

# Impact of Non-Fungible Tokens in Digital Assets

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Abstract: NFT are the Non-Fungible Tokens which are used in blockchain and also act as one of the upcoming economic environment where digital assets can be acquired as well as sold. They are similar to the digital tokens such as bitcoins but bitcoins are fungible tokens in simple terms, they are interchangeable, to be more precise bitcoins when sold would have the same value in return, whereas NFT's are not. NFT's are unique thus making them non-fungible. NFT's are those tokens which represents a digital asset such as images, videos, a unique avatar in video-games or a personal ID created in digital world where it is identified as a unique item or an object of possession and cannot be duplicated. This research paper would show how the NFT would change the digital economy in various field of internet, as internet is the hub for all the digital transactions or acquiring digital possessions. Methodology: This research was done on Microsoft academic search, virtual LRC, Wikipedia, Google scholar and various other websites where statistical opinions are undertaken regarding NFT's and how they can be introduced. In the physical world as well as their impact on digital Business as well as economy with safety in mind. Findings: NFT's give every business market a chance of marketing and managing their digital or physical assets into a digital environment where trades and exchange happens thus creating an economic environment with authentic identity evaluation as well as uniqueness in every assets that has been created or imported into this environment. It can also be seen that decentralized financing is also taking momentum in the field of NFT. Wherein real assets such as machine, or other various form of art is being regulated as a digital asset into the digital market.

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

# 1. Introduction

What are NFT's? In order to understand NFT, we have to first understand the concept of fungible and non-fungible. Fungible are those items which can be interchanged and share same value over the incremental period of time, Such as bitcoin or similar digital coins. They are the types of fungible items where their values remain same even if exchanged in certain numbers. But while considering the non-fungible items, they are non-interchangeable and have unique value associated to them hence making them less prone to duplication; this implementation is backed by blockchain technology. Few Examples of NFT's are digital art, songs, or digital assets such as in-game avatar or drop-items. So, they are units of data which verifies whether the given digital asset is unique or not, hence making it non-interchangeable and providing a digital certificate to the owner of NFT projects.

NFT's are gaining a lot of momentum because of the

blockchain technology present in it. Digitalization being the main focus as of now, every data in the internet can be tampered with hence making it vulnerable for different kinds of cyberattacks. But NFT being backed up by the blockchain technology it has proved itself that it is one of the most secure technologies out in the internet where one can invest with the safety measures in check.

Hence, we can see that NFT can be used widely in business model considering the fact that they themselves make a digital economic eco-system where people can create their own business or be collaborated partners with other business individuals or a body.

# 2. Working of NFT

NFT are much different from the concept of crypto-currency. Crypto-currency are more of a fungible token who shares same value even if the quantity of the currency differs. NFT are much more different from that of fungible tokens. Here every single token or an asset created would be unique and would not be individually divisible. Compared to bitcoin which can be interchangeable, NFT cannot be inter-changed hence making the concept of scarcity much more viable and valuable in the market.

NFT which represents digital assets hold certain values in it because of the marketplace and its demand, where every asset is represented as an acquirable object with different grade of value as per its uniqueness or scarcity just like the real work marketplace where everything is bought as per an individual personal or essential interest. Majority of NFT takes Ethereums crypto-currency blockchain which is a public ledger that tracks and maintains the transactions. Every single data in NFT being a unique data relatively makes verifying as well as validating the ownership of that NFT an easier job with a supportive backing of blockchain technology.

NFT's can only have a single owner. This Ownership is handled by a unique ID as well as the metadata present in the NFT so that it can never be replicated. These NFT's are minted through a special process called as smart contract; this smart contact assigns and maintains the ability of transferring the NFT.

Scarcity is also one of the main concepts of NFT. Here the creator/owner of the NFT can choose whether how many duplicate items should be created for his NFT. For example, if an NFT owner want to sell certain tickets corresponding to a

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show that is being hosted, the creator can choose how many tickets (in this case tokens) he wants to create. So, if the NFT owner creates something that has demand he/she would be able to make the NFT item scares in order to increase the demand for it.

# 3. What are NFT used for?

They are mostly used for decentralized trading as well as for those individual whose interest reside in collecting digital assets or with collecting arts. But most importantly they are used for having an eco-system where every asset has an owner for versatility in validating and verifying the ownership of the item and a smoother transaction is carried own with proof of the ownership. Listed below are they few reasons why NFT is used for.

*Digital Content Creation:* Contents created by Authors or for example video creators or game streamers can make it or market it as an NFT or ultimately take royalty form it. Because of NFT every individual content created by the creators would have to be unique. And they can earn royalty if someone else has a content that corresponds to that of the original.

*In-Game Items:* NFT are the hot topic among video game developers as well as for video-game streamers and players. In normal instances, when a player receives an item in the game, he/she can either use it or sell it in the game for in-game currency but considering the possibility the item was not spent or was not put to use and the player have already finished the game then the obtained item would be obsolete. Here is where the concept of NFT comes in. If the received item is an NFT and has a market demand then the player can spend it for real world currency and would earn by it. And for the developers of these games can take royalty of the item when it gets re-sold by the player that obtained it or the one who sold it. Hence making the concept of re-playability even more useful.

1) Domain Names: They are like the web extension for example ".com", ".org" etc., which are launched as smart contract on public blockchains. They are usually stored in the wallet of the crypto-account and ones when acquired are free to keep it for the lifetime.

2) NBA Top-Shot: It is a marketplace where traders/users can collect, sell, buy NBA's moments of scoring. They are actually minted in packs. i.e., in real world we buy a pack of card and then open it to know what we got inside. In the same manner the top shot-NFT which we bought would have several cards present in it with various time moments of playing taking the shot in the court.

3) *Physical world Items:* The main reason for the NFT to be a wild fire is because of the digital art trade present in it. These are those items which are also present in the physical world such as music, art, Drawings, Property for sale. Because of the block chain technology present in the NFT it Is much more safe and easily decentralized method of selling such items digitally. 4) Digital Investment firms: These are those firms who invest in the arts or items created in NFT for investing and marketing business.

### 4. Examples of NFT Assets

# 1) In-Game NFT

- i. Skins for different types of objects in the game
- ii. Different Varity of wearables.
- iii. Objects with different grades such as common, uncommon, rare.
- iv. Cosmetics for the avatars created.
- 2) Digital Art Works
  - i. Nyan cat NFT
  - ii. NBA hotshot
  - iii. Crypto Kitties
  - iv. Crypto voxels
  - v. Virtual design objects

# 5. Problems Solved by NFT

The NFT makes sure that the digital and every other asset created in it, to have their own creator with unique ID for that individual owner hence making the concept of duplication impossible and in directly illegal. This is only possible because of the blockchain technology that functions and supports it. To be more precise in detail, the NFT are those tokens which are non-interchangeable unit of data stored in a ledger. This ledger claims that every unit of data which represents a digital or physical assets have a unique ID associated with it thus making duplication an impossible task, if done would be fraudulent. And being officially acknowledged that it remains in a ledger it can be traded and sold as per the creator's convenience. Hence making it one of the most reliable systems for investing as well as for the growth of decentralization.

# 6. Conclusion

Hence, 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.

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