

Technology V9/S5: Non-Fungible Tokens

Why are Non-Fungible Tokens Helpful?

Imagine you are a music artist that streams your music online. You receive an income by selling copies of your songs to fans. One day, you find that a free copy of your song is circulating the internet. Now, anyone can download or make money off your work. Wouldn't it be amazing if there was a way to ensure that only YOU had the rights to sell your music? Non-fungible tokens are digital signatures that prove the originality and ownership of the item being sold. This protects work from being copied.

**Before continuing, be sure to get a good understanding of the terms listed below.*

| <u>Term</u> | <u>Definition</u> |
|---------------------------|--|
| Objective Value | Value that an item contains devoid of personal belief or perception. |
| Subjective Value | The value of an item is circumstantial and not inherent to the item. |
| Asset | Something useful or valuable that can be used to generate income. |
| Non-Fungibility | The value is nontransferable when traded. |
| Token | Items used to represent a value or service of something. |
| Non-Fungible Token | A digital representation of a unique asset that cannot be equally traded for another NFT |
| Blockchain | A record of data stored on networks of computers (ex: Bitcoin) |
| Decentralization | Data is stored on multiple devices/locations without the oversight of an authority figure. |
| Transparency | Transactions are made available for anyone to see making the data difficult to alter. |

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| Immutable | Data recorded and stored on the blockchain cannot be changed. |
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A **non-fungible token** (or an **NFT**) is a digital representation of a unique asset that cannot be interchanged for another item. NFTs create unique digital signatures that define the ownership of an asset (otherwise known as copyrighted items). NFTs can provide information such as who owned it, who it was sold to and when. NFTs give people the ability to own and sell their online work in a secure marketplace that is not owned by a government or company.

The **blockchain** is a record of data stored on many networks of computers. The blockchain is preferred because it is a decentralized system that offers transparency and immutability. **Decentralization** means that the data is stored on multiple devices/locations and no one authority controls the data. **Transparency** relates to the way transactions are recorded so that they are available for anyone to see. **Immutability** means that the data recorded and stored on the blockchain cannot be changed, meaning that a digital signature cannot be forged, thus building trust with the user.



Like most other items sold in our economy today, NFTs depend on the subjective value of the asset. **Subjective value** is when the value of an item is circumstantial and not inherent. These **assets** can be physical, digital, or anything that can help you generate income like a computer or an education. In the case of NFTs, the value of these items is represented by tokens. A **token** is something physical or digital that can be exchanged or represents a good/service. The token does not have inherent value; its value is derived from the asset it represents.



The Process of Creating and Using Non-Fungible Tokens

1. Create Work
2. Choose Market
3. Create Token
4. Sell NFTs
5. Make Money

