CFY.Finance

Abstract: CFY.Finance is a Decentralised Finance (DeFi) protocol for NFT-collateralized loans, and NFT lending. NFTs are a fast growing market currently plagued with a major lack of liquidity. Moreover, unlike ERC20 tokens, holders of HRC721 NFT tokens do not have any way to earn passive income from their holdings. CFY.Finance changes that by allowing peer-to-peer lending and NFT-collateralized loans using any HRC721 NFT.

Introduction & Summary

Over the last many months, the Non-Fungible Token (NFT) market has seen fast growth, with everything from crypto-collectibles, to art and physical property being rapidly tokenized. We do not see this trend slowing down, and instead expect it to accelerate, as more high value resources like land, apartments, and other property rights get tokenized as NFTs. It is thus paramount to build the surrounding DeFi architecture that supports efficient pricing and liquidity in these assets.

Traditionally, a challenge of creating an automated liquidity market (AMM, like Uniswap), or a automated lending market (ALM, like Compound or Aave) for NFTs lies in the difficulty in pricing the assets, and delegating the risk of price fluctuations to the protocol comes with many problems that are so far unsolved.

Instead, CFY solves this problem by providing a P2P marketplace for NFT-collateralized loans and NFT-lending. A user lending against an NFT can do his own risk assessment and determine if the promised interest rate covers his risk. A user renting out an NFT will, of course, determine whether the NFT is valuable to them before taking out a lease. In this fashion, we decentralize the risk analysis process for each NFT, and enable it to occur in parallel, simultaneously for thousands of NFTs.

The Utility of NFT-Collateralized Loans

The straightforward use cases of CFY.Finance are:

1. Where an NFT holder takes a loan against the NFT to access liquidity without selling his asset, and giving up any potential price appreciation; &
2. Where NFT collectors use the lease NFT feature to earn passive income on their holdings;

These two cases are fairly well established in the Fungible Token DeFi market, with users locking tens of billions in lending protocols, earning passive income or accessing liquidity on their holdings. The extension of this use-case to NFTs is a natural progression in the growth of the DeFi market, and of increasing importance as the market for NFTs rises exponentially (currently at $3B daily tx. volume).

For example, an NFT collector who owns 5 CryptoPunks today cannot access any of the locked liquidity of over $400,000, without selling one of his punks. Such a sale may be unfortunate, as many people expect punks to cross over $1 million per punk eventually. With

NFTs in particular, markets are highly illiquid, and once sold there is no guarantee of ever being able to buy back that NFT, at a similar price range - this differs from the more liquid ERC20 markets. Thus it is an even more massive risk to sell an NFT to meet short-term liquidity needs, with the hopes of buying it back once the needs are met.

Using CFY, the collector can meet short-term liquidity needs easily without selling his precious collateral - he can simply raise a NFT-collateralised loan request on CFY.finance, and borrow out whatever amount he needs (say $30,000) by promising to pay adequate interest (say $500).

As CFY is fully decentralized, there is no counterparty risk involved in taking a loan against even the most valuable NFTs. While your loan is pending, the NFT is held by the smart contract, and cannot be accessed by anybody but you until the loan period expires. Thus high value NFTs can

be rapidly used to access liquidity without worrying about the integrity of the lenders or the team, as the contract code is immutable and guarantees the return of your NFT upon repayment of the loan. Likewise, lenders can rest assured knowing that even if the borrower defaults, there is a valuable NFT locked in the smart contract that they are guaranteed access to, once the loan period expires.

We also see many other use cases springing up rapidly as NFT tokenization of the real world speeds up and gains legal acceptance.

Imagine a future where all your property - your house, your car, your laptop, your TV etc., come with NFT ownership deeds that are legally recognized. Getting a loan/mortgage against any of these properties would then be as simple as locking up the NFT for collateral: no further action is needed to vest ownership rights.

This will lead to a new generation of finance, where property both large and small can quickly be put up as collateral for anyone in the market to give a loan against, secure in knowing that the document is authentic and truly represents ownership. As NFTs cannot be forged, unlike normal deed documents, the requirement of a due diligence procedure, and requirement of knowledge of local laws etc., before giving out a loan against property is largely eliminated - enabling fast, seamless, and worldwide collateralised lending markets.

Market Size and Economic estimates

NFTs represent a fast-growing share of about $20 Billion of value on ethereum and other chains, the rest being held in fungible ERC20 tokens and ether. Correspondingly, the potential NFT lending market would be at least 5% * $20 Billion = $1 Billion in size presently. That translates to fees of at least $25 million dollars accruing annually to CFY tokenholders. This is without accounting for any further growth and development of the product or in the NFT market.

A more likely scenario involves the continued increase in the value of assets owned as NFTs, perhaps mirroring the 100x + growth of DeFi in 2020. This would imply that with increasing tokenization of virtual as well as real assets, NFTs could represent $200 Billion of value or greater by 2023. The potential revenues from tapping all these NFTs for collateralised loans will therefore be correspondingly higher, computing to over $250 million in fees for CFY holders annually by 2023.

With these estimates an early market capitalisation of over $1 Billion, and an eventual market cap of over $100B seems on the cards for a protocol such as CFY.

Development plans

At launch we're enabling decentralized P2P lending against *any* NFT asset for the first time. All competition offers centrally curated lists of NFTs, limiting their growth potential and decentralization. We are working on multiple avenues of development thereafter, including:

A. Enabling Leasing of NFT tokens - analogous to leasing property or art, we will soon allow people to earn passive income from holding NFTs by leasing them out for a time period. Imagine someone leasing out a Punk for display at their party, or someone signing a rental agreement where the property deed is an NFT. Both these use cases will be supported by our v2 update featuring LeaseNFT.sol

B. Enabling a liquid automated lending market for NFTs - a.k.a. compound for NFTs, we hope to utilize early traction and data to develop the equivalent of cTokens for NFTs, essentially enabling holders of popular NFTs like punks to take out instant NFT-collateralised loans, at some collateral ratio to the floor of price for that category of NFTs.

C. On-boarding real world assets as NFTs - Our third step involves gradual tokenisation of the massive physical property market, by means of Token-Curated Lists where users vote on approving ownership claims, proofs and disputes by minting/burning an NFT representing ownership of that asset. This would utilize CFY tokens to curate claims and maintain an honest list of ownership and transfer of specific assets.