

NFT

Digital asset trading platform



N.Fans

White Paper

N.Fans (V1.0)

Catalogue

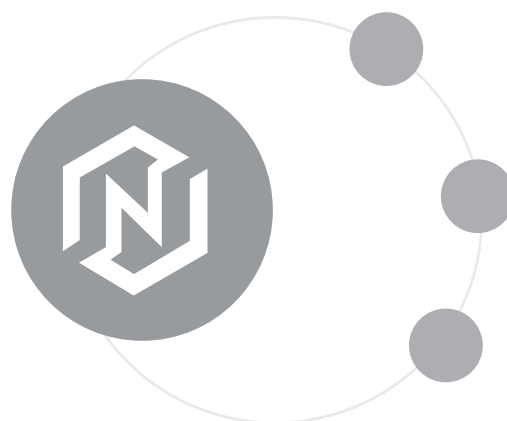
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Preface:

N.Fans is a new, digital game platform focusing on promoting the issuance, display, and flow of NFT assets in the crypto sphere. We are targeting the popular entertainment industry, as well as, the primary and secondary markets of trend and culture. N.Fans introduces blockchain technology and encrypted assets to the masses. We connect creators and users to provide a trusted and transparent, high-security, liquid, and integrated NFT platform.

The platform includes

- (1) An application development framework that supports multiple operating systems and multiple blockchain environments.
- (2) Fully scripted, componentized, and data-driven application development tools.
- (3) A related high-performance application functional component which can support developers in programming, debugging, and releasing decentralized applications and hybrid architecture applications oriented to the blockchain environment.



01. Background description

Since 2009, as blockchain technology matures, more and more funds have entered into the field. The public has also begun to pay attention to the impact of this novel technology on social development and the role of digital currency in world economic activities. Digital assets on the blockchain are divided into fungible and non-fungible digital assets. Examples of fungible digital assets include Bitcoin,

Ethereum and so forth. In the field of non-fungible digital assets, or non-fungible tokens (NFTs), with the exception of popular games such as CryptoKitties, large-scale applications have not yet been developed, and NFT-related industries are still in their nascent stages.

With the help of blockchain technology and other innovative cryptographic tools, artists have created some of the most unique artworks of our time, allowing collectors and art lovers alike to expand their creative horizons. The application of blockchain to artistic creation enables artists and collectors to communicate in a new dimension, brings new ways to display and trade artworks, and attracts more participants to the NFT ecosystem. Undoubtedly, applying blockchain and NFT principles to the field of art is one of the most successful use-cases in the NFT space.

The NFT market has grown exponentially year after year. From 2019 to 2020, the total transaction volume of NFTs rose from 62.9 million US dollars to 250 million US dollars, an increase of nearly three times. In 2021, NFTs will additionally benefit from the prosperity and development of the DeFi movement. According to NonFungible.com data (excluding NBA Top Shots, Nifty Gateway, and other such projects), the NFT market transaction volume in the first quarter of 2021 alone has exceeded the full year of 2020 by 8 times, about 2 billion US dollars.

The NFT market is growing exponentially every year

(NFT market transaction volume)



The trading market in the first quarter of 2021 demonstrates that collectibles and artworks occupy the bulk of the NFT market, while other categories such as games, sports, and music are also gradually becoming more popular.

The total market sales of NBA Top Shot in the past 6 months have exceeded US\$550 million. The transaction value of CryptoPunk in the first quarter was US\$1.5 million. The latest auction of Beeple at Christie's auction was US\$6 million. In the first NFT music album sale in history, 3LAU's album achieved a new record of \$11.6 million, all of which heralded the beginning of the NFT era.

02. Introduction to N.Fans

2.1. Introduction

N.Fans is a gaming platform combining NFT and DeFi to provide users with a free, transparent, and decentralized cultural and entertainment ecosystem integrating NFT creation, promotion, consumption, and payment resource management.

N.fans brings together the world's top talents in blockchain, culture and entertainment, software development, digital assets, gaming, and other relevant fields, linking multiple resources with high-end innovative project operation methods and capital investment. Aimed at creating a level playing field to leverage NFT and the non-fungible real world, the platform connects diversified NFT assets through the construction of standardized protocols, creating a more perfect ecosystem for all NFT assets, and becoming the key infrastructure for blockchain technology to map itself to the real world.

2.2. Ecology

N.Fans builds a complete application ecosystem around NFTs. This includes a comprehensive NFT asset trading section, NFT asset mortgage and lending, NFT INO issuance, and NFT blind boxes. In the future, N.Fans will further expand in accordance with market demand to adapt to the needs of users and maintain itself as the one-stop shop for all-things NFT.

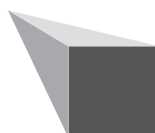
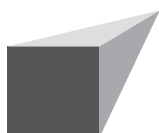
**Comprehensive NFT
asset trading sector**



NFT INO issuance

N.Fans Application Ecology

**NFT asset mortgage
and lending**



NFT blind box

2.2.1. Comprehensive NFT asset trading platform

The N.Fans virtual asset trading platform allows any user to trade on its fully-functional virtual trading platform without investing any funds in security, infrastructure, or settlement processing. Players can enter the global market, where all transactions are necessarily verified via the blockchain and its inherent trust mechanism.

The N.Fans platform allows tens of millions of traders to build their own virtual stores on one, unified decentralized platform. At the same time, a set of tools are provided to help creators interface easily with NFTs in one click, so as to eliminate the technical barriers to use. In this way, we efficiently link creators to the NFT market and lower the threshold required for creators to use our platform.

The N.Fans platform seamlessly and efficiently integrates all parties, providing security, established transaction procedures, and trusted settlement services, and leading hundreds of thousands of new users into a growing ecosystem. The high liquidity offered by our platform enables buyers and sellers to buy and sell goods at the most favorable prices with immediate settlements.

At the same time, the global gaming community will gain a virtual commodity security exchange based on blockchain technology. Similar to Amazon, Alibaba, Uber, and Airbnb, which have changed the business models of tens of millions of small business owners and created tens of billions of dollars in new revenue, N.Fans will provide more opportunities for a new generation of virtual goods traders.

2.2.2. INO

N.Fans' Initial NFT Offering (INO) model will split the value of assets (artwork) into "art value + token value" through NFT issuance. Therefore, the value of the token can be expanded to a functional market value. Anyone can lock an NFT asset on the chain and initiate an INO on N.Fans. Users participating in INO can send digital assets such as ETH, BNB, and NFS to the contract to participate in the auction. After a successful transaction is executed, users will receive a certain percentage of ownership according to the agreed-upon proportion.

The original value of millions of NFT assets can be locked on the chain through the INO contract, and NFT tokens can be issued, which can greatly reduce the threshold for user participation. After the contract is successful, the user will obtain part of the ownership of the NFT assets in the form of platform tokens according to the proportion of participants in the auction. N.Fans relies on the 'real money' of the public auction pool and uses the hands of the market to adjust and achieve the vision of NFT asset popularization.

2.2.3. DeFi debit and credit with NFTs

The combination of NFT and DeFi is an inevitable trend of development, and NFT-related financial derivatives have also emerged recently. N.Fans combines its NFT trading sector and market demand to launch a new NFT collateral and lending function. According to NFT's pricing in the INO market, combined with over-collateralization and other methods for risk control, the borrowers and lenders are matched with each other through N.fans' platform. After the borrower and lender confirm the loan amount, interest, and repayment method, they are then entered into a smart contract. Once the contract takes effect, the NFT assets will be in a staking state. When the agreed time expires, if the borrower fails to repay in time, the NFT assets will be attributed to the lender. If the borrower pays in time, the NFT assets will be returned to the borrower. At the same time, NFT assets can participate in NFT mining under "pledge status." In order to better match the borrowing needs of NFT assets, N.Fans will also introduce third-party insurance to customize reasonable insurance services for NFT assets and for both borrowers and lenders.

2.2.4. NFT blind box

We chose the blind box form of NFTs to meet global customer needs, as blind boxes are more effectively aligned with general consumer behavior. In the future, we will also consider joining group-buying to promote NFT artwork in the N.fans ecosystem. As we continue to release blind boxes, we will maintain prices at a reasonable level to attract new customers into the NFT space. Blind boxes also include NFS tokens to reward customers and encourage use of our platform.

NFT fragments (coming soon) enable us to highlight the story behind the work. Artist background is perhaps the most critical concept in artistic creation — if a digital artist lacks a backstory, the artwork is often incomplete. The best way to show fragmentation is to divide a work according to its story and make sure the pieces are connected. We divide the NFT into several segments based on the story of the artwork, and present the author's intentions through each NFT segment. Users understand that once they have collected all fragments and combine them into a complete story they then own a complete NFT.

At the same time, the scarcity of individual NFT works and the collectible game industry will further increase the value of NFTs in the secondary market. We will promote the works of artists with a high reputation in the art world by highlighting each artist's creativity and the story behind their works.

Oftentimes, such works of art will be very expensive; hence, we will create a unique NFT for each piece of art and let the artist divide it into fragments. Owners who purchase these NFT pieces can also trade these fragments in other markets. After users have collected all the NFT fragments of a particular piece of art, they can use our platform to integrate the fragments into a complete NFT and receive rewards in NFS tokens. The user can also redeem this NFT to obtain the artist's physical artwork, including the user's unique signature. After redemption, the corresponding NFT status will change to "Redeemed." Users can also choose to keep NFTs in their virtual state instead of receiving physical artworks to maintain the economic value of the art in the secondary market.

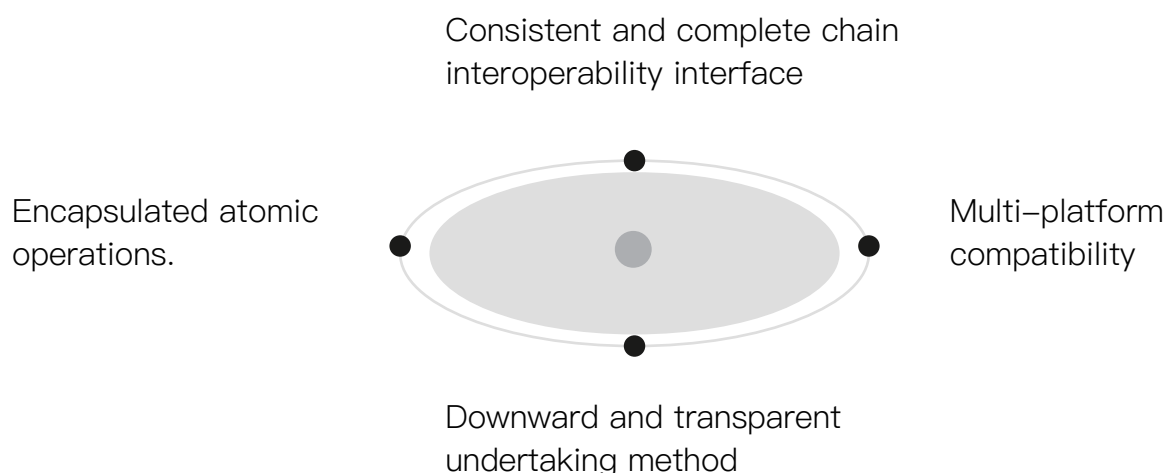
03. Technical architecture design

In the initial stages of the N.Fans project, our protocol was deployed on the Binance Smart Chain (BSC), however, it will gradually be connected to other blockchains such as ETH and TRX in the future as we focus on multi-chain support. The N.Fans protocol is a decentralized blockchain solution for buying, selling, and exchanging virtual goods and services.

Each of these game platforms has its own virtual commodity exchange mode and delivery conditions. N.Fans will support all these game platforms and build a unified network. When performing the DOPS, the N.Fans platform uses a consensus algorithm that utilizes elected nodes to confirm a transaction. This algorithm was deliberately chosen to solve challenges related to massive demand generated by the market.

3.1. Multi-platform game integrated operating environment

N.Fans believes that the operating environment of future blockchain games should have the following characteristics:



In order to simplify the user's experience, N.Fans developers have designed a set of integrated operating environments that can be adapted to multiple types of apps and can support multi-chain interoperability. The goal of streamlining the game interface with the blockchain, is to make the inter-chain interaction function with ease so that developers of traditional games can also develop or migrate games to our platform quickly and simply.

N.Fans provides a comprehensive chain interface for games. Game developers use the N.Fans SDK to create and test games. Access to the blockchain network and chain interactions are a transparent and structured process, and game development teams no longer need to invest research and development efforts to adapt to the chain network and to different devices.

At the same time, the operating environment will be compatible with popular systems and environments such as native Android, iOS, PC Web, and mobile H5. Games in the operating environment will have native cross-platform capabilities to achieve barrier-free operation with on-chain games on multiple platforms.

N.Fans provides a development environment for chain interaction so that developers can easily interact with the chain through this environment. N.Fans' interactive development environment on the blockchain provides development components compatible with multiple work platforms, including SDK for Android and iOS systems, javascript libraries for front-end web applications, and Python and PHP libraries for back-end applications.

Developers can use these raw environments to develop their own blockchain software to learn about their games' data interaction, including user registration stats, de-identified user information, and asset operations, as well as, functional user game data. The on-chain data interface allows users to store fungible or non-fungible data on the chain, and in order to provide optimal compatibility and customizable features, the blockchain system does not force asset data to be stored in plaintext. Game developers can design their own chain data storage structure with flexibility to parse this information safely and efficiently through game clients and market plug-ins.

The current chain interactive development environment provides the critical functions such as fungible and non-fungible digital assets and props query, transfer, ownership change, transaction submission, proposal, and voting.

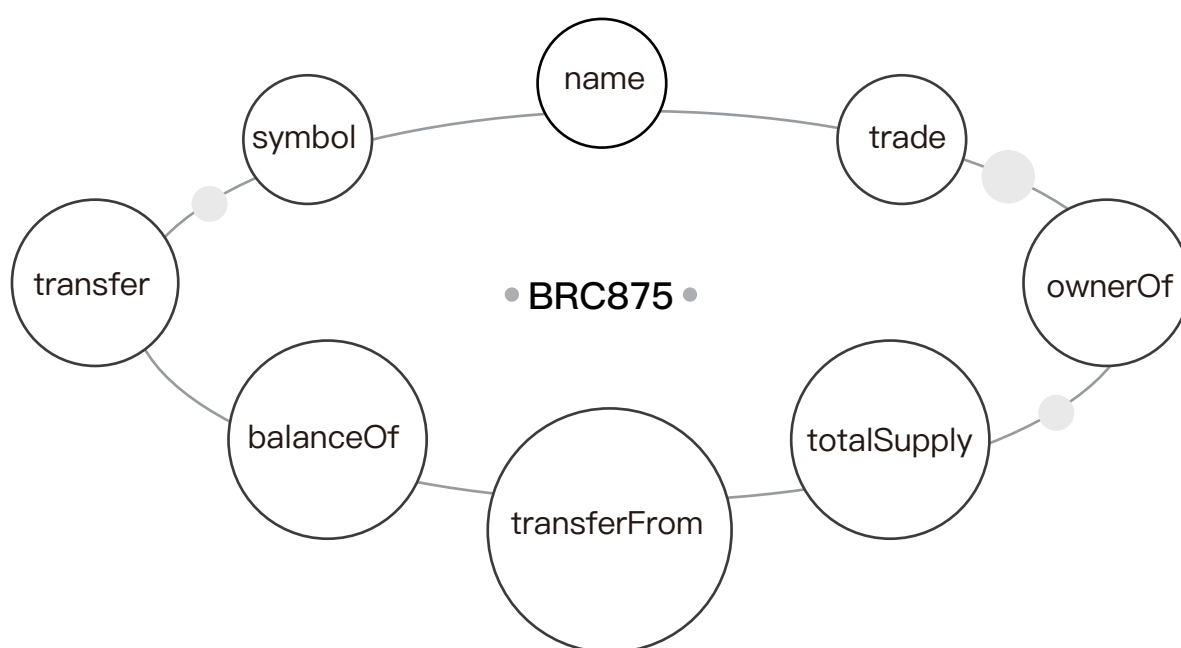
In N.Fans' ecosystem, fungible and non-fungible assets and smart contracts are separated. It is foreseeable that we will be processing large and continuous transactions. Therefore, it is necessary to reduce the computational cost of asset analysis and circulation as much as possible. By lowering the cost to the end-user, it is easier to achieve cross-chain acceptance of non-fungible assets. More importantly, of course, "asset and contract separation" is a safer design for our community members.

N.Fans provides a set of acceptance gateways for automatic acceptance of NFS tokens and NFT assets. Under a unified value measurement system, it realizes the smooth transition of content between different games and platforms on the chain. The content that can be used for acceptance includes game gold coins and game equipment, data, and so on.

3.2. Acceptance of non-fungible assets

Both BRC875 and BRC721 digital asset standards are Ethereum's standard protocols for non-fungible digital assets. BRC875 is a "simplified and reduced" upgraded version of BRC721. BRC721 created the first standard for non-fungible digital assets, and its subsequent updates, BRC841 and BRC821, are optimized and modified in some ways, while the BRC875 standard is simpler and more straightforward.

The defined functions include name, symbol, balanceOf, transfer, transferFrom, totalSupply, ownerOf, and trade. Compared with the BRC721 standard, the functionality of BRC875 is simpler.



By further expanding the digital asset technology supported by the acceptance gateway, the gateway will be able to support non-fungible composite contracts represented by BRC721 and BRC875 in the future. The acceptance of game props and non-fungible contracts by the acceptance gateway is similar to a dedicated compiler. Through the translation and conversion of structured data, the two-way acceptance of non-fungible contracts to game props on the chain is realized and is compatible with more types of props inside and outside of the chain; the end result is richer game content and experiences for the user.

Non-fungible digital assets are a type of digital asset used in distributed accounting networks. By optimizing the structure of non-fungible digital assets, they can be more flexibly utilized in and adapted to blockchain network games.

N.Fans redesigned the data structure of NFTs and added custom data storage to accommodate the intricacies and variability of game data. The key processes such as consensus, witness, and block production are also adjusted accordingly to match the new data structure. The item data is only fully recorded in block data when it is generated and attributes changes. During ordinary transactions and circulation, only the hash pointer is recorded to ensure that the volume of the block data will not increase faster than it should; we have modified this with the long-term functionality of our platform in mind.

The non-fungible digital asset data structure of the blockchain network is divided into the inherent data area and the extended data area. The inherent data area stores the basic information of non-fungible digital assets, including asset ID, world view statement, and basic data area: The asset ID is the unique identity of the asset instance in the distributed ledger network, which is the unique credential of the asset when it is accessed, queried, and modified. The world view statement includes the world view ID and the game type, as well as, the world currency type that the asset needs to circulate in the network. Basic data area is divided into basic description of assets, production time, producer, owner, user, use rights, and other relevant information.

The extended data area is a functional section designed for the expansion of non-fungible digital asset attributes, including two data areas: combination relation data and domain data. The combination relation data describes the asset portfolio, nesting, and affiliation. The extended data area supports the expansion of non-fungible digital asset attributes. The data unit is called the domain, which is the storage area for the specific.

business data of the game in the worldview supported by the asset. Different games or other business entities have their own domain identification and data in the domain. Each domain is bound to a number of contracts that are only responsible for itself. The domain data is stored in the form of key–value pairs of domain identification and data, representing the data of the asset in a specific game, such as attack value and defense value, durability, etc.

Furthermore, the separation of right of use and ownership design increases the feasibility of business design based on chain rights, such as: lease, mortgage, pawn, and so forth. Compared with other non–fungible digital asset standards, the non–fungible digital asset standard by N.Fans has many advantages: it has the characteristics of separating assets and contracts, as well as, an expandable and customizable data area, and is compatible with other non–fungible assets standards.

3.3. Data separation of assets and contracts

Fungible and non–fungible assets and smart contract data are stored separately on the chain. There will be a large number of continuous transactions in the N.Fans network. It is necessary to reduce the computational cost of asset analysis and circulation as much as possible. The separation of assets and contracts can realize separate analysis and execution of contracts and the operation on the chain. Under the design of separating storage of assets and contract data, the asset owner has all associated rights of the asset, and the operation of the asset can only be completed with the owner’s authorization. This separation avoids damage to assets or untrue claims on other people’s assets from modifying the content of a contract, and makes it easier to realize cross–chain acceptance of non–fungible assets without the constraints of contract factor; overall, the separation of assets and contracts is a safer design for the user.

3.4. Multi–chain connection

In addition to cross–chain acceptance gateways, N.Fans will support more direct multi–chain linking solutions in the future. For example, in the next phase of our platform upgrade, N.Fans will support the use of IPFS to store a large number of contracts and game data.

3.5. Combine multiple operations to ensure transaction atomicity

The production of props in blockchain games is atomic. Props are created based on the needs, materials, and assets submitted by players. After creation, props are transferred to the player. The transfer process includes a series of operations (OP): digital asset generation, setting prop properties, changing asset ownership to users, and so on, until the prop is delivered to the gamer. In order to ensure the consistency of all operations in the process, we merge this series of operations into one transaction. That is, an atomic operation in which all operations in the transaction will only succeed or fail at the same time.

Another application of atomic mergers is Project BCX's disintermediation of asset transfer, which aims to allow sellers to benefit more and buyers to consume less. The disintermediation circulation platform itself does not store the user's asset data, but only serves as a matching medium for peer-to-peer requests. Creators can flexibly design their own game asset data structure. The content that can be circulated is not limited to fungible assets in the game, but also includes non-fungible assets such as props, equipment, and artworks.

When a user submits a transfer request on the content circulation platform, the game assets (NFS or props) corresponding to the request will be locked and cannot be used in the game temporarily until the request is cancelled. The request contains the main chain ID of the transferor and the content of the transferred assets. When the transfer request is fulfilled, the system automatically completes the change of asset ownership, and transfers the assets paid by the requestor to the transferor to complete the entire transfer request.

When an asset transfer occurs, the transfer/purchase is submitted to the circulation platform in the form of a request. The transfer of assets and the change of ownership of the assets are regarded as an inseparable operation, that is, the actions of both parties need to be recognized by consensus. If any party changes assets and it is not recognized by the main chain block, the entire transaction will be rolled back. That is to say, during the entire circulation process, behaviors such as asset ownership changes or asset transfers will be packaged in a single transaction. The states of the two actions are consistent. After the transaction is completed normally, a unique transaction ID will be generated on the chain.

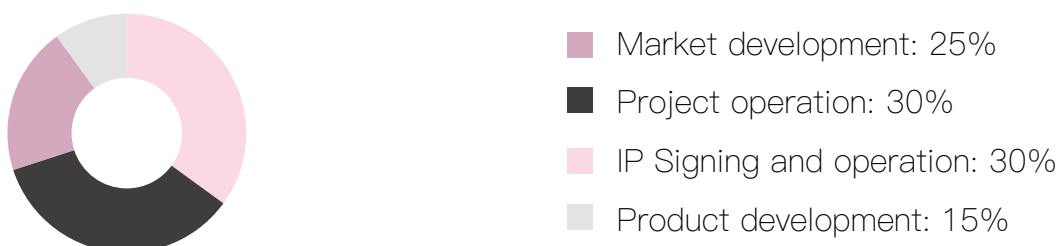
4. N.Fans Economic System

NFS is the token of the N.Fans platform. NFS token holders will benefit from our platform's dividends, community governance voting, purchasing of NFT products, priority participation in activities, and mining. N.Fans' platform promises to release 100% of platform transaction fee profit for the repurchase and destruction of NFS until the remaining 100 million NFS are destroyed, so as to ensure the deflationary logic of our token. This process utilizes a controlled, centralized destruction and release formula at the end of every month. N.fans platform will use NFS as a value token, gradually improving the platform's functions and ecological content, energizing participants and builders to provide a safe and stable investment environment for all users.

4.1. NFS Token



Total NFS issuance: 200,000,000



Tokens and NFT sales purposes

50% of NFS will be used for mining rewards for users of the N.fans platform, and the corresponding proportion of incentives will be adjusted according to the active behavior of all users in the ecosystem. Each year, 20% of the 100 million NFS tokens will be allocated for the corresponding incentive, and the remaining annual release will be no more than $(100 \text{ million} - \text{the total released amount}) * 20\%$ for the incentive.

INO mining: After the target NFT asset is injected, the INO contract triggers a buyout, and releases NFS according to the transaction volume; all participants receive NFS incentives in proportion to their participation.

NFT asset lending and mining: users will utilize ETH, BNB and NFS to participate in the NFT asset lending contract, and receive NFS rewards after the completion of the contract.

Dex mining: By staking the trading pairs of NFS, ETH, FIL and synthetic assets, users will provide liquidity for the mining pool to obtain NFS incentives.

4.2. Circulation and consumption of NFS

1. Purchase consumption: NFS has the same purchasing power as ETH, BNB, etc., and can participate in transactions and auctions for the purchase of non-standard assets.

2. Staking circulation: Liquidity staking of NFS and NFT trading pairs or other synthetic asset trading pairs.

3. INO initiated consumption: When an INO contract is initiated, NFS needs to be consumed as a gas fee for recording the contract on the chain.

4. INO consumption: The NFT asset injection process in the INO contract needs to consume NFS as a gas fee for on-chain operations to complete the execution of the contract buyout.

5. Liquidity transaction consumption: When users participate in liquidity pool pledge mining in our decentralized platform, they must consume NFS to pledge.
6. Buyout NFT consumption: For the purchase of NFT assets that have been in an INO contract on the platform, the NFS needs to be consumed to initiate a buyout invitation, and NFT asset holders vote to decide whether to sell.
7. Lending NFT consumption: Initiating an NFT asset loan contract needs to consume NFS for contract deployment.
8. Commission consumption of rewards management: When the holders share the commission of NFT asset income, they need to consume NFS for this on-chain commission process.

05. Risk and Disclaimer

Please read this disclaimer section carefully. If you have any questions about your actions, you should consult your legal counsel, financial advisor, tax advisor, or other professional advisor.

1. The information contained in this whitepaper may not be comprehensive and does not imply any contractual relationship elements.
2. The content in this whitepaper is not binding, including with respect to NFS growth value, and may change with the continuous development of the project.
3. This whitepaper does not constitute investment, legal, tax, regulatory, financial, accounting, or other advice, and is not intended to provide the only basis for the evaluation of the purchase of NFS. Nothing in this whitepaper is deemed to constitute any type of prospectus or investment invitation, and in any respect does not involve an offer or solicitation to purchase any securities in any jurisdiction. If the laws and regulations of any jurisdiction prohibit or restrict in any way transactions involving or using digital currencies, this document is not prepared in accordance with such laws and regulations and is not subject to the laws and regulations of that jurisdiction.

4. Certain statements, estimates, and project planning business information contained in this whitepaper are considered forward-looking statements or information. Such forward-looking statements or information involve known or unknown risks and uncertain factors, which may cause actual events or results to be materially different from the estimates or results implied or expressed in such forward-looking statements or information.

5. NFS, as a digital token asset, shall not apply to countries or regions where the applicable laws and regulations prohibit or restrict the trading of digital currencies in any way. It is the responsibility of NFS purchasers to determine whether the purchaser can legally purchase NFS and other digital token assets in their jurisdiction, and whether the purchaser can resell NFS to other purchasers in any particular jurisdiction. Individuals or organizations are requested to read this risk and disclaimer in detail when purchasing NFS and other virtual digital assets.

Thank you for your cooperation in advance.



 NFANS