



## A Review on NFT Marketplace

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### ABSTRACT

NFTs are phenomenal transformation in the purview of digital ownership of assets and artworks. In recent times, these digital assets have gained exceptionally high selling prices that may seem unimaginable for a non-fungible virtual asset. These NFT Marketplaces based on blockchain offer a huge space to the artists to earn financial rewards for their artistic creations. Due to the overwhelming growth of NFTs, the artists don't have to rely anymore on auction houses for selling their artwork. The artists can showcase their artwork in the form of NFT by creating and listing it on any NFT Marketplace and get the best price for it.

**Keywords:** Blockchain, Decentralized, Marketplace, NFTs, Token.

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### 1. Introduction

Non-fungible tokens (NFTs) are digital assets or units of data that are created, minted and stored on blockchain. The NFTs are constructed using blockchain technology, which guarantees ownership authenticity, transparency, and immutability. These NFT tokens are non-interchangeable with other digital assets, unlike other types of cryptocurrencies. The NFTs can store any kind of data unit, including image, video, and audio files with each token having its unique identity code. It can be tied to any physical thing, computer image, or piece of art.

Fungible tokens are the token which can be interchanged with other digital assets of the same type. The best example of fungible tokens are cryptocurrencies, as each crypto coin has the same value as of any other crypto coin of the same type. The fungible tokens are interchangeable, divisible, uniform and have high liquidity.

#### 1.1 Types of NFTs

There are so many different types of NFTs out there but, these are some main categories into which NFTs can be classified:

1. Domain Names
2. Gaming
3. Generative Art
4. Memberships
5. Music and Media Tokens
6. PFPs and Avatars NFTs
7. Photography NFTs
8. Sport Memorabilia
9. Utility and Security Tokens

#### 1.2 Blockchain

Blockchain is a leading database mechanism that stores data in blocks which are linked to each other in the form of chain. It is an immutable ledger that facilitates the process of recording transactions and allows transparent tracking and sharing of assets in a business network.

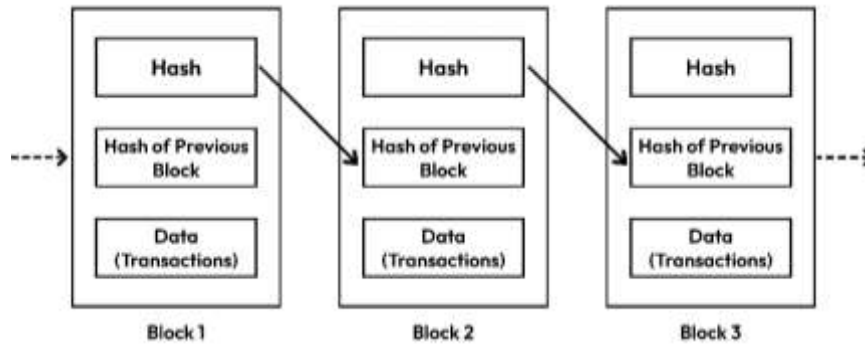


Fig. 1 – Simplified diagram of a blockchain.

### 1.3 Decentralized Apps (dApps)

Decentralized apps are the application which are built using the blockchain technology and run on a distributed network of computers called peer-to-peer (P2P) network instead of on a single sever. The dApps run using the smart contracts, providing robust security to all the transactions and data. Some of the popular dApps are CryptoKitties, OpenSea, WINK, InterPlanetary Search Engine (IPSE) and Blockchain Cuties.

## 2. NFT Marketplace

A NFT Marketplace is a blockchain based decentralized platform created for trading and creating various types of NFTs. The NFT Marketplace allows individuals to buy, sell and trade NFTs using various digital currencies and also using cryptocurrencies.

In a NFT Marketplace, the very first thing the user has to do is the login process, then the user must connect with their MetaMask wallet as a part of the login process. MetaMask is a decentralized wallet which provides the user facility to securely manage their digital assets and connect with decentralized applications (dApps) built on the Ethereum blockchain. It serves as a bridge between the user's browser and the Ethereum network, allowing for easy storage and management of Ethereum-based cryptocurrencies and tokens.[5]

After logging in to the NFT Marketplace, the user will be able to discover and browse all the NFTs listed on that marketplace. Using their MetaMask wallet, a user can buy or sell whichever NFTs they like to. MetaMask wallets require a smart contract which is an agreement written directly in code form and includes the rules and regulations for the sale of NFTs. When a user sells the NFT, the ownership of the NFT is transferred from the seller's wallet to the buyer's wallet. This transfer of ownership is also recorded on the blockchain providing a permanent record of it.[4]

In the NFT Marketplace, a user can create their own NFTs by uploading their digital creation to the platform. After an NFT is created, the user can list it on the marketplace for sale, determining its price and conditions for the sale. The NFT Marketplace also enables the user to browse and purchase the NFTs created by other users.

Here are some of the most popular and well-rated NFT marketplaces where the user can buy and sell these digital assets

Table 1 – Top NFT Marketplaces (as of 14<sup>th</sup> December 2023)

Market	Traders	Volume
OKX NFT Marketplace	12.02k	\$ 26.71M
Blur	4.28k	\$ 17.61M
OpenSea	10.41k	\$ 3.89M
UniSat	2.09k	\$ 3.81M
Magic Eden	3.25k	\$ 1.55M

Table 2 – Top NFT Collections (as of 14<sup>th</sup> December 2023)

Market	Market Cap	Volume
Pudgy Penguins	\$ 385.7M	\$ 2.99M
Mutant Ape Yacht Club	\$ 459.73M	\$ 2.91M
Bored Ape Yacht Club	\$ 1.22B	\$ 2.13M
Milady Maker	\$ 122.71M	\$ 1.15M
Creepz by OVERLORD	-	\$ 948.03k

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### 3. Conclusions

In conclusion we can say that the NFT Marketplace is great platform for the creators to monetize their artistic creations. The eminence of the blockchain technology that powers the NFT marketplace is its high degree of openness and legitimacy. Each NFT is recorded on the blockchain, which is an immutable database of all transactions. Buyers can be assured that the NFT they are acquiring is genuine and that they have proper recorded evidence of its ownership. In contrast to the traditional markets, where assets like as stocks and bonds are frequently fungible, NFTs are non-interchangeable. Since the NFT market is still blooming, it may be quite volatile. The prices of the NFTs waver widely depending on market sentiments, and also there is inadequacy of historical data to assist the investors make informed selections.

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