

# **The Fusion of Art and Technology: NFT Revolution**

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## Introduction

The explosion of the trend of NFT has gotten a lot of media attention of late, leaving a bunch of unsolved questions. You may be wondering, “What is going on?” Before we delve into the world of NFT filled with jargons, let us take a look at this situation. Mary, a passionate digital artist, found her artworks being forged without her permission. When she comes across NFT, she realises this can be a great opportunity for her to sell her artworks as NFTs because not only it maintains her ownership, but also allows her to retain a percentage of the revenue each time her artwork is sold. However, before she jumps into the NFT markets, she will need to study what NFT is.

## Thesis statement

NFTs have provided a critically valuable tool for the digital representation of real-world assets. The uniqueness in NFTs is also one of the reasons for driving interest in learning about NFT basics. Since NFT is an entirely new phenomenon in our society, it is high time for us to discuss the purposes of NFT, its pros and cons, and its potential in the creative world.

## Content

A non-fungible token (NFT) is a unique digital identifier that cannot be copied and is used to certify authenticity. It certifies a digital asset to be unique and thus, not interchangeable. These digital assets include arts, in-game items, videos, music or even a physical asset with ownership tied to an NFT. As they live on a blockchain, usually Ethereum, NFTs are easy to track. This tracking allows for verification of their authenticity as well as their history and owners. Formally, NFTs are smart contracts, usually ERC-721, that people interact with by calling them and then receiving proof of interaction.



Figure 1: Ethereum, a decentralised blockchain.

Source : <https://en.wikipedia.org/wiki/Ethereum>

NFTs appeal to a wider audience of creatives and consumers, which has sparked people’s curiosity to see how space evolves with new ideas and collaborations (Terado, 2021). Consumers are essentially purchasing a digital recording of ownership of a token, which can then be transferred to a digital wallet. The recording (or ledger) where that token is certified is called a blockchain (Jablonski, 2021).

Although NFTs have been around since 2014, they are gaining notoriety because they are becoming an increasingly popular way to buy and sell digital artworks (Conti & Schmidt, 2021). From a digital collage by artist Beeple worth \$69 million through to an autographed Tweet by Twitter founder Jack Dorsey, which has sold for \$2.9 million, the range of items being sold is staggering. In all this craziness, laypeople are looking around and screaming “bubbles”, while some creators and artists are claiming this as the next form of monetisation (Oxjim, 2021).

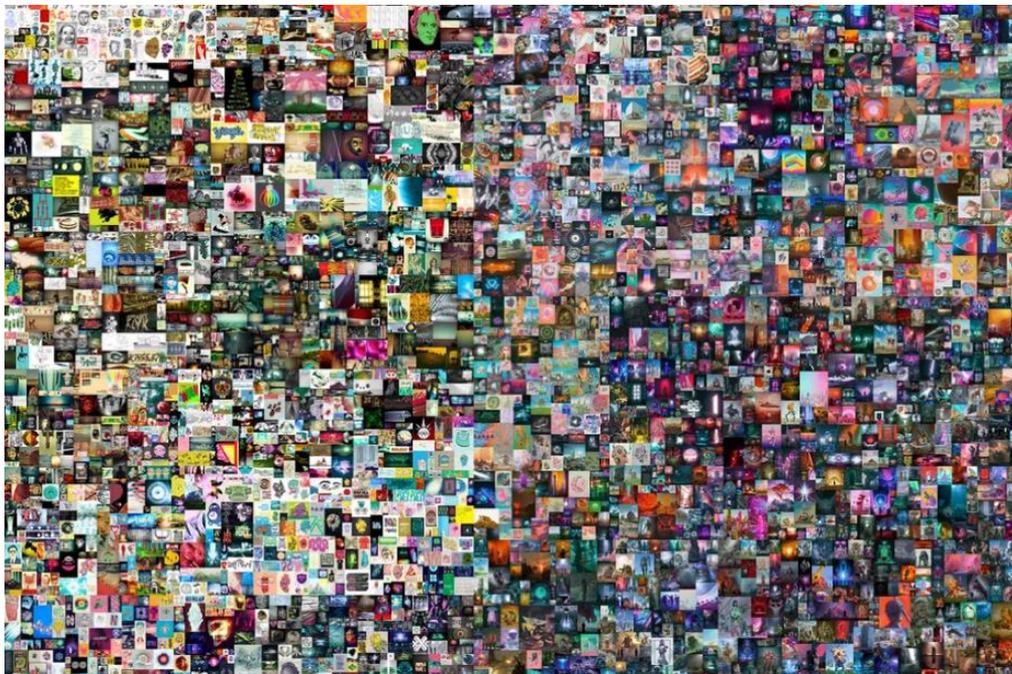


Figure 2: Beeple’s collage, *Everydays: The First 5000 Days*, sold at Christie’s. Source : <http://bitly.ws/fBV7>



Figure 3: Jack Dorsey’s first tweet sold for \$2.9 million. Source : <http://bitly.ws/fBUS>

NFT revolves around ownership, immutability, permission, and scarcity. It empowers the creator economy who have struggled to monetise their creative expression by providing several digital marketplaces where NFTs can be stored, displayed, traded and minted. These marketplaces are to NFTs what Amazon or eBay are to goods. OpenSea, started in 2017, seems to be in the best position at the moment (Terado, 2021).



Figure 4: Open Sea, one of the NFT marketplaces. Source : <http://bitly.ws/fBVd>

So, why are NFTs so popular? The NFTs afford artists and content creators a unique opportunity to monetise their wares. For example, artists no longer have to rely on galleries or auction houses to sell their arts. Instead, the artist can sell it directly to the consumers as an NFT, forming a direct relationship with their supporters, which also lets them keep more of the profits. In addition, artists can program in royalties, so they can receive a percentage of sales whenever their art is sold to a new owner. This is an attractive feature as artists generally do not receive future proceeds after their art is first sold (Jablonski, 2021).

However, there are always two sides to a coin. As the market for NFTs has exploded, some artists have complained that their work has been tokenized into an NFT without consent. Derek Laufman, an artist claimed that a verified profile had appeared that alleged to be from him on Rarible, an NFT marketplace. Although the problem was quickly resolved, it has since been debating how to prevent future incidents (Stephen, 2021).



Figure 5: Tweet by Derek Laufman. Source : <http://bitly.ws/fBUN>

Worse still, the NFTs are at least partially responsible for the millions of tons of planet-heating carbon dioxide emissions generated by cryptocurrencies (Calma, 2021). Memo Akten, a digital artist, analysed about 18,000 NFTs, found that the average NFT has a carbon footprint equivalent to more than a month of electricity usage for the average person living in the European Union. The large footprint is partially due to the many transactions involved including minting, bidding, cancelling, and transferring of ownership (Lewis, 2021).

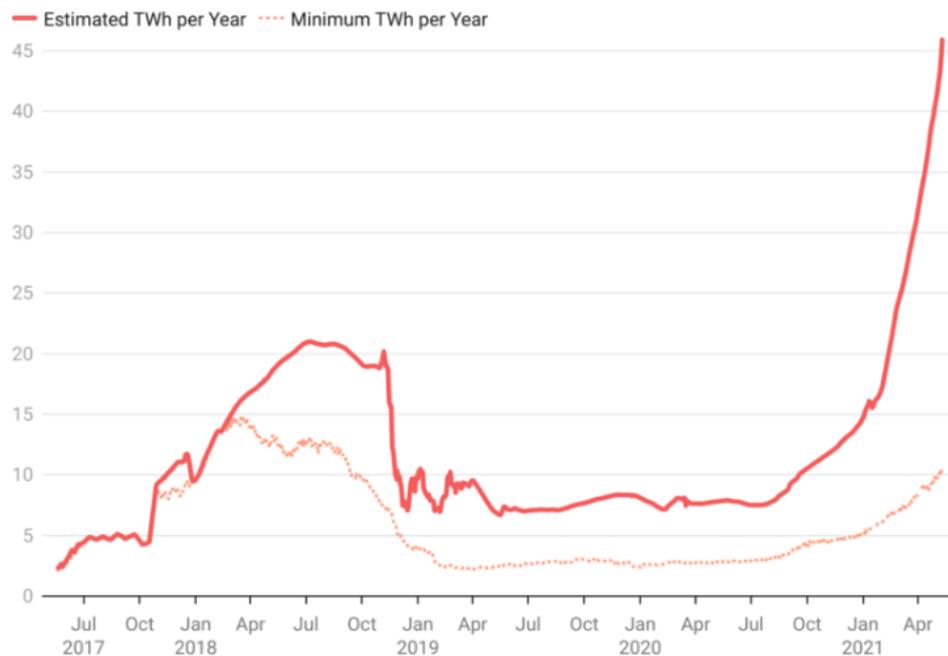


Figure 6 : Ethereum energy consumption. Source: Digiconomist, Ethereum Energy Consumption Index.

Some artists, including those who have benefited from the craze, believe that it is a problem that can be easily solved. It has caused debate, with some believing that the proposed solutions are a pipe dream (Calma, 2021). This kind of gleeful wastefulness, according to Pipkin (2021), is a crime against humanity during unprecedented temperature increases, sea ice melting, sea level rises, and all the other hallmarks of total climate collapse.

Nonetheless, there is an alternative to reduce the impact of NFTs on the environment. By switching the “proof of work” system into “proof of stake”, users will be required to prove their investment in the blockchain before they are allowed to solve the problems to validate tokens, that eliminates the need for computers to solve complex puzzles, thereby get rid of emissions (Falconer, 2021). “That would essentially mean that Ethereum’s electricity consumption will literally over a day or overnight drop to almost zero,” says Michel Rauchs, a research affiliate at the Cambridge Centre for Alternative Finance (Calma, 2021).

If Ethereum decides to make the change, and other shortcomings are to fix in the future, maybe you are considering whether is it time to jump on the bandwagon. When we talk about investments, no one can 100% guarantee that if certain investments are good or bad. Some rush to conclude that this is just another bubble that has started bursting. Even Bepple, possibly the biggest winner in the current situation, said he thinks NFTs are absolutely a bubble, much like the dot-com bust of the early 2000s.

In my opinion, I believe that NFTs are here to stay since the world has transitioned into a digital society, often referred to as “the age of the Internet”. We cannot stop the advancement of technology in reshaping our ways of living and perceiving our lives. NFTs are a revolution that fuses art and technology than ever before, putting the long-established art market in its place. It is the convergence of new technologies and new forms of art.

Regarding the environmental impact, I am optimistic about the future of NFTs. I support the argument by a FinTech investor Viktor Prokopenya: the initial inventions of cars were also not very energy effective, yet, as technology improves, zero-emission cars are now possible. It is not the right time to conclude that all NFTs are equally bad for the environment. Let time tells the answer.

## **Conclusion**

In today’s connected world, art is no longer the privilege of high society, as almost anyone can participate in this creative field (Madrid, 2018). Thanks to the NFT revolution, digital creators now have a new creative landscape to bring beauty into the blockchain world, accessible by anyone, from anywhere.

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