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What is Non-fungible token (NFT)? A short discussion about NFT Terms used in NFT

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Abstract: Non-fungible tokens (NFTs) may initially sound like a fancy jargon, but they are actually rather simple to comprehend. Blockchain-based non-fungible tokens (NFTs) are digital items that are often linked to one-of-a-kind digital material, like music or photographs. A multi-billion dollar NFT market has appeared overnight thanks to a recent flurry of public interest. NFT collections are being produced by brands like Coca-Cola, Nike, and conventional artists like Damien Hirst and Grimes, as well as mainstream consumer goods businesses. Individual NFTs may fetch millions or tens of millions of dollars [1].

Introduction

It was the ideal setting for a match that has been lit ever since: Sotheby's had to keep up with Christie's pace and organized a fully curated sale with Canadian artist Mad Dog Jones; Open Sea (the leading NFT marketplace across all chains) reported last month a billion-dollar trading volume week; and in the final week of August, it set a record trading volume day of \$208 million

[2]. The daily volume traded at Open Sea at the time of writing is greater than what the platforms reported for the full year of 2020. Machine learning is frequently used by financial trading organisations to create trading techniques. If it hasn't happened before, NFT trading is a logical application of machine learning algorithms. However, an intriguing twist is that these algorithms may also characterise the style of NFTs, i.e., trade in part based on NFT styles, in addition to data on market dynamics [3].

Currently, there are no memories in the ticketing system to serve as a memory of the special moments from earlier events. New ticket features including memorability and usefulness were introduced by NFTs. The paper ticket may disappear or become damp and ruined. Additionally, the risk of losing [4] a paper ticket makes travelling with one challenging. Paper tickets, which are simple to fake, also don't provide enough security for organisers. A single NFT serves to represent a single domain, sometimes referred to as a decentralised domain, crypto

domain, or blockchain domain. The ability of domain NFTs to serve as cryptocurrency public addresses, which enables the domain to transmit and receive other compatible cryptocurrencies and tokens as payment, is what makes them so intriguing [5].

In the field of traditional art, a person who collects art is sometimes referred to as a collector. Similar reasons drive some NFT customers. For instance, DC Investor and Punk 6529 have both said in the open that they amass early pieces of on-chain created digital art with the intention of conserving them for future generations [6], maybe in the form of an online virtual museum open to the public. In fact, affluent people and celebrities who have no prior experience with cryptocurrencies or blockchain technology have started to amass highly valuable NFTs. The artwork and technology that enable the NFT ecosystem are made by smart contract developers and artists. Many of them travel to buy NFTs, occasionally as presents from friends or other artists [7]. They represent a unique class of collectors and tastemakers as a result. While there have been instances of well-known artists who were or are collectors (such as Damien Hirst), connections between creators have been especially robust inside the NFT community due to how simple it is to create

relationships and transfer NFTs. example, creators will collaborate produce online events. The speed and geographic diversity of Internet culture allow artists to conduct digital events more frequently and more simply than events in a gallery, however conventional artists have also co-hosted events [8]. For instance, Farokh, a well-known cryptoartist, hosts weekly podcasts with other NFT artists that are open to anybody with an internet connection, as opposed to the exclusive events hosted by conventional galleries in the real world. FVCKRender, another wellknown NFT artist, is well known in the neighbourhood for being an enthusiastic collector in addition to being an artist. For instance, according to his OpenSea page, he has more than 1500 NFTs made by other artists [9].

Another group of NFT buyers are those who aim to make money over the long run by foreseeing the changing preferences of the NFT community and the dynamics of the market. Some of the investors both private and institutional mirror those in conventional art markets. Three Arrows Capital is an illustration of the latter. They advertise themselves as "a hedge fund created in 2012 and focused on producing better risk-adjusted returns" and are well

known for collecting computer generated digital art works from the well-known curated online NFT Art gallery named Art Blocks [10].

a distinct group of investors who retain NFTs for brief periods of time. Flipping is a general phrase meaning acquiring goods at a loss and reselling them for a profit. It has always existed—since the days of selling trading cards, toys, and comics for cash—and the NFT market is currently experiencing a tremendous boom. Flippers refuse to sell a high-risk NFT despite pressure. This is sometimes used as an excuse by persons whose NFTs begin to lose value. It comes from the phrase "diamonds are formed under pressure." Another word that isn't specifically related to NFT but is frequently used in the industry is "paper hands," which is essentially the reverse of "diamond hands" [11]. It alludes to someone who transacts business, such as an NFT or cryptocurrency, at a price that is seen to be too low by others. The verb "paper hands" has the same meaning as "diamond handing," as in "Someone just paper-handed a Cool Cat for 6 ETH! [12]." FUD, or fear, uncertainty, and doubt, is an acronym. In the crypto community, this phrase is used to unfavourable express and incorrect information about a project or coin. you'll never undergo a "rugpull"! It's simply a fraud where the creators of a looking legitimate enterprise vanish with the money as soon as it launches. For the price you paid, you might really receive an NFT, but it's probably useless and not even tradable on a secondary market [13].

Additionally, the verb rugpull is frequently employed, as in "I was rugpulled" or just "I got rugged." On Discord, you may also come across users who only use the word "rug," frequently to sow discord in the community of a certain project. In the world cryptocurrencies, the concept "HODLing" encourages investors to show "diamond hands" (hang on tightly) and refrain from selling their holdings [14], even while the value of such holdings is continuously falling. For instance, when you say something like, "Ethereum is bearish, but HODL," you're advising Ethereum investors not to sell their holdings hastily because of the continuous price decrease they are now experiencing. Additionally, the market is unstable and might have an overnight surge [15].

A simulated digital environment known as the "metaverse" combines many technological components, including blockchain, augmented reality, virtual reality, and mixed reality, with social media ideas to provide settings that enhance user engagement by simulating the actual world. It is a hypothetical idea of a digital 3-D environment that people might access using VR headsets [16]. They may design their "body" (avatar) in this virtual world, and there are countless places to explore. They also have a home to furnish with their favourite items. Users can engage with others, carry out tasks, play games, and, for the most part, carry out daily activities in metaverses. NFT has come to be associated with a range of resources that appear to address issues with digital artefacts [17].

The market describes NFT as the special combination of a digital asset, such as digital

Terms used in NFT

Ape in - To heavily invest in a new project, usually out of fear of missing out.

Avatar project -Sometimes used interchangeably with terms like PFP and generative art, an avatar project is a collection of cartoon avatar NFTs, usually represented as a portrait depicting the avatar from the shoulders or neck up. CryptoPunks is a popular example of an avatar project.

artwork, and a digital passport that is stored on a blockchain and is, thus, immutable, even if technically they are simply certificates [18]. This is because NFT often represents digital assets. This odd pairing suggests a number of qualities that digital assets do not have. The capacity of an item or asset to be exchanged for other like goods or assets. Contrarily, something that is non-fungible, such as a art is unique [19].

Beeple - Pseudonym for Mike Winkelmann, perhaps the most well known digital artist. Beeple's *Everydays:* the First 5000 Days sold for \$69,400,000, the current record for most expensive NFT.

Binance Smart Chain - A blockchain compatible with buying and selling NFTs. While Ethereum is the most popular blockchain for NFTs, prominent competitors include Binance and Solana.

Burn - To burn an NFT is to effectively destroy it. While technically NFTs always remain on the blockchain, you can remove

one from circulation by sending it to a wallet address that can't be accessed.

Delist - To remove an NFT from an exchange. Delisting an NFT incurs gas fees. NFT communities often encourage holders to delist NFTs before big announcements.

Discord - An instant messaging platform and the go-to place for discussing NFTs.

ERC-721 - A token standard that allows for the creation of unique, non-fungible tokens. It differs from ERC-20, for example, which is used to mint fungible tokens.

Ethereum - A blockchain with smart contract functionality. Ethereum is currently the main platform for NFT projects.

Floor price - The lowest NFT price in a collection. To "buy the floor" or "floor sweep" is to buy the cheapest NFT in a collection.

Floor sweep - To buy up the cheapest NFTs in a collection. Sweeps can be organized by an NFT collection's community to raise the project's floor price.

Fractional ownership - Partial ownership rights over an NFT. Sellers can sell

percentages of a work and buyers can buy what they can afford.

Fungibility - Replaceability. Dollars are fungible because a dollar owed can be paid using any dollar in existence. Something that is non-fungible, like a painting or NFT, is one-of-a-kind.

Gas fees - Fees that blockchain users pay to compensate for the computational resources used to execute transactions. Gas fees ensure that transactions will be genuine and discourages bad actors from spamming the network with a high volume of transactions.

Generative art - A project in which NFTs are generated from a pool of limited assets. In a generative art collection, each NFT can have a unique set of traits while still sharing individual traits with other NFTs in the collection.

InterPlanetary File System - A means of storing NFT data that is considered superior to storing on an HTTP gateway URL, since the latter is tied to a specific provider. IPFS addresses allow users to find a piece of content so long as someone on the network is hosting it.

Metadata - The collection of data that defines ownership and differentiates one NFT from another. Metadata can be onchain or off-chain.

MetaMask - The leading Ethereum wallet used as a gateway to NFT apps like OpenSea, Rarible, and Axie Infinity.

Metaverse - A virtual 3D world where people can interact. Popular blockchain-based metaverses include Decentraland and The Sandbox, virtual gaming worlds where users can buy and sell land NFTs.

Minting - The process by which an NFT becomes part of the blockchain. Once an asset is put on the blockchain, it is "minted" as a token and cannot be altered.

Off-chain metadata - Metadata that is stored outside the blockchain.

On-chain metadata - Metadata that is directly incorporated in a smart contract.

OpenSea - Launched in 2018, OpenSea is the first and largest NFT marketplace.

PFP - Profile picture. A PFP NFT is an NFT that people like to show off as their main photo on platforms like Twitter. Popular

examples include Bored Ape Yacht Club and Cool Cats.

Play-to-earn game - Games in which players can earn rewards, such as NFTs and cryptocurrency, that have real-world value and can be exchanged outside of gameplay. Axie Infinity is currently the most popular NFT play-to-earn game.

Polygon - An Ethereum-compatible protocol that provides cheaper, faster, and more secure payment transactions. Polygon is an attractive platform for NFTs because of cheap minting costs and low gas fees.

Rarible - A community-owned NFT marketplace founded in 2020. The Moscowbased platform mostly hosts digital art, and is fuelled by its native ERC-20 token RARI.

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