

Impact of Non-Fungible Token (NFT) on World

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Abstract: Non-Fungible Tokens (NFT's) display digital authentication certificate in blockchain technology similar to other crypto virtual assets and funds. The popularity of blockchain technology and interaction with crypto assets has seen repeated growth in recent years. Having said that, the NFT market as well mushrooms as proved in recent years. The very concept of NFT is derived from a Ethereum token standard, aims to separate and separate each token from it a unique signature tied with digital formats. I return its impression immediately global market growth has attracted a lot of attention, with India also witnessing growing interest in the digital sector, especially for emerging investors and digital creators. However, the development of the NFT ecosystem is in the early stages saw the absence of a regulatory framework for governing such digital pre-maturity digital Cryptographic assets in India. There are many legal issues around them which also leads to a lack of clarity regarding its legitimacy and sanctity. The upcoming artists may be inclined to get lost in this hectic pace with a lack of order abbreviations. This paper aims to explore the concept of NFT in contrast to cryptocurrency and copyright and its operational and technical components. It aims to review the law pitfalls that affect its performance and the opportunities and challenges it faces Indian legal framework in terms of stationery.

Keywords: NFT, digital impact, digital economy, decentralization, online market, digital assets.

1. Introduction

What exactly are NFTs? First, NFT cryptographic tokens, like examples already known Bitcoin, Ether (ETH) and countless others. Bitcoin tokens are part of "invisible tokens." This means that there are many identical tokens that can be exchanged. No matter what Bitcoin I have, the value remains the same. In contrast, NFTs are unique and thus immutable - each token has an individual feature. For this reason, NFTs are required to represent digital assets such as works of art or music, as well as tangible assets such as land, machinery or vehicles. In fact, NFT binds a tangible or digital object to a unique digital token. Due to the unique security and suspension of these tokens, they can now be used in digital business processes. For example, NFTs can be used within a digital ecosystem to advertise intellectual property rights and make them marketable.

In 2019, NFT markets, or exchanges introduced, popular Opensea.io and Rarible. Users can trade using smart contracts, which allows for unreliable transactions happened securely, and the NFT ownership is record and stored on the blockchain. In addition, the creator of NFT receives royalty whenever it is resold to the consumer. With deficit features, high cost, legal

ownership, creator's fees, protection from dishonest practices, and be easy exchange NFTs tend to have the potential to be intellectual properties. This is what demonstrates its importance. Like the result of the artist Beeple being able to sell his digital art like NFT nearly \$ 69 million and Twitter CEO Jack Dorsey sold the first tweet for an estimated \$ 2.9 million.

2. How to Create NFT

The process of creating and trading NFT can be a busy one for a newcomer, here we will provide a summary of the process. There are five key functions involved.

- First, real art creations, such as photography, digital art, audio file, and so on.
- The creator of NFT uploads a file, writes a description and title, and sets the percentage of revenue he or she wants to resell.
- The owner then stores the data on the trading site when they list their NFT, this information is outside the blockchain. The owner also has the option to store data in the blockchain but will have to pay a certain amount of gas.
- The transaction is sent to a smart contract, this purchase includes the owner's signature and the NFT data hash.
- This is where NFT is made and the trading process begins, in ensuring a smart contract transaction the mining process is completed. Which means that now NFT is stored at a unique address inside blockchain forever.

NFTs are stored in a blockchain, it is possible to keep a record of its real owner, as transactions are stored in blocks linked to the next block which creates a long consistent history. Also, whenever an NFT is created or sold a new transaction is deal with a smart contract, after verification when new owner details and NFT metadata are added to the new block. It is therefore granted the right of a protected area to the owner.

3. How NFT Works

NFT is very different from the concept of crypto-currency. Crypto-currency is more than just token, tokens that share the same value even if the value of the currency varies. NFT is very different from that of fungible tokens.

Here every single token or created object will be different and will not be separated individually. Compared to the volatile

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bitcoin, NFT is unchanged which is why it has made the concept of shortages more effective and valuable in the market.

NFT representing digital assets holds certain values in it due to its market and demand, where every asset is represented as a commodity with a different price or its deficit as a real labor market when buying everything as usual. Personal or significant interest. Most NFT adopts the Ethereum's crypto-currency blockchain which is a public ledger that tracks and maintains transactions. All single data in NFT to be unique data in comparison makes verifying and verifying the identity of that NFT a simple task with blockchain technology-based support.

NFTs can have only one owner. This identity is handled by a unique ID and metadata available in NFT so that it is never duplicated. These NFTs are made through a special process called intelligent contract; this smart contract gives and maintains the ability to transmit NFT.

Scarcity is also one of the key concepts of NFT. Here the creator / owner of the NFT can choose how many duplicate items should be created for his NFT. For example, if an NFT owner wants to sell certain tickets that are compatible with the host system, the creator can choose how many tickets (in this case) they want to create. So, if the owner of the NFT does something that is needed he can make the NFT thing scary to increase its need.

4. Technical foundation for NFTs

NFTs appeared for the first time in 2017/2018, but their popularity began to really increase in 2021. As NFT adoption continues to increase, the underlying technology base is also improving. At its core, NFT is one of the many applications of the world's largest blockchain and smart contract technology. However, only a selected number of blockchain agreements that can support the use and scale of NFTs with Ethereum are the most common. The following article aims to break down the technical blocks that empower NFTs.

Blockchain: blockchain - as a theory - was first proposed in 2008 by Satoshi Nakamoto when he simultaneously introduced the concept of bitcoin. Satoshi aims to create a peer-to-peer system for transactions, and unlike any traditional financial system, bitcoin uses algorithms to reach agreement on transaction data. Blockchain technology algorithms are powerful. A blockchain can be thought of as a distributed archive that stores a list of records in secure data blocks and connects to another using a cryptographic protocol. Once the work is done, these confidential agreements are resolved and verified by a set of different computers (or nodes). Once shared data in the blockchain is verified across distributed nodes, it becomes irreversible because any changes to the site will invalidate all subsequent data. The most common blockchain platform used in NFT programs is Ethereum; this forum presented the idea of smart contracts.

Smart Contracts: Smart contracts are computer programs that can verify, use, record and speed up a set of digital actions defined by their authors. Their youth is based on the fact that a wise contractor can predict the terms and conditions under which a contract will be used. Therefore, they allow international organizations to operate more efficiently without

a reliable external company. Ethereum has also developed these smart contracts in the blockchain ecosystem. Under Ethereum, smart contract terms are shared by all parties involved, thus ensuring greater transparency. An example of the use of smart contracts in the NFT space is that it allows developers to put a cap on the provision of non-fungible tokens and enforce continuous structures that can be converted after NFT release.

Address and function: A blockchain-based address is made up of a fixed number of alphanumeric characters. It is a unique indicator for the user to send and receive an asset. In order to transfer ownership of digital assets (including NFT), the owner must prove that they are yours; this operation is usually done using a crypto wallet.

5. Token Standards

A token level is required to define what a token might mean performs well, outlines a set of structures and rules for a project should follow in order to interact with the trade once wallets. Different protocols have many values as well even within the protocol, there are various other levels. Here we will discuss the token standards for different protocols such as Ethereum and Tezos. Moreover, we will divide you between the various tokens within these protocols.

A. *Ethereum Token Standards*

Ethereum has many token standards, the major ones are discussed below.

ERC-20 - Ethereum-based standard used by many Ethereum-based projects. ERC-20 tokens are also called tokens "fungible" as these tokens alternate, i.e., each symbol costs the same number as the other. Others Examples of this are rule tokens and stable coins.

ERC-721 - This token standard is an immutable, monetary value. ERC-721 tokens represent a complete intangible property, such as a certificate or item made of tokens. Each ERC-721 token has its own set of contract values, such as ownership information and real estate property with a token as real estate. The ERC-721 is strong in terms of consistency, transparency, and security, without the complete flexibility in token creation. ERC-721 tokens are often referred to as "non-disruptive" as they are a single type, so they are non-fungible tokens (NFTs).

ERC-1155 - The ERC-721 token level is good in terms of swearing but it shows that it is slow and ineffective when it comes to passing a set of tokens at the same time. This is where the ERC-1155 token standard, developed by Enjin, comes in, which provides different digital NFTs. Allowing faster bulk transfer of more tokens than ERC-721. Emphasizing the true "multi-token" method, the ERC-1155 token standard is often referred to as the "next generation of most common tokens."

6. NFTs from an Artist's Perspective

NFTs, like cryptocurrencies, are traded on the blockchain. However, while cryptocurrencies are like a digital tender, NFTs are digital assets. Digital assets, in general, are not entirely new and can be anything, from Fortnite skins to company logos. NFTs are notable because unlike conventional digital assets,

they do not swear by nature. Each NFT is unique and cannot be traded for a similar business. This means that when you buy NFT, your purchase goes into the blockchain, which makes you the owner and the digital certificate of authenticity.

What does this mean for the arts industry? First, NFT changed the way transactions took place in a highly regulated industry in terms of cash flow. NFTs have been able to bring about change in this uncontrolled space primarily thanks to a blockchain network that creates a permanent record of all NFT-related transactions. In doing so, the blockchain creates a contract, known as a "smart contract" protected by cryptography. The contract contains information about the main NFTs market that includes the creator and first buyer as well as information about its successive changes in ownership and valuation.

7. Conclusion

We can conclude with the fact that NFT are one of the most important aspects of blockchain technology.

This is already acting as a cataclysm for the growth and development of blockchain. And with the attention of content creators and trader, the approach and the inter- activity of this same technology is reaching many aspirants.

References

- [1] <https://bullandbearmcgill.com/the-impact-of-nfts-on-the-art-industry/>
- [2] <https://www.nfttech.com/insights/technical-foundation-of-nfts>
- [3] <https://ethereum.org/en/developers/docs/standards/tokens/>
- [4] Shreyansh Goushal, "A Deep Dive into Non-Fungible Tokens (NFTs) and its Correlation with the Price of Bitcoin and Ethereum."