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What Are Fractionalised NFTs

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1. Introduction

In 2021, we witnessed the NFT boom. Although the first NFTs already existed for much longer, such as the famous Cryptopunks that were created in the 'distant' past of 2017, it was only in 2021 that NFTs really caught on. Purchase volumes started to rise, which led to the prices of the NFTs themselves growing.

Then, NFTs became a mainstream phenomenon, so widespread that by the end of 2021, the search volume of Bitcoin and other cryptocurrencies became eclipsed by NFTs.

Source: Larva Labs

Diffusion of the Phenomenon

NFTs were the first crypto assets to have activated this phenomenon of exciting the crypto community. In fact, NFTs were also increasingly purchased for reasons other than mere speculation or investment, even by those who don't know that NFTs function through the blockchain.

This has made it possible to involve more and more people, from cryptocurrency enthusiasts to digital artists and gamers.

The consequence of this success has been a disproportionate increase in the price of some NFT collections, making them too expensive for most investors.

2. Limitations and Problems of NFTs

Illiquidity Problems

Even though NFTs are having an undeniable success, there are some challenges that the sector faces that will limit its ability to gain worldwide mainstream adoption. Up until now, uniqueness and provable scarcity have been the main selling points of NFTs. However, despite their unprecedented success, the NFT market remains quite illiquid.

This extensive illiquidity of the NFT ecosystem is a big issue. This is because NFTs are mostly represented by Ethereum-based ERC721. This token standard makes NFTs non-interchangeable with one another, which makes the process of trading them innately complex and causing their markets to be far less liquid.

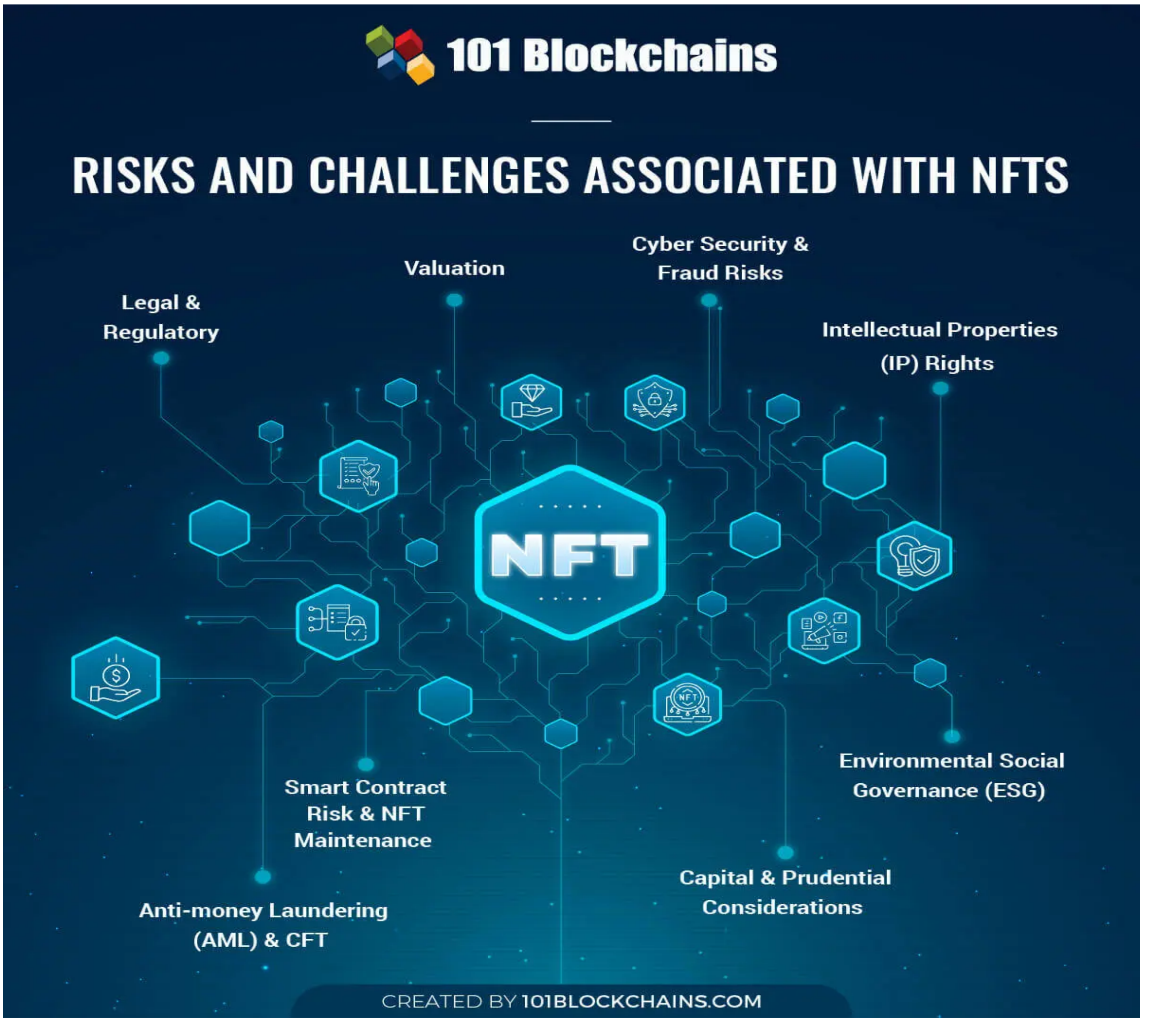
Fundamentally, all this causes limited access to a broader audience, which includes retail investors and smaller collectors. Additionally, the majority of high-end NFT assets are too costly relative to their risk for most collectors.

Other Technical Issues

Apart from illiquidity, the NFT ecosystem faces many other drawbacks that are limiting its widespread adoption. This includes copyright and environmental sustainability issues as well as a lack of security protocols, regulations against market speculation, and efficient storage systems.

These technical constraints have inhibited NFTs from gaining the exposure and liquidity required to develop into a fully fledged sustainable digital asset ecosystem. However, a new type of tool is emerging, which could allow NFTs to solve these problems.

This solution is represented by fractionalised NFTs, also known as FNFTs.



Source: [101 Blockchains]

3. How Fractionalised NFTs Work

NFT fractionalisation is a rather new tool in the digital asset environment. NFTs have traditionally been able to have only one owner at a time.

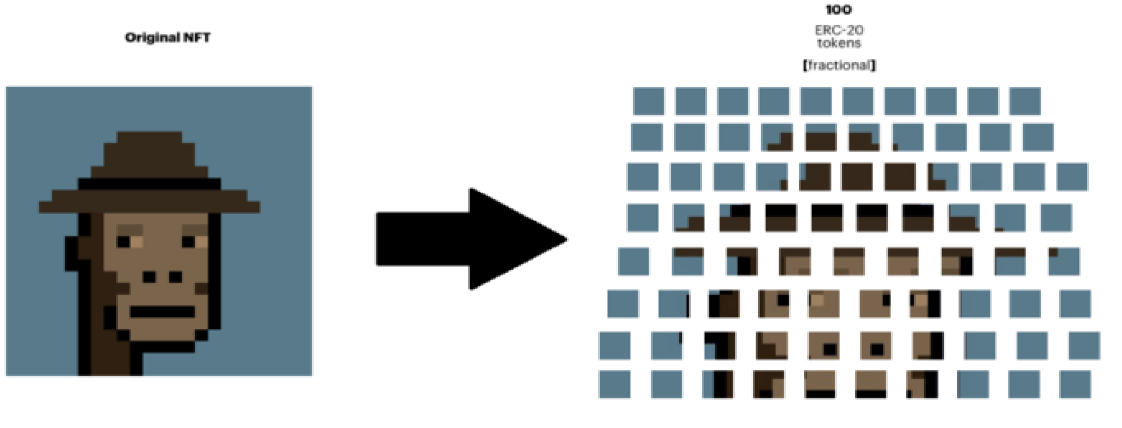
For this reason, FNFTs have been created to allow NFT owners to mint tokenised fractional NFTs and share the ownership of the asset with others. In fact, a high-value asset like a Cryptopunk will be impossible for everyone to own and in cases like this, NFT fractionalisation can allow individuals to invest a small sum of capital to gain partial ownership of a high-priced asset.

The Fractionalisation Process

With FNFTs, anyone can theoretically own a piece of a high-value asset at a considerably lower cost. Therefore, this tool could potentially open up an entirely new economic framework based on shared ownership of valuable assets.

When an NFT undergoes a fractionalisation process, the underlying asset is first locked in a smart contract. This smart contract then splits the originally indivisible ERC721 NFT into multiple fractions in the form of fungible ERC20 tokens. Each fraction represents partial ownership of the ERC721 NFT.

The shareholders will now be able to own a fraction represented by an ERC20 token of the NFT, which equates to owning a part of the original ERC721 asset.



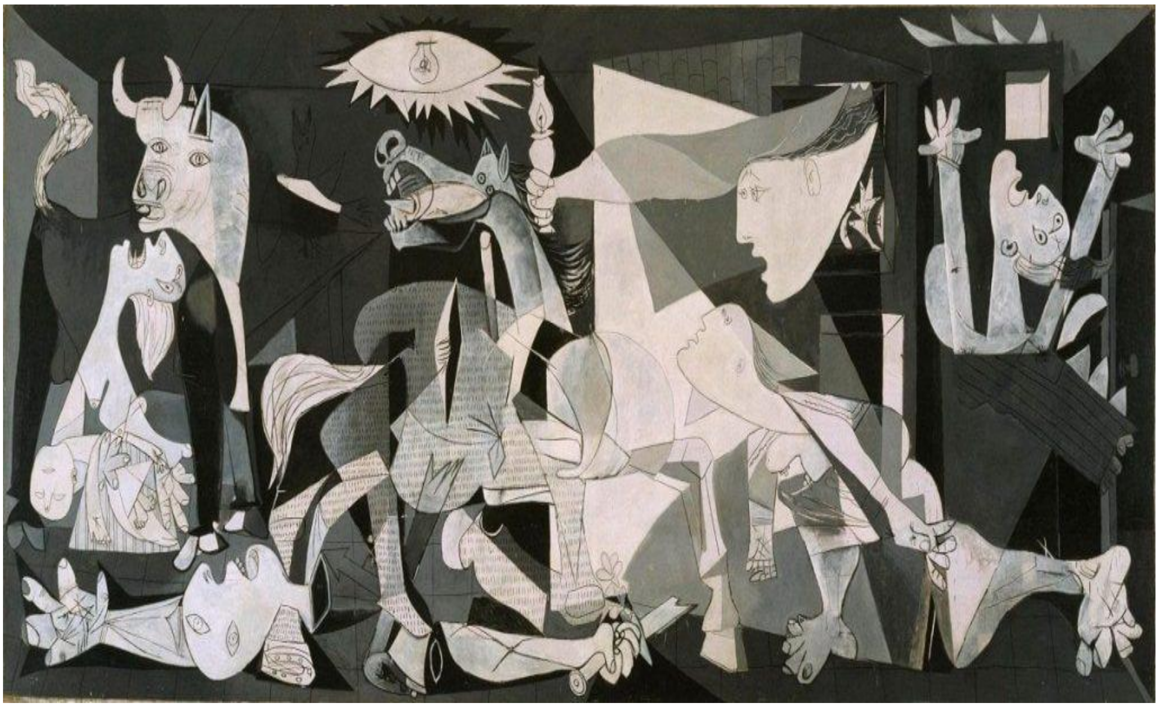
Source: Medium

An Example of Fractionalisation

Fractionalised entities are appealing because they offer interesting benefits to their users and holders.

For example, let's imagine being able to tokenise a Picasso painting worth US$300 million, and break it down into many ERC20 tokens.

This, in turn, would allow every fractional owner to use their ERC20 tokens to buy, sell, or auction off their share of this expensive NFT, which makes the asset more liquid.



Source: Wallpaper Access

How much would you pay to own a fraction of Guernica?

4. NFT Fractionalisation Incentives

FNFTs have several benefits that can entice NFT owners to split their own digital collectibles and allow investors to buy these fractions. The four main advantages are:

1. Price discovery
2. Enhanced liquidity
3. Democratisation of investment
4. Easier monetisation

4.1 Price Discovery

The price discovery procedure can be used to produce a price estimate for each ERC20 fraction, which then allows for an overall valuation of the underlying ERC721 NFT asset through three different metrics: past sales, auction, and fractionalisation.

Past Sales Mechanism

The past sales mechanism uses historical data to produce an estimate of the value of the NFT.

Auction Mechanism

The auction mechanism shows how much people are willing to pay for an NFT. Then, a general estimate is made that allows a certain value to be attributed to an asset. The value that people offer is therefore attributed to the asset.

Fractionalisation Mechanism

Through the fractionalisation mechanism, the NFT is first locked in a smart contract and divided into fungible ERC20 tokens that can be purchased and resold on the free market. Based on how much people are willing to buy or sell a token, a specific value can be attributed to the asset.

4.2 Enhanced Liquidity

As previously mentioned, NFTs are a rather illiquid asset, unlike, for example, a stock or a cryptocurrency, which are much more easily traded on the market.

NFT fractionalisation was designed to overcome this problem, especially for assets that have now become too expensive. This allows the asset itself to be traded in a fractionalised manner on specific platforms, as if it were a stock. As a result, the asset moves from a state of low to high liquidity.

4.3 Democratisation of Investment

By dividing the most expensive NFTs into fractions, it is now possible for people who do not have, or who are not willing to invest, such large amounts to participate in the purchase and sale of these digital assets.

For this reason, there is a lot of talk about the democratisation process of NFTs. This allows even the smallest investors to own a piece of the most expensive NFTs, at their desired level of exposure based on their portfolio and capital.

The tokenisation in fractions could, in the future, allow for the possibility of selling fungible assets such as real estate, works of art, or even land in a fractionalised way.

4.4 Easier Monetisation

By splitting NFTs up, artists can monetise their assets more efficiently, and by increasing the potential number of buyers, growing their overall sales.

The fractionalisation of NFTs can be an important tool to help creators expand their businesses, boost their audience, and have an impact on this ever-increasing space.

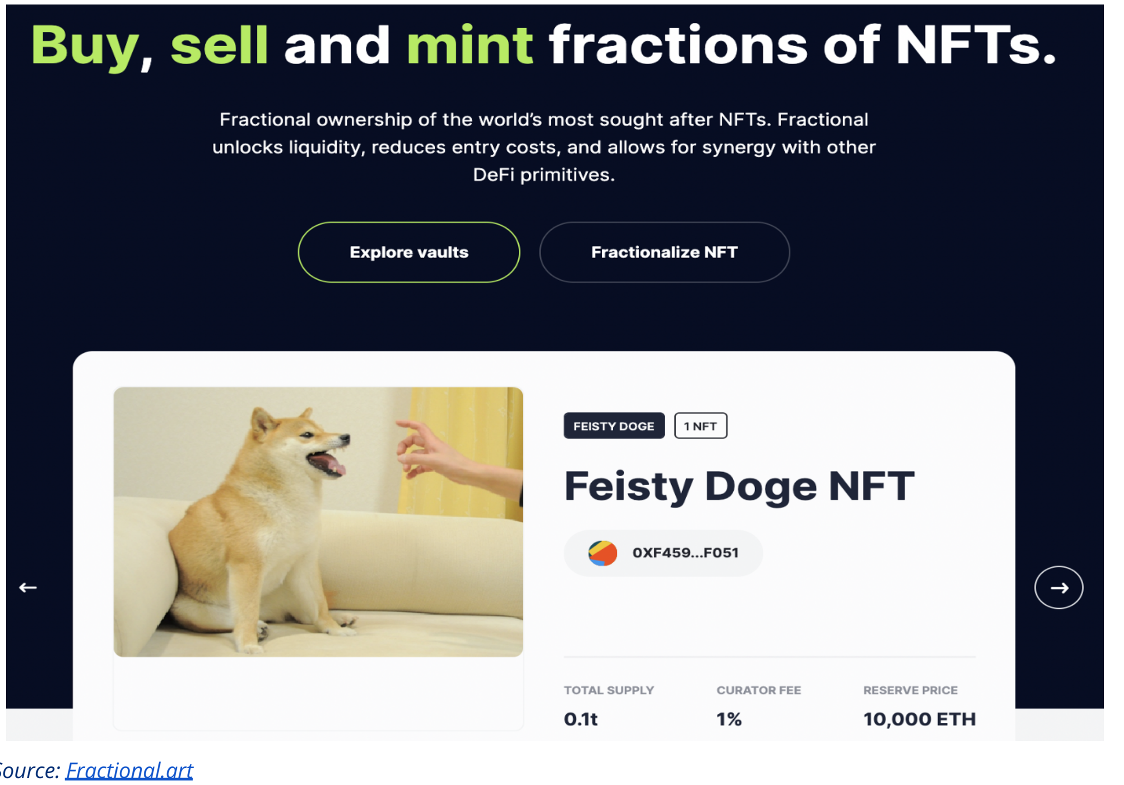
5. Websites That Offer Fractionalised NFTs

After having indicated the benefits and possible regulatory risks of FNFTs, we now proceed to discuss where it is possible to buy and sell them.

There are quite a few fractionalised NFT marketplaces at the moment, but given how niche this emerging sector actually is, these marketplaces haven't yet gained widespread popularity.

Below we examine the most famous platforms by considering their pros and cons and fractionalising methodologies.

Fractional



Source: [Fractional.art]

Fractional is a fractionalised NFT protocol that is having a lot of success recently.

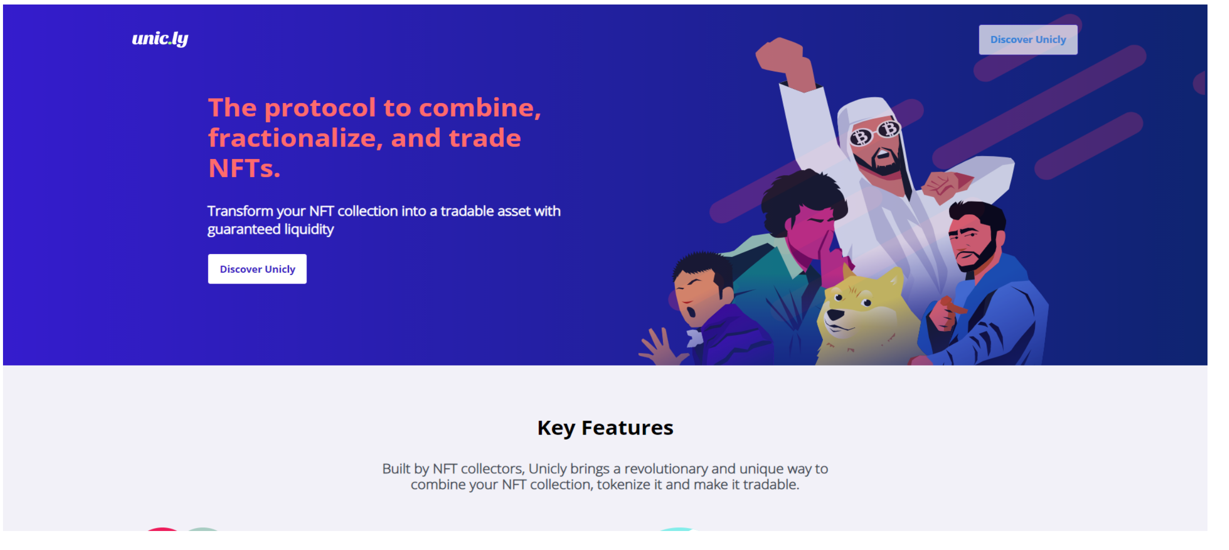
Fractional permits NFT owners to fractionalise both individual and a basket of digital assets into ERC20 tokens. They have control over the total supply distribution and initial reserve price.

NFT owners who lock up their assets will earn curator fees on an annual basis, which is a percentage of the total ownership token supply.

When a user owns fractions of an NFT, the ERC20 tokens give the user the right to vote on the reserve price that should be attributed to the entire asset. This is the price in ETH that must be offered by someone to start an auction for the entire NFT.

When the auction ends, all fractionalised token owners will have the possibility to cash out their fractions per ETH on a prorated basis.

Unic.ly



Source: [Unic.ly]

Founded in April 2021, Unic.ly is the newest entrant to the fractionalised NFT space.

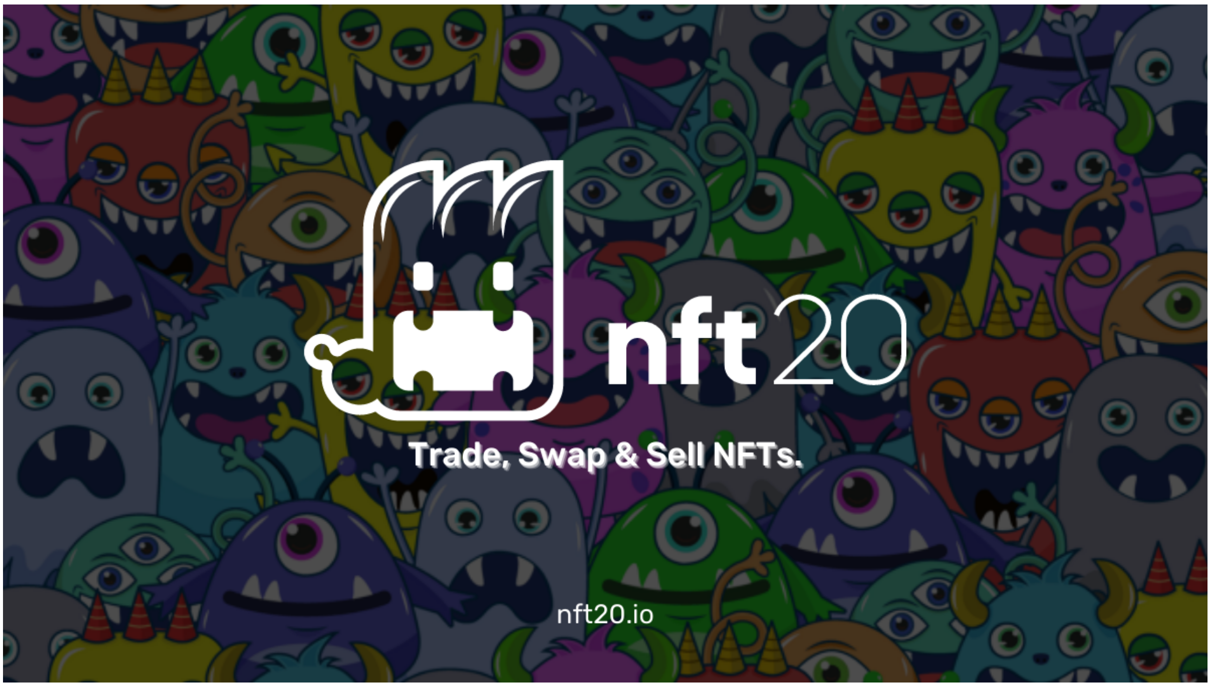
Unic.ly users can lock up their ERC721 NFTs in exchange for ERC20 tokens. For example, if you were to deposit a Cryptopunk, you will receive u-punk in exchange. This represents your share of the entire u-punk collection.

U-tokens can be easily exchanged for other assets on Unic.ly, which can be considered the Uniswap of u-tokens.

U-tokens are also governance tokens on their respective collections, so as the owner of u-punk, for example, you can vote which NFTs should or shouldn't be included in the u-punk collection.

Unic.ly has its own token, which you can learn more about here.

NFT20



Source: NFT20

We've seen how NFTs can be split into a set, which makes them more tradable. However, there's also another way to fractionalise NFTs and that is through indexation.

Nft20 is an NFT index fund provider with their own governance token called Muse. Users can deposit their NFT into various pools on Nft20.

When users deposit any NFT in an available pool or if they create a new one, they'll get tokens for the NFT immediately.

With the token received, users can speculate on them via Uniswap, exchange the tokens for another NFT available in the pool, use the tokens to bid on a higher quality NFT through an auction, or add liquidity for those tokens on Uniswap and stake the LP token to earn daily MUSE token rewards.

Every time an NFT is deposited, 100 tokens are minted, and 5% of those tokens go to the NFT20 protocol and are distributed to MUSE token holders.

5.1 Bundling Vs Indexation

To complete this analysis, let's compare the two methodologies of NFT fractionalisation.

Bundling

The bundling method used by Fractional and Unic.ly permits users to split NFTs into smaller parts. This gives investors a chance to get a slice of the pie, including utilities like rent or interest, if there are any.

The downside of this is that the NFTs here are very hard to redeem and would require the entire collection to be bought out after passing a vote. What makes this even more complex is that every single NFT within the bundle will need to be separately valued because there's no common price floor.

Indexation

Indexation is a lot simpler when it comes to valuation and redemption.

In fact, this tool helps to create a price floor reference for each NFT collection. However, there's also no way to value common and rare NFTs differently. This means that this method is only useful for the most common NFTs.

6. Conclusion

To conclude, fractionalised NFTs are NFTs divided into several parts to allow them to be bought by smaller investors who cannot afford them due to their high price.

The advantages of this include easier determination of their price, better liquidity, the possibility of being accessible to a wider audience of interested investors, and giving artists more monetisation opportunities.

Fractionalised NFTs are a rather recent invention and they are ultimately beginning to find success and be adopted by an increasing number of people. These are undoubtedly interesting tools to keep an eye on.

References

https://fractional.art/, https://fractional.art/. Accessed 20 April 2022.

Unicly, https://www.app.unic.ly/#/discover. Accessed 20 April 2022.

Erotocritou, Christos. "What is NFT20?" *Skvllpvnkz Hideout*, 13 September 2021, https://skvllpvnkz.io/content/nft20-faq. Accessed 20 April 2022.

Kane, Arben. "Fractionalized NFT (F-NFTs): All That You Need To Know." *Medium*, 9 September 2021, https://medium.com/@arbenk/fractionalized-nft-f-nfts-all-that-you-need-to-know-46bc06ea486d. Accessed 20 April 2022.

"NFT20." *NFT20*, https://nft20.io/faqs. Accessed 20 April 2022.

Robbins, Cameron. "Fractionalized NFTs." *Medium*, Zap Protocol, https://medium.com/the-zap-project/fractionalized-nfts-d3fa7458ae5. Accessed 20 April 2022.

Very Nifty. "Changes in the Ecosystem FAQs." *Medium*, 31 January 2021, https://medium.com/nft20/changes-in-the-ecosystem-faqs-693c1ed82cb6. Accessed 20 April 2022.

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