The Indonesian marketplace for NFTs are also starting to appears such as Neftipedia that run under Tiga Token Digital and TokoMall from Tokocrypto. The enthusiasm pushed every marketplace continue to expand their business. For instance, TokoMall has targeted worldwide marketplace visitor and equiped its platform with five features namely Original, Lifestyle, Creative, Stars as well as Games and Sports which teamed up with several top of the line merchant partners including Si Juki, DAMN! I Love Indonesia—and making it as the first Indonesia's multi category NFT marketplace.⁴⁶



Conclusion

NFTs are surely change the way artists share their idea and creation. It brings more benefit towards the artist in terms of its value and prestige. The exploded popularity can be used to boost up the development of creative industry. However, there are numerous issue arises that every stakeholder has to focus on especially the IPR issues revolving around NFTs. Aforementioned, there still are legal gap of NFTs that is worsen by technical difficulties in moderating the NFTs system. The existence of several cases that rather sacrifices the artists right cannot be neglected, especially those that caused by the flaw of the system.



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Center for Digital Society

Faculty of Social and Political Sciences
Universitas Gadjah Mada
Room BC 201-203, BC Building 2nd Floor
Jalan Socio Yustisia 1
Bulaksumur, Yogyakarta, 55281, Indonesia

Phone : (0274) 563362, Ext. 116

Email : cfds.fisipol@ugm.ac.id

Website: cfds.fisipol.ugm.ac.id

facebook.com/cfdsugm [@cfds_fisipol.ugm.ac.id](https://cfds.fisipol.ugm.ac.id) [@cfds_ugm](https://cfds_ugm)

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