NFT Art Investments: An Evolution in Kind and in Contract

J Scott Christianson

"He just spent $69 million on a digital piece of art. It's not his first Beeple. "
— Headline in Washington Post.

"TikTok Star Sells Viral Video as NFT for $500,000."
— Headline in Entrepreneur online.

"Crypto marketplace OpenSea raises $23 million to be the Amazon of NFTs."
— Headline in Fortune Magazine.

It is easy to dismiss the hype, mania, and speculation surrounding digital NFT art assets but behind the wild stories and headlines is a serious technological change in how assets can be created, sold, and traded. Non-Fungible Tokens (NFTs, often pronounced as "Nifties") are serious innovations worth investigating and have some interesting implications for art investments and other asset classes.

The Revolution will be Tokenized

When a creative work such as a movie, artwork, or book moves from a physical object in the analog world to bits in the digital realm, some interesting magic happens. First, the cost of copying and distributing the work becomes so negligible that it can be considered non-existent. Moreover, digital assets can be copied in such a way that the duplicate is identical to the original. As a result, ownership is hard to verify and scarcity is hard to maintain. Many efforts have been made to secure digital property rights, but most have been unsuccessful or far too expensive for small companies or artists to implement.[1]

Using cryptographic signatures and blockchain technology, a creator can issue a secure Non-Fungible Token representing their creative work. NFTs can be generated with relative ease and little expense. By definition, each non-fungible token is unique. In contrast, a cryptocurrency asset like a bitcoin can be exchanged for another bitcoin, or it can be subdivided (each bitcoin can be divided into 100 million satoshis). In essence, an NFT is a unique digital certificate of authenticity issued by the creator or holder of an asset.

While the discussion about NFTs is currently centered on the arts, NFTs can be handy for representing various assets, digital or analog. For example, NFTs are used in smart contracts to represent invoices, accounts, payments, and assets.

Many Copies, One Original

NFTs don't prevent the duplication of digital art but allow the artist to mint a digital token or tokens that can be sold like an original painting or print. The creator can issue just one NFT for a work (similar to an original painting) or issue a limited number of NFTs to represent the work (similar to a limited-edition print).

Just as one might hang a poster of an Andy Warhol silkscreen on the wall for one's enjoyment, the digital art of Beeple is free to download, display digitally, or even print out and frame on your wall. Neither is an original which would have significant value. Digital art without an NFT is the same as the poster: nice to look at but not an investment.

In this way, NFTs can prove ownership and authenticity of an asset and preserve scarcity in a digital world. While NFTs can't be copied, they can be sold or transferred to another party via a smart contract.

A Smarter Sale for Artists and Art Patrons

NFT assets are sold via smart contracts which can include any number of provisions or restrictions regarding subsequent sales. One popular use of smart contracts is to allow the artist to participate in their work's subsequent resale. For example, Jane can sell her NFT art to John and specify that she will receive ten percent of any subsequent resale amounts. As the art appreciates, the artist can benefit financially for years or decades after selling the original art.

NFT contracts are typically made using the Ethereum platform, which includes a cryptocurrency known as ether. Ether can be exchanged with US dollars, euros and other government-issued currencies. By combining the payment platform and the contract, payments are automatic. Unlike contracts that must be validated and litigated by third parties, smart contracts are largely peer-to-peer and can include any number of scenarios.

NFTs sold via smart contracts can share profits between an artist, a gallery or other parties. These scenarios are not hypothetical. American artist Sara Ludy recently set the terms for the sale of her digital art: 50% for herself, 15% to the platform that sells her art, and 35% to the gallery which represents her work. Ludy's smart contract also specifies that the gallery proceeds are divided between the gallery owner and gallery staff.[2]

A smart contract might also specify conditions for when a piece of NFT art is resold. For example, the original creator of the NFT receives a certain percentage of the sale, as do all previous owners of the NFT. This type of contract could incentivize more investment and speculation in art since the act of resale would also allow early investors to profit from the rising value.

To blunt the possibility of bad behavior arising from NFT resale (pump and dump), smart contracts can also alter the proportions or amounts with each sale (for example, the gallery only gets a portion of the first three sales and none beyond that).

A smart contract might also limit the number of sales within a given time period even for small value assets. This capability has great potential outside of art. For example, last Fall and into this Spring, Sony's PS5 gaming console was in short supply. The supply of PS5s was made even more limited by scalpers armed with computer bots that quickly purchased all available stock as soon as it was released. Sony has been accused of failing to protect the consumer by permitting bot buying. If Sony had tied an NFT to each console sale, purchasers could have been restricted from reselling the device for three months, thereby eliminating the incentive for scalpers.

The terms in the smart contracts will determine which behaviors will be incentivized. Many hope that NFTs will allow artists to bypass the current gatekeepers (gallery owners, art critics, etc.) and democratize art investing. But of course, it could also happen that NFTs create new gatekeepers and fuel investments in bad art.

Ya Burnt, Banksy

The question "What is art?" takes on some new twists in the world of NFTs. In March, a collective of "art and NFT enthusiasts" called Injective Protocol purchased a Banksy original print titled "Morons (White)" valued at USD $95,000. They then made an NFT to represent it digitally and burned the print to the point of destruction. The resulting NFT was sold at auction for USD $380,000 US several days later.[3]

This is reminiscent of an episode in the 1950s when Willem de Kooning gifted a drawing to Robert Rauschenberg, knowing that Rauschenberg intended to erase it and thereby create a new piece, "Erased de Kooning Drawing."[4]

"Had Rauschenberg destroyed one artwork to create another? Or was de Kooning's piece, altered by Rauschenberg, still a de Kooning?" asks writer Kriston Capps.[5] "Modern conservation complicates the question: In 2010, scientists at the San Francisco Museum of Modern Art used infrared digital processing to trace the original drawing, revealing the lost de Kooning. In so doing, did they erase Rauschenberg's erasure?"

When a physical object of art no longer exists except as digital ephemera, is there any art left? Is the NFT now art or a financial derivative? And if it is art, what does it represent? The Banksy, or the performative art of destroying the Banksy?

Things Might Get Weird

Smart contracts also allow NFT issuers to include an end user agreement with the creative work.[6] The popular NBA Top Shots NFTs (videos and photos from basketball), include an end-user agreement that restricts the user from modifying the art post-sale, or associating it with images or issues the NBA deems inappropriate (hate speech, pornography, etc.). It is not clear how these rules would be enforced once ownership is transferred.

Since smart contacts are peer-to-peer and are not validated or litigated by a third party, smart contracts allow for the recreation of established financial instruments and imaginative new arrangements. A Synthetic NFT can be created by embedding a smart contract within another smart contract. Options contracts for NFTs might also be popular. Basically, any scenario that can be programmed can be part of a smart contract. Welcome to the world of programmable assets.

NFTs Forever

Because of the distributed nature of blockchains, every network node provides backup for NFT assets. NFTs are not subject to the dangers of loss or destruction in the way that an accident or security breach can destroy a digital asset on a central server. Nor can they be damaged or destroyed like a physical asset.

While NFTs can't burn in a fire, they can be forever unobtainable if the encryption keys used to prove ownership are lost. If an NFT owner loses their private encryption keys, the NFT would exist in perpetuity on the blockchain but forever be out of reach.

This scenario has been experienced by several people who owned Bitcoin when it was worth very little. As such, they didn't bother with transferring their keys to a new phone or computer when they recycled their old technology. The bitcoins these people owned still exist on the Bitcoin blockchain, but that value can't be accessed. Estimates are that bitcoins worth some $200 billion US is forever inaccessible.[7]

Likewise, if an NFT owner died without passing on the knowledge of how to access their private encryption keys, then the assets will not be transferable to any heirs. For all practical purposes, the NFT would be lost. Therefore, estate planning for crypto assets needs to be considered whenever an investor dips their toes into the world of NFTs or cryptocurrency.

Investing in NFTs

Like many art investments, NFTs of creative works are highly speculative. They should be approached with caution, especially in a market where bitcoin millionaires and Wall Street Boyz are looking to buy into the next wave of crypto wealth. The market cap for NFT art was $338 million US in 2020 and will certainly be double or triple that amount in 2021 if current trends continue.[8]

As blockchain expert Andreas M. Antonopoulos has remarked, investing in NFTs (and everything crypto) is like adding spice to a dish. A sprinkle makes it exciting; a cup makes it inedible.[9] It is all a matter of proportion.

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ENDNOTES

1 Nicholas Sheppard "Digital copyright protection – some success, but mostly failure." The Conversation (August 11, 2014), https://theconversation.com/digital-copyright-protection-some-success-but-mostly-failure-30215

2 Rea McNamara "How Crypto-art Might Offer Artists Increased Autonomy." Hyperallergic (March 2, 2021), https://hyperallergic.com/626274/nft-crypto-art-artist-autonomy/

3 Cristina Criddle "Banksy art burned, destroyed and sold as token in 'money-making stunt.'" BBC News (March 9, 2021), https://www.bbc.com/news/technology-56335948

4 San Francisco Museum of Modern Art, https://www.sfmoma.org/artwork/98.298/

5 Kriston Capps "Can you destroy a Rothko painting that is available everywhere?" The Washington Post (October 12, 2012), https://www.washingtonpost.com/opinions/can-you-destroy-a-rothko-painting-that-is-available-everywhere/2012/10/12/fd4d42b4-131c-11e2-a16b-2c110031514a_story.html

6 NBA Top Shot Terms of Use: https://www.nbatopshot.com/terms

7 Nathaniel Popper "Lost Passwords Lock Millionaires Out of Their Bitcoin Fortunes." New York Times (January 12, 2021), https://www.nytimes.com/2021/01/12/technology/bitcoin-passwords-wallets-fortunes.html

8 Joshua Mapperson "New report predicts NFTs will explode in popularity during 2021." Cointelegraph (February 23, 2021), https://cointelegraph.com/news/new-report-predicts-nfts-will-explode-in-popularity-during-2021

9 J Scott Christianson "A Conversation with Andreas M. Antonopoulos." YouTube (March 3, 2021), https://www.youtube.com/watch?v=334Hcc3VMbg

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