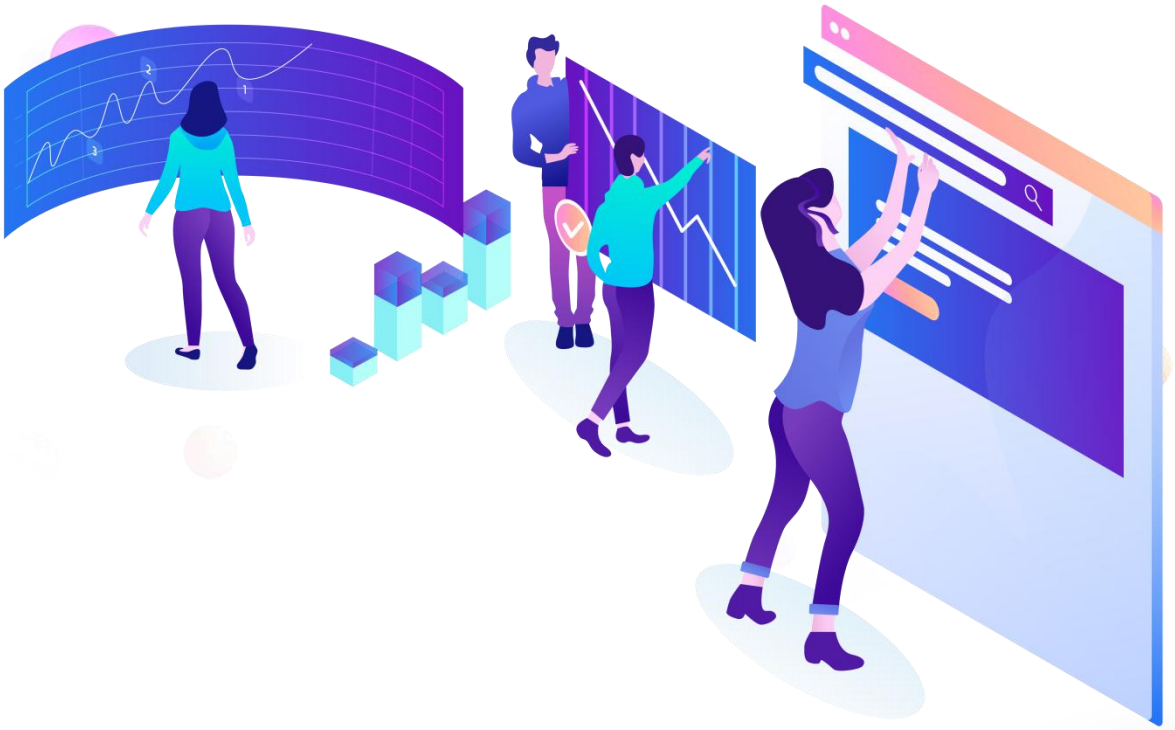
SmartRocks

The world's top NFTS trading platform



catalogue

Chapter I Background of Project Birth

1.1 NFT basic concept

NFT stands for Non Fungible Token, which is a non-fungible token, which is an asset type based on blockchain technology. The opposite of encrypted assets is Fungible Token (FT). Bitcoin or Ethereum are homogenized tokens, similar to "standardized products" in traditional finance. Compared with homogenized tokens, NFTs are more "personalized", similar to "non-standard products" in traditional finance. The difference between the two is:

The characteristic of a homogenized token is that every asset is indistinguishable and interchangeable. And each NFT represents the ownership of a unique specific asset, such as digital artwork, virtual game items, rare collectibles, or other digital or physical assets. Therefore, it cannot be directly replaced by another NFT.

They cannot be exchanged for one, because no two NFTs are the same. Homogeneous tokens can be divided into very small units for trading and circulation. A non-homogeneous token is an indivisible and unique token. NFT can represent artwork, collectibles or game items, etc., and has different characteristics compared with collectibles in the traditional game economy:

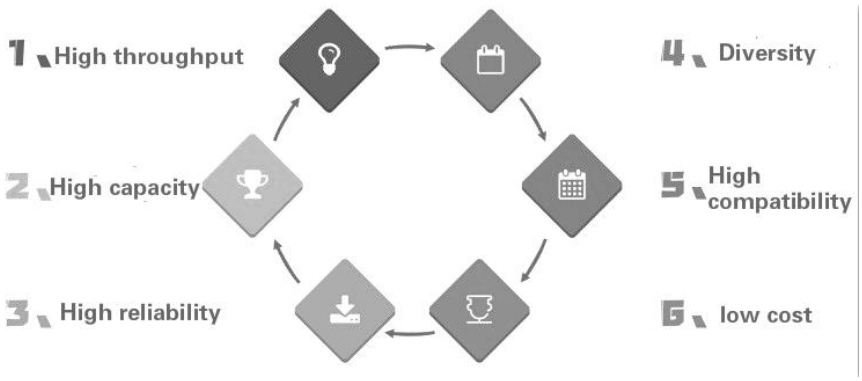
- Ownership: Centralized institutions (such as game operators) can control or even take away virtual assets at will, while NFTs are assets that are actually owned by players' wallets.
- Permanence: Once the NFT is minted, it can always exist on the blockchain.
- Proven scarcity: Since all records are publicly accessible, the number of NFTs in existence can be confirmed at any time.
- Proven provenance: It is possible to know exactly who once held the NFT, all the way back to the creator of the NFT.

- Programmability: Using smart contract technology, NFT can be traded between players and even with other games or applications.

- Decentralization: The economy maintains its integrity in a fully trusted manner. Once launched, the community can still spontaneously promote operation even if it leaves the game project side.

1.2 NFT's value sector

The reasons for the current rise of NFT are: the formation of NFT value consensus; the completeness of the infrastructure layer and protocol layer in the NFT industry value chain; the overflow of the entire encryption market to the NFT market; and the implementation of application scenarios and the vigorous development of creative groups. Strong support.



1) Formation of the NFT value consensus

- NFT, like any other homogenized token including Bitcoin, is a value carrier;

- NFT provides a new and digital form of rights, a digital tool for ownership confirmation, and a tool to protect the interests of creators.

- All valuable things can be chained in the form of NFT, including copyrights,

artworks, cultural and sports collections, real estate, securities, virtual assets, emotional expressions, etc., can all be chained in the form of NFT;

- NFT can conduct peer-to-peer transactions extremely conveniently, with very strong liquidity;

- Under certain circumstances, NFT can become a tool or target for value preservation and appreciation. For example, in the game, NFT can get more benefits through derivative ecology.

2) Infrastructure, trading platforms, and service platforms

The technical foundation and market foundation of NFT include three aspects: the technical foundation of public chain, LAYER2/side chain, and storage is more solid; the NFT trading platform has more powerful functions; and various service platforms are more complete.

3) The spillover of the cryptomarket boom

The spillover of the entire encryption market is another factor in the strong launch of the NFT market this year.The crypto market is just one step ahead of the NFT market.In 2020, the encryption market slowly gathered momentum in the second half of the year. From December 2020, the encryption market started strongly before the NFT market, and the NFT market began to make efforts in 2021.The crypto market was in a peak range from mid-March to mid-May, and the NFT market had a one-step lag and peaked in mid-to-late May.The crypto market has started a sharp pullback since late May, and similarly, the NFT market has experienced a downturn.After a market downturn in May and early June, the NFT market began to take off independently of the crypto market.Statistically, chain travel plates, metaverse, and collectibles become the super engines of the entire NFT market.This is the fourth factor in the rise of NFT, NFT application scenarios really began to land on a large scale

Logically, whether homogenized tokens or non-homogenized tokens are assets based on blockchain technology and decentralized into the core.The nature of capital seeking profits should always seek richer profits and make the layout of homogeneous tokens while seeking greater value depressions. Investment extension to NFT is a very natural logical process.Therefore, the encryption market boom spillover is the financial condition for the NFT market to take-off.

1.3 Market conditions for the NFT

It is generally believed that NFT development has gone through several stages: the embryonic period from 2012 to 2016,2017 to 2020, and the beginning of the outbreak from 2021.

1) Some landmark events in the outbreak of the NFT market

On March 11, 2021, one of the world’ s largest traditional auction houses, Christie’ s, auctioned the digital artist Beeple’ s NFT work "Everydays: The First 5000 Days" (Everydays: The First 5000 Days) in the form of NFT for the first time in history. , The base price was 100 US dollars, and it was finally sold for 69.346 million US dollars, making it the third highest price for a living artist's auction. This auction allowed NFT to be understood by outsiders.

On March 22, the CEO of Twitter, Jack Dorsey, even boosted the prosperity of the NFT, selling his NFT for the first tweet in 2006 for nearly $3 million. Copy. In May, Christie’ s auctioned CryptoPunks’ NFT works, including nine 24x24, 8-bit style pixel punk avatars. The lot was sold for US$16,962,500.

2) The NFT market is on the rise

Entering 2021, the NFT market started strongly, and the transaction amount of the market ushered in a peak from February to April. The transaction amount of the week starting on February 21st exceeded US$197 million. The market entered a brief downturn from late May to mid-June, and the transaction amount fell sharply. At that time, many people believed that the NFT market collapsed after a brief bubble, and voices of doubt about the development of the NFT market began to appear. However, with the market's expectations of the NFT prospects, the decline and doubts are only temporary.

Entering July, the NFT market continued to climb upward. In mid-July, the weekly transaction amount of NFT exceeded the peak in February, reaching US$209 million. The market did not stop there. In the week starting on July 25, the weekly NFT transaction value soared to more than US$339 million, a surge of more than 70% from mid-July. The transaction volume in the first week of August was approximately US$443 million, and the NFT market transactions continued to

thrive.

With the prosperity of the market, the NFT ecosystem has become more complete. According to the NFT liquidity, the market divides the NFT industry value chain into three layers, which are the infrastructure layer, protocol layer, and application layer from bottom to top. The NFT ecosystem is also more complete, with both infrastructure and NFT products covering various categories.

Google Trends data shows that from 2021, the global search volume of the keywords "NFT" and "Non-Fungible Token" has increased significantly, and the market scale has further expanded. The NFT fever continues and has spread to the technology, sports, and investment circles. Nowadays, some financial giants and technology giants have laid out one after another, hoping to get a share of the NFT.

1.4 NFT trading market pain points

With the popularity of NFT, various kinds of platforms emerge one after another, which also puts the whole market in a state of wild growth. In general, the existing NFT trading market has the following pain points:

1) Credit issues

Practical problems such as the lack of a credit system in the field of personal IP. The creator's creation track and achievements cannot be preserved fairly, and there is the possibility of tampering.

2) High cost of centralized platform

The centralized system requires a centralized third party to intervene between the project party and the IP provider. This increases the corresponding cost. In order to ensure the normal operation of the platform, some platforms will transfer these fees to the commission of the project party, the price of the game or the product, and ultimately, the user must pay.

3) No copyright protection

On traditional platforms, content piracy, lack of innovation, a vicious circle,

copyright cannot be confirmed, and confirmation of rights is difficult. Seriously infringes on the interests of creators.

4) Centralized power

Centralized platforms have risky behaviors such as tampering with transaction records, user assets, user levels, number of community participants, reading records, digital currency, etc., especially modifying the amount of digital currency, which will directly lead to the devaluation of user assets and ultimately lead to user losses. Even the loss of the third-party platform itself.

5) False traffic and single evaluation system

The value consideration of traditional platforms for creators mainly relies on a single evaluation system of reading volume (participation volume), number of rewards, and user evaluation, which is easy to be brushed and lacks credible reference value. In order to improve their own popularity and traffic, some individuals are forced to perform behaviors such as checking the number of people, the number of rewards, and the evaluation. As a result of spam content on the list, the platform lacks an intelligent anti-spam mechanism and anti-swipe mechanism. Therefore, it is very important to provide users with a fair, fair and innovative evaluation system.

6) Insufficient liquidity in the NFT secondary market and high GAS

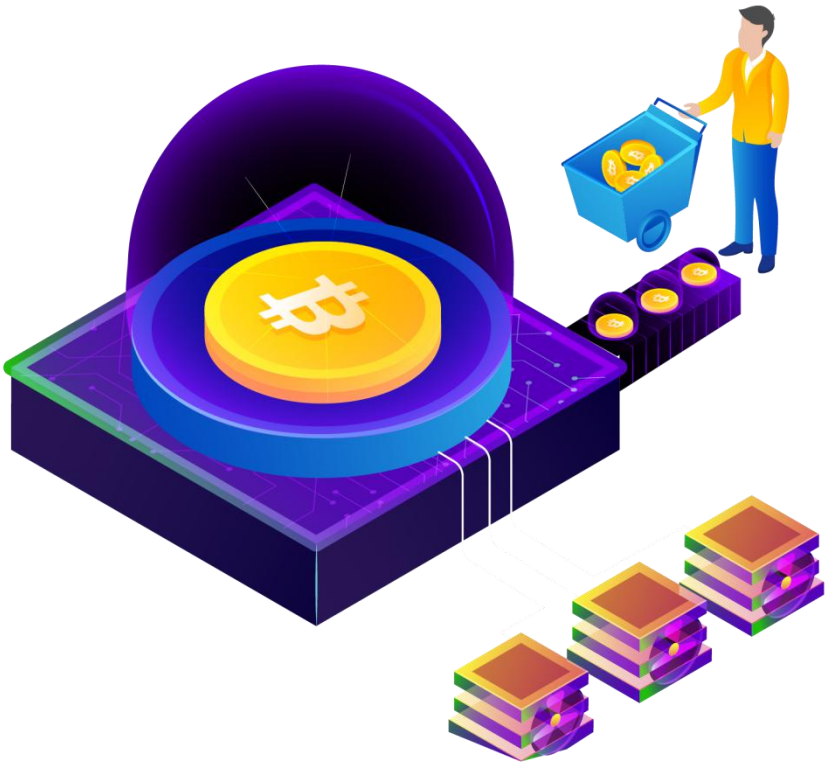
The scarcity of NFT is suitable for a series of applications that reflect unique value, but it is also because of its uniqueness and irreplaceability (uniqueness) characteristics that make it difficult to evaluate the value, which makes it difficult to realize the free trading of NFT artworks. Create liquidity problems. Therefore, the current NFT and homogenized tokens (ERC-20, etc.) show a gap of multiple orders of magnitude in transaction volume, and the transaction cycle is too long, which ultimately restricts the circulation of NFT assets.

7) NFT primary market to be explored

Due to the nature of NFT, it is unable to subscribe to the primary market through Token distribution. It can only circulate in the secondary market through auctions, transfers, and the sale of a single NFT. Due to the lack of early funds and investors in the primary market for NFT assets (such as investment institutions,

promoters, collectors, art funds, etc.), this type of assets (works) is restricted in dissemination and marketing, and ultimately makes high-quality NFT assets in Difficult to discover early.

In order to drive the transformation and model upgrade of the NFT trading market, SmartRocks is building a NFTs trading platform to establish a one-stop, highly convenient NFT trading channel for global users.



Chapter II Overview of the SmartRocks Platform

2.1 SmartRocks NFTs trading Platform

SmartRocks is based on the BSC public chain network to create the world's top NFTs trading platform that is convenient for users to view, collect, and exchanges. It is for the core market needs including the ecological landing of NFT, NFT exchange, and NFT multi-field ecological applications. Provide comprehensive solutions. At the same time, we cooperate with artists and other tokens to issue NFTS and sell them. Users can buy collections or trade in the NFTs mall we built. The SmartRocks pass will create a bridge for the integration and high-value circulation of global online and current assets. Users need to burn tokens to list products. After the transaction is successful, 5% of the transaction price will be charged. These profits are used to buy back tokens and burn.

With the support of BSC's underlying technology, SmartRocks will create the world's leading third-generation super NFTs trading system, and change the existing blockchain technology and application ecosystem through protocols, implementations, networks, heterogeneous chain systems, and Casper. mainly includes:

- Build SmartRocks' NFTs basic transaction service platform to provide transaction support services for the tokenization of physical assets and the digital economy derived from NFTs;

- Provide industry application solutions for NFTs. The third party can formulate a reasonable NFT application model based on the actual situation of each industry;

- Create a SmartRocks incentive ecosystem, integrate merchant certification, NFT production, NFTs circulation transactions, NFTs online digital exhibitions, NFTs copyright and auctions, digital asset mortgage lending, etc. At the same time, through the BSC public chain support, bridge more transaction service systems , And obtain benefits according to the tokenization of physical assets, and automatically allocate specific digital assets, and design corresponding mechanisms to promote the circulation of digital assets, thereby creating a reasonable reward system for the NFTs field, and finally realizing industry-finance

docking services .

Finally, the mobile-oriented strategy is also a strategy that SmartRocks pays special attention to. We will work with third-party developers to support DAPP applications and mobile smart contract services from the technical architecture. We also encourage third-party developers to join us to develop the entire process of blockchain services and jointly promote the implementation of blockchain technology in the global community and the field of NFTs digital asset trading.

2.2 NFTs trading pain point solution

SmartRocks will help quality projects, users, investors, related institutions to participate in the primary issuance, trading and circulation of NFTs assets.SmartRocks, users or players can buy before NFTs flows into the secondary trading market for better access to price or experience projects earlier.For example, users can directly participate in the market subscription on the SmartRocks platform to get better access to prices or the priority to experience projects earlier.

In terms of secondary market liquidity, the SmartRocks secondary market will rely on the huge traffic of BSC to help users solve the liquidity problem in the secondary market.On the SmartRocks platform, buyers and sellers can trade freely in the Binan NFTs secondary market.

In terms of GAS fees, compared with the general NFT trading platform, SmartRocks has no user threshold and has no distribution restrictions.At the same time, SmartRocks users need to burn tokens for goods on the shelves, and the transaction price is 5% of the transaction price. These profits are used to repurchase tokens and burn to perfectly solve the problem of high GAS fees.In addition, NFTs, data cast on SmartRocks is stored in a decentralized storage network, ensuring the persistence and tampering of data.

The advantages of the SmartRocks solution are: a one-stop trading platform, low gas fees for casting NFTs, decentralized storage, low thresholds and clear fees.

- SmartRocks is a cross-chain, cross-category, and cross-project NFTs

comprehensive trading platform. This comprehensiveness provides users with one-stop transaction services, and also concentrates user traffic, bringing more exposure to products. Regardless of which NFT users want to purchase or browse, the relevant business needs can be met on SmartRocks.

• Mining NFTs on SmartRocks has low cost and can get a certain return. When users successfully sell the goods, the minted NFTs will be listed on the chain and the gas fee will be charged.

• The data content of NFTs minted on SmartRocks is stored in a decentralized storage network, which guarantees the durability and immutability of the data.

• Compared with a trading platform that focuses on a single NFT field, SmartRocks has no user threshold and no issuance restrictions. At the same time, SmartRocks only charges a very small portion of the transaction fee, and the charging model is clear.

In the future, relying on first-mover advantages and continuous accumulation of network effects, SmartRocks will surely become a comprehensive NFTs investment platform covering the widest range of categories and the most digital products. With its diversified ecology, SmartRocks will continue to cultivate in the field of NFTs trading. , And form an irreplaceable dominant position.

In addition, SmartRocks' ecological plan is collaboratively developed by communities around the world, and the platform business is governed by DAO. The development of the platform mainly consists of the following parts:

1) Basic layer-SmartRocks trading platform

The SmartRocks trading platform is a decentralized NFTs trading platform based on the basic technology of the BSC public chain. It provides guarantees for the business through smart contracts + DAO, and truly decentralizes the power to the DAO organization.

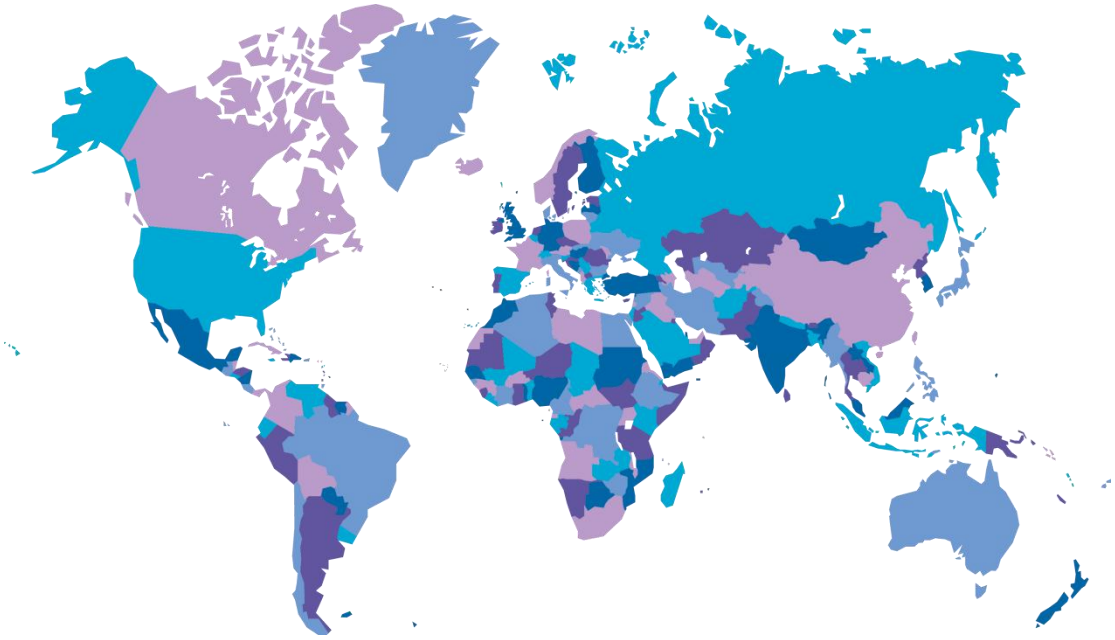
2) Business layer-the ecology of SmartRocks

Combining the characteristics of distributed systems and decentralization, quickly integrate the talents of the NFTs industry, and support encrypted currencies, digital collectibles, game projects, derivatives, digital art and other digital assets

supported by BSC and other blockchains in the early stage. From NFTs digital asset casting, auction, mortgage lending, and then to NFTs exchanges, combined with the community autonomy model, SmartRocks ecology will break through the barriers of the extremely low liquidity of current NFTs digital assets and realize the digital assets of NFTs. Maximum circulation service of assets. At the same time, SmartRocks will also provide support for project parties: project incubation, smart contracts, blockchain DAPP, one-click currency issuance, NFTs derivatives, media publicity and other support.

3) Governance layer-LDAO organization

The DAO organization has the right to make proposals, voting rights, and the priority to develop ecologically related benefits in the future. We hope that community members can highly recognize our values. With SmartRocks as the carrier and profit-driven as the direction, the project is gradually promoted through community consensus, and the decision-making power and benefits of the platform are distributed to all members of the DAO organization.



2.3 SmartRocks NFTs Shopping Mall

SmartRocks will cooperate with artists and other tokens to issue NFTS and sell

them. Users can buy collections or trade in the NFTs mall built by us.

The SmartRocks NFTs mall is different from the existing NFT malls:

• SmartRocks supports all NFT pass transactions, everyone can list it, and there is no threshold for it!

• SmartRocks simplifies blockchain transactions and restores them to e-commerce transactions, lowering the learning threshold for transactions!

• SmartRocks supports off-exchange transactions for all items, whether it is tokens, physical objects, or game equipment.

The SmartRocks NFTs mall has low barriers to use and good ease of use, and the on-chain contract guarantees the security of transactions. Users can view their NFT on BSC and other blockchains on SmartRocks, and the experience of displaying and trading on NFT is similar to existing online shopping. The biggest difference from traditional e-commerce trading platforms is that SmartRocks transactions are an on-chain behavior. Users purchase NFTs with encrypted currencies, and the settlement of transactions is guaranteed by blockchain smart contracts. In other words, SmartRocks guarantees the transaction during the transaction process is realized by the smart contract on the chain.

In the future, relying on first-mover advantages and continuous accumulation of network effects, SmartRocks will surely become a comprehensive NFTs trading mall covering the widest range of categories and the most digital products, and around its diversified ecology, SmartRocks will continue to cultivate in the field of NFTs trading. , And form an irreplaceable dominant position.

2.4 Platform development principle

Based on the requirements of the core trading sector of NFTs, SmartRocks is building a community-owned NFTs trading system with breakthrough technology and new economic models.

• Community Economics: Today’ s applications are based on economic models,

and for many in the industry, these models will not be sustainable in the future. SmartRocks is committed to rewriting the rules and building a new type of economic platform, starting and ending with community ownership, participation and growth. By rewarding developers, players and publishers who have contributed to the health of the Internet, a new era of community-centered economy will emerge. To

- Openness and operation: We believe that all platforms in the SmartRocks community must be inclusive, independent and interoperable. This is why we weave cross-chain and cross-platform functions into the structure of our platform, remove any barriers to entry for community members, and ensure that our platform will continue to improve and serve the community as new protocols, tools and standards.

- Progressive decentralization: Centralized platforms will inevitably create a virtual ceiling, and will often eventually obtain opportunities from others in the community and limit their growth through monopolistic behavior. As SmartRocks technology matures and adoption increases, SmartRocks is committed to transitioning to a fully decentralized platform that is owned, controlled, and nurtured by the entire community. By doing so, players and publishers of all sizes will be able to benefit from the community economy without having to trust a centralized management platform.

- Community governance: SmartRocks will create a transparent, intuitive and wise governance framework to ensure that no individual or group can control the SmartRocks platform or network, and actions that are in the best interests of the larger community will be rewarded. SmartRocks is working tirelessly to find the correct rules and mechanisms necessary to create such an unprecedented but vital governance system.

- Lasting innovation: We are very concerned about the innovation of the NFTs model. This is why we are building a trading platform that uses the full-scene value circulation of NFTs. We will always change the NFT industry in a positive way-to provide developers with a better business model, to provide players with new NFTs design, and to let everyone Tokenized economy of physical assets that all benefit. Therefore, we will build long-term investment in appropriate technology and infrastructure required by the platform and community, rather than seeking any form of short-term economic gain.

2.5 Technical advantages of SmartRocks

SmartRocks has the following advantages over other NFT platforms:

1) Composite storage design supports efficient, stable and cheap storage

Since the SmartRocks main chain supports hybrid storage, the cost of storage is much lower than that of many blockchain platforms. At the same time, because the bottom layer supports the IPFS protocol, SmartRocks is more scalable and horizontal than other blockchain platforms. Better scalability.

2) Support the asset and information interaction of multiple heterogeneous chains and homogeneous chains

Different from other blockchain platforms, SmartRocks supports the exchange of information and assets of a variety of heterogeneous chains and homogeneous chains. In the future, with the launch of the main network, it will be compatible with the current mainstream architecture, integrate industry resources, and save migration costs. Improve overall data value.

3) High-performance public chain support based on BSC

In SmartRocks, due to the use of BSC's underlying public chain architecture, it has higher performance and more stable and reliable services than other blockchain platforms. BSC has certain innovations in consensus algorithms. BSC supports smart contract writing functions, compatible with the existing Ethereum virtual machine EVM and all applications and tools under its ecosystem. Developers can easily implement the migration and deployment of Ethereum DApps. Save development effort. Finally, as a parallel chain that can interact with multiple chains, BSC natively supports cross-chain communication and transactions.

4) Quick verification of NFT transactions

By optimizing key links such as signature algorithm, ledger structure, data operation, serialization, consensus mechanism, and message diffusion, SmartRocks will achieve rapid verification in seconds. Meet the user experience of physical scenarios in most blockchain applications.

5) Storage of massive NFT data

The double-entry accounting model of the blockchain has been continuously used in the system, accumulating a large amount of data, resulting in a decrease in operating speed. SmartRocks will implement a separate storage and table storage mechanism to achieve mass storage of data.

6) Increase in throughput

The essence of blockchain is a distributed and shared accounting technology, and its distributed characteristics are mainly reflected in distributed consistency rather than distributed concurrent processing. In order to ensure data consistency and prevent the Byzantine Generals problem, certain specific links can only be executed serially, but not in parallel. Through long-term testing and optimization practices, SmartRocks' processing performance will further greatly increase throughput.

7) Fast synchronization of node data

SmartRocks will develop a mirroring mechanism, which can periodically mirror the local ledger to implement a convenient rollback mechanism. Under a unified consensus, mirror tags can be designated for rollback. At the same time, it shortens the cycle of adding new nodes into operation, and only needs to synchronize the latest mirroring and a small number of recent transaction collections to integrate into the network and participate in consensus verification.

8) Unified API and programmable intelligent hardware support

SmartRocks supports a unified API interface, which can be easily connected with the existing NFT application project DApp. At the same time, it also provides a standardized protocol for programmable intelligent hardware, which is convenient for expansion.

9) Automated management of system operation and maintenance

Through node privatization deployment, node operation and maintenance can be automated, and on-chain services can be started in seconds, improving efficiency and saving manpower.

Chapter III: SmartRocks Technical System

3.1 Overview of system technology

The SmartRocks technology system consists of three levels of participant management, blockchain layer and application layer, where the exchange system consists of two sub-levels of verification node and voting node.

1) Participant management

Participants of the SmartRocks system join the blockchain network in the form of super nodes. Different business parties can join and exit according to their needs. The information exchange between super nodes will jointly ensure the authenticity of the deposit certificate carrier and deposit data. Through the effective formulation of uniformly applicable transaction standards, STO gateways, smart contracts, etc., the effective link transfers the identity functions and contract elements of each node in different events.

2) Blockchain layer

Key technology: This part is the basic support for each module of the application service part.

Blockchain technology: including network structure, data structure, consensus mechanism, signature verification, etc., is the basis of system operation.

Related technologies:

• Data storage module: Based on the IPFS system, the content-based address replaces the domain name-based address, that is, the user is not looking for an address but the content stored in a certain place, without verifying the identity of the sender, but only needs to verify The hash of the content can make the web page faster, safer, more robust, and more durable. At the same time, storage security protection measures are provided to prevent data from being forcibly stolen; and data access auditing facilitates the traceability of data changes and circulation.

• Identity module: Perform blockchain authentication on users and devices, register the validity of the logo, and manage the user’ s identity, that is, the private key. The system also includes access security functions as an important guarantee for system security.

• Timestamp service: Provide a unified time service for the system.

• Data encryption and decryption module: Provide data encryption and decryption services for the system. The module should support national encryption algorithms and pluggable encryption and decryption algorithms.

• Client module: The client provides users with management and query functions for accounts, blocks, nodes and wallets, such as creating new accounts, sending transactions, generating random seeds, obtaining block information, and obtaining wallet status. All transactions are sent to the blockchain through the client, signed and encrypted.

• P2P module: The P2P module connects each node and broadcasts transactions and block related information across the entire network.

• Mempool module: transaction buffer pool, mempool stores transactions from the RPC interface and transactions from P2P. The realization of Mempool is mainly to solve the problem that the processing speed of the consensus module is slower than that of the RPC module.

3) Application layer

Application services are implemented and packaged for various service modules based on the support provided by the key technologies of the SmartRocks system. Each service is composed of a set of related specifications, processes and supporting interactive interfaces.

The application services of the blockchain layer of the SmartRocks system can be called to connect to specific business scenarios through secondary development.

3.2 Technical architecture

The SmartRocks system is a high-speed, secure, and scalable blockchain infrastructure consisting of two layers: super nodes and storage nodes. And through IPFS technology, processing millions of transaction services per second, through a secure decentralized cloud database, to provide unlimited expansion of storage capacity for Dapp.

The SmartRocks architecture system consists of the following parts:

- A homogeneous multi-chain chain system, providing high TPS access capabilities, cross-chain transaction capabilities, etc.;

- SmartRocks P2P, a P2P network system, provides addressing capabilities at the network layer;

- Multi-database cluster system, providing unlimited expansion of secure encrypted data storage capacity;

- The underlying structure support system of the SmartRocks system, including a block storage system and a distributed file system;

- Attribute-based encryption authentication access system composed of multi-node consensus, database access control gateway;

- A data integrity verification organization composed of multiple validator nodes;

- Adaptive probe system, providing memory data storage, performance monitoring, security monitoring and Metrics data upload capabilities.

The core of the SmartRocks system is the chain library separation mechanism and the functional sub-chain design. Decentralized applications can store data on the chain and in the database system according to the different levels of trust and public verification of the data. The SmartRocks system provides different types of data collaborative management at different levels. And, because the multi-database cluster system is a Permissionless environment. The SmartRocks

system has also completed an access control mechanism based on attribute-based encryption of multi-authorization agencies, and a complete proof of the possession of stored data.

The main reason for the design of chain library separation is to consider the future upgrade and update of the system. Because the update of the blockchain system will cause the system to fork, and in general, it will have an irreversible impact on the entire economic system. Therefore, we deal with the main data The ability is placed on the database system, and the access control system for the database system is completed through the function sub-chain. The functional sub-chain is designed for future scalability, and more to complete the two core functions of the decentralized storage system: privacy protection and proof of data possession. We have realized the access control function and encryption function of cloud storage data through an efficient multi-authorization agency attribute-based encryption scheme.

1) Account

SmartRocks uses the concept of state to store a series of accounts, each of which has identity authentication information and its own unique data. In some cases, if there is code that needs to be executed in the accepting account, the transaction will trigger the execution of the code, then the internal memory of the account may change, and additional information may even be created and sent to other accounts, resulting in new The transaction occurs.

2) Merkel Patricia Tree

Bitcoin is through a method called Merkel tree. IPFS also saves this data through a directed acyclic graph data structure of the Merkel tree. The Merkel Patricia tree simply means that when our file is relatively large, let alone one or two megabytes, two or three megabytes, or even larger, the IPFS system will upload files to the IPFS node when you upload them. It will split the file, and after the splitting, each file uses a hash value as its file name. Then these files are saved in a way of numbers, and the total number, for example, this number is like there are many leaves, and then the branch connected by two leaves is actually a hash value operation of the two leaves, then From the leaves to the branches, and then from the branches of the branches to the roots.

In this way, it can be ensured that when the data on a certain leaf changes, the

hash value directly reflected in the root of the tree also changes. This method is actually consistent with Bitcoin's data storage method.

Its purpose is to allow the entire network to verify the integrity of a data at the fastest speed. Because we don't need to compare the entire file, we just need to see if the value of the root of the tree is still the same. If it is consistent, different nodes can prove that the data has not been tampered with.

Merkle Patricia tree (Merkle Patricia tree/trie), proposed by Alan Reiner and implemented in the Ripple protocol, is the main data structure of the SmartRocks system, used to store all account states and each block Transaction and receipt data in. MPT is a combination of Merkel tree and Patricia tree. The structure created by combining these two trees has the following properties:

• Each unique key-value pair uniquely maps to the hash value of the root; in MPT, it is impossible to deceive members with only one key-value pair (unless the attacker has ~2A128 computing power);

• The time complexity of adding, deleting and modifying key-value pairs is logarithmic.

MPT provides SmartRocks with a fingerprint that is efficient, easy to update, and represents the entire state tree.

3) RLP encoding

RLP aims to be a highly simplified serialization format, and its sole purpose is to store nested byte arrays. Unlike existing solutions such as protobuf BSON, RLP does not define any specified data types-such as Boolean, 20floa, double or integer. It just stores the structure in the form of a nested array and leaves it to the protocol to determine the meaning of the array. RLP also does not explicitly support map sets. The semi-official suggestion is to use nested arrays of [[kl, vl], [k2, v2],...] to represent the key-value pair set -kl,k2...according to the characters The standard sorting of strings.

The scheme with the same function as RLP is protobuf or BSON, which are algorithms that have been used all the time. However, we prefer to use RLP because:

- It is easy to implement;
- Absolutely guarantee byte consistency.

4) Node architecture

The SmartRocks system itself is a homogeneous multi-chain design, including verification nodes (super nodes) and storage nodes (voting nodes). Super nodes are "block producers", which refer to those who collect, package, and verify transaction information. The nodes in the block are the basis for the stable operation of the SmartRocks system network. It is a consensus mechanism based on POS. The working principle of POS is as follows: similar to storing property in a bank, this model will be based on the amount and time of digital currency you hold , To allocate the corresponding interest to the user.

Simply put, it is a system that pays interest to users based on the amount and time of currency held by users. In the proof-of-stake POS model, there is a noun called currency age, and each currency generates 1 currency age per day, such as user holding There are 100 coins held for a total of 30 days, so the coin age is 3000 at this time. At this time, if the user finds a POS block, the coin age will be cleared to 0. Every time 365 coins are emptied, the user will get 0.05 coins of interest from the block (assuming that the interest can be understood as an annual interest rate of 5%), then in this case, the interest = 3000 * 5% / 365 = 0.41 coins , This means holding currency has interest.

In addition, POS-based pledge lending will also have efficient, safe and stable system performance, which we will describe in detail later.

3.3 Database design

The SmartRocks system uses IPFS distributed storage for the database design.IPFS (Inter-Planetary File System) is a global, peer-to-peer distributed version file system aiming to complement (or even replace) the current Internet-dominant Hypertext Transfer Protocol (HTTP), connecting all computing devices with the same file system.The principle replaces the domain-based address

with content-based address, that is, users are looking for an address but content stored somewhere, do not need to verify the identity of the sender, but only the hash of the content, which can make the page faster, more secure, more robust and more lasting.

At present, there are hypercentralized problems of traditional HTTP, and there are too many unsecurity factors in security. From the recent network security accidents, we can see the disadvantages of centralized networked storage. IPFS has fundamentally changed the way of finding, using HTTP to find the location, while using IPFS, we look for the content.

IPFS is the infrastructure for a general purpose, with no storage limitations.Large files will be cut into small blocks and can be accessed from multiple servers.IPFS's network is an unfixed, fine-grained, distributed network, and is well adapted to the requirements of content distribution networks (CDN).This design can be good to share all kinds of data, including images, video streams, distributed databases, the entire operating system, module chain, backup of 8-inch floppy disks, and the most important —— static website.The IPFS file can also be abstracted into special IPFS directories to labeling a readable file name (transparent mapping to IPFS hash) that takes a directory index like HTTP at the time of access.

The process of building a site on IPFS is the same as in the past, and the instruction to add the site to the IPFS node requires only one instruction: ipfs add-r yoursitedirectory.Connections between web pages no longer need people to maintain, and IPFS's own lookup can be solved.

IPFS does not require each node to store all the content, and the owner of the node is free to choose the data they want to maintain.It's like a bookmark, voluntarily serving other focused content beyond backing up your own site, and the difference is that this bookmark doesn't eventually become as ineffective as before.Copy, storage, and website support between IPFS nodes are easy with just one instruction and site hash.

The IPFS is universal and has few storage limitations.It serves files large or small, and for some large files it automatically cuts them into small pieces so that IPFS nodes can not just download files from one server like HTTP, but also synchronously from hundreds of servers.

The IPFS does not require each node to store all the content posted to the

IPFS.Instead, each node stores only the data it wants.If each node hosts a little data, all the data go through

3.4 C2C's support

The original traditional centralized trading method relies on the platform to make credit endorsement to ensure the real and reliable trading, but it also exposes the risk of personal privacy and asset theft.Individuals cannot master their own information, but in the blockchain network, personal transaction information is decentralized and stored on all nodes, and anyone can publicly review it to form a multi-centralized data storage mode.Skip the centralized platform for directly

trading between individuals and individuals, the transaction is more efficient.In blockchain systems, each node is highly autonomous.Either node may become a phased center, but does not have mandatory central control functions.Between nodes and nodes, non-linear causality will be formed through the network, realizing a decentralized, open, flat and equal system.

Compared with centralized transactions, many hurdles need to cross as regulatory customer funds need to comply with the relevant regulations of the regulatory body.Users who trade in this way must comply with the various rules of the centralized transaction service providers and pay the corresponding fees.

SmartRocks will decentralize trading rules through DEX (Decentralized Exchange), addressing this issue and achieving both convenient and secure transactions.There are two ways to achieve DEX decentralized transactions: Bitcoin Cross-Chain Support (BTC Relay) and Hash Locking.

3.5 Improved NFT data structure

NFT is a digital asset type applied in a distributed bookkeeping network, asset instances are unique, through the NFT structure optimization can be optimized to make it more flexible to serve the blockchain network games.

BSC redesigns the data structure, and adds custom data storage to accommodate possible NFT data and extended content.At the same time, the key processes such as consensus, witness and block out are also adjusted accordingly to match the new data structure.NFT data in BSC, only fully recorded in block data upon generation and attribute changes, and ordinary transactions and flows, only the hash pointer to ensure that the volume of block data does not grow too fast by long-term transactions.

The storage of homogeneous, nonhomogeneous assets (NFT) and smart contract data on the chain is separated.There will be a large number of continuous transactions in BSC's network, which need to reduce the operational cost of asset analysis and circulation as much as possible. The separation of assets and contract can realize the separate analysis execution of the contract and the operation of the

necessary results.

Under the design of separating the asset from the contract data store, the asset owner has all the permissions of the asset, and the operation of the asset can only be completed by the authorization of the owner.It can avoid the destruction of assets by modifying the content of the contract, and it is easier to achieve cross-chain acceptance of non-homogeneous assets (NFT) without the restriction of contract factors. Therefore, the separation of assets and contracts is a safer design.

3.6 System safety protection

1) Proprietary security team

SmartRocks defense system, professional security team, mature security system, rich protection experience, provide multi-level three-dimensional protection for digital asset services.

2) Resistance to DDoS attacks

SmartRocks advanced defense algorithm + HTTPS encryption mechanism + massive DDoS cleaning.

3) Triple system protection system

- The first level is the physical isolation between the front-end, back-end, and database;
- The second level, two-way encryption of communication, information verification and review mechanism;
- The third level, the system's multi-site standby mode, instantaneous, smooth, and user-insensitive server switching capabilities.

4) Seven-fold audit of smart contracts

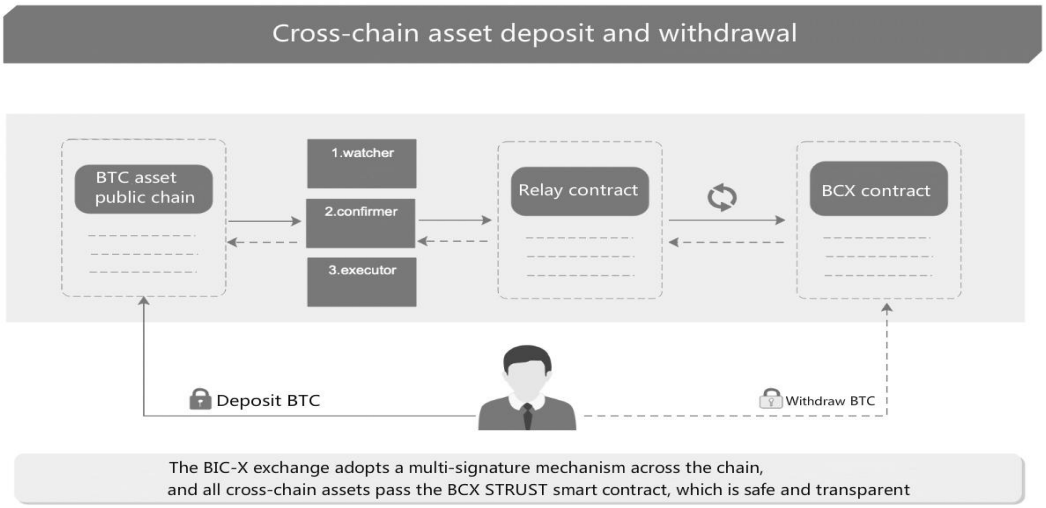
Overflow→Conditional competition→Access control→Security design→Denial of service→Gas optimization→Design logic, layer by layer check.

5) Pay attention to wallet security

- Physical defense, separation of hot wallet, cold wallet, and user wallet;
- Software defense, a dedicated wallet tool developed independently;
- Defense-in-depth, multiple audits of wallet code and frequent security program scanning.

3.7 Cross-chain system

SmartRocks will independently develop multi-signed cross-chain technology solutions based on BSC to support various cross-chain assets such as Ethereum, wave field and quantum chain.For the user to complete a cross-chain transaction, the user first sends the A asset to a specific address on the A backbone, which is a multiple-signed address.The advantage of multiple signed addresses is that the assets are safely locked on that address.Because only one or several gateway members cannot complete the transfer of the asset, according to the multi-sign algorithm, a certain proportion of relevant members are required to unlock the asset.



Once the user sends the A backbone asset to a specific address, the listener of the transaction information on the listening chain will monitor the main chain transfer. After receiving the information, confirmer will verify the authenticity and accuracy of the transaction on the backbone through txid. Once determined that it will not be revoked, confirmer will sign the cross-chain transaction on the relay contract.Executor(executor) meet the signature threshold conditions, issue the same number of anchor coins, and recharge to the SmartRocks Strust contract, and the user adds the asset in the SmartRocks security account, which completes the process of the transfer of the asset from the backbone to the SmartRocks Strust contract.

So, if the user wants to transfer their assets from BSC backbone to A backbone, the user first needs to launch a withdrawal request in SmartRocks, token will be withdrawn to the relay contract, relay contract press the part of the token, this time watcher will initiate multiple transfer on the A backbone, and record the multiple signing request on the relay contract, confirmer to confirm the authenticity of the token destruction, and provide the signature on the A main chain.After meeting the threshold conditions, the transfer is completed from Executor to the A backbone, and the user withdrawal address receives the A backbone assets.

Overall, recharge is mixing a certain number of tokens on the A backbone and then issuing new tokens on the BSC chain based on it.In turn, it is the withdrawal on the BSC chain, destroy a certain number of tokens, and unlock the corresponding number of tokens on the A main chain.

3.8 BSC's support for SmartRocks

As the world's largest digital currency exchange, Binance has always been at the forefront of the industry and continues to deploy the NFT ecological sector. Binance Smart Chain (BSC) is forming support for the entire NFT market.

The Binance Smart Chain (BSC) can be regarded as a blockchain parallel to the Binance Chain. At present, it mainly serves the DeFi and NFT ecology.

BSC has a certain innovation in the consensus algorithm. It adopts the PoSA (Proof of Stake Authority) consensus algorithm, which combines the functions of the delegated proof-of-stake (DPoS) and the proof-of-authority (PoA) mechanism, and is built on a network of 21 verification nodes , The second-level block time can establish a high-speed infrastructure for the DeFi protocol.

The word smart in BSC is reflected in the functions related to smart contracts: BSC supports smart contract writing functions, compatible with the existing Ethereum Virtual Machine (EVM) and all applications and tools under its ecosystem , Developers can easily implement the migration and deployment of Ethereum DApp, saving development effort. Finally, as a parallel chain that can interact with BC, BSC natively supports cross-chain communication and transactions. Overall, the technical advantages of BSC are more obvious, which are reflected in the following aspects:

• Smart contract: BSC has the function of writing smart contracts. DApps with different functions are the basic elements of the DeFi ecosystem, and smart contracts represent the underlying rules and operating logic of DApps. At the same time, programmability also greatly increases the scalability of BSC and realizes the diversification of DApp functions. Therefore, smart contracts are the cornerstone of the Binance DeFi ecological "building".

• Compatible with EVM: BSC is compatible with the existing Ethereum Virtual Machine (EVM) and all applications and tools under its ecosystem, which greatly reduces the threshold for developers to develop DApps. Developers can easily implement the migration and deployment of Ethereum DApp, saving development effort. The significance of being compatible with EVM is that it can be compatible with the current hottest Ethereum ecosystem to the greatest extent, attracting

developers and overflow funds on Ethereum.

• Cross-chain function: The significance of cross-chain is to enrich the currency of the DeFi ecosystem and increase liquidity. Up to now, Binance’ s "Token Canal" has completed the cross-chain of BTC, ERC20 on Ethereum (ETH, LINK, USDT, DAI, etc.), XRP, BCH, LTC, ADA, DOT, XTZ, BSC and other assets Intercommunication. This means that these assets can be migrated to the Binance Smart Chain and become liquidity for DEFI operations.

Through the SmartRocks system built on the BSC, the huge potential of multiple NFTs service verticals can be greatly improved, and the protocols and mechanisms of blockchain technology at all levels can be optimized and promoted. The NFTs ecological application infrastructure provides basic underlying services for various NFTs value transmission applications, and provides realistic and feasible technical approaches for building a global value Internet.

Chapter IV Design of SmartRocks Pass Model

4.1 The SmartRocks Pass Certificate is issued

In order to drive the efficient circulation of asset value in the NFTs market, we issued SmartRocks tokens based on the BSC protocol. SmartRocks is a value token circulating in the ecology and a functional token used on the platform. Its value attribute integrates all the values necessary for NFTs. This is an interesting and practical one, in order to be widely used in the circulation of various value assets. Designed token. At the same time, SmartRocks is also the governance token for the entire platform and the third-party access ecosystem. All ecosystems are developed around SmartRocks, which are used to participate in account records, transfers, and payments in NFTs and more applications in the future. In addition, SmartRocks will also play more roles in the future ecology, while stabilizing the fluctuations in the value of digital currency, while maintaining the overall ecological balance.

The ultimate vision of SmartRocks is to maximize the full value of payments, transactions, auctions, production, pledges, and physical asset tokenization in the field of NFTs, break through various key technologies of the value transmission network, and build the value interconnection of global NFTs. In the early stage, with the support of BSC technology, through the SmartRocks ecological model and pledge mechanism, incentives and liquidity construction were formed. Introduce SmartRocks at the incentive layer to achieve the purpose of a flexible consensus mechanism for the multi-public chain ecology, and by incentivizing the DAO community to maintain the platform ecology and develop DApp applications on the chain, create network effects for SmartRocks to increase value.

Total circulation of SmartRocks: 2000 pieces

In cooperation with FEGEX, SmartRocks will be launched on the FEGEX exchange.

Use the tokens of the SmartDefi ecosystem developed by FEG. Using SmartDefi, the liquidity pool will be automatically and permanently locked to ensure the safety

of investors' property. (The ROX mechanism of SmartRock and FEG is the same, both use SmartDefi technology, ROX open up to more than 600 times, currently there are 300 times, 1 ROX up to = 47bnb)

SmartRocks tokens are multi-chain tokens constructed using SmartDeFi technology and are the most advanced product of FEG tokens.

Smart DEFI Ecosystem

Smart-Swap

Direct reward to SmartRocks

Fwrap and Smart Rising Floor

Sensible price increase floor

SmartRock Token offers the smartest price hike ever.Since the SmartRocks Token contract has its liquidity, the 0.1% swap sale fee is used directly to raise the lower price limit.

fWrap-Enabled

SmartRocks Token's trading ecosystem is built to run seamlessly with fwrap-based assets. This means that all transactions on the same underlying assets have brought positive price pressure to SmartRocks. As the basic fWrap collects rewards, the rewards come from the liquidity of the tokens, so that the price continues to rise.

Token Economics: Baseline6%, Txn Fee1%, Price Floor 1%

Using the SmartDefi ecosystem, 100% asset support, 6% of each transaction enters the base price pool, which will lead to a continuous increase in the baseline value of the token, which will always increase with each purchase/sale, thus forming A baseline value that never drops, guarantees that every SmartRocks token is valuable.

Each SmartRocks token is fully backed by its underlying assets, ensuring that the base value of the token will not suffer losses. The underlying asset is the asset of the token transaction (for example, BNB). A certain percentage of each

purchase/sale is allocated to the asset backing pool. The asset backed pool is protected in the smart contract of the SmartRocks token. This has led to a continuous increase in the benchmark value of SmartRocks tokens. Asset backing can be restored immediately by destroying SmartDeFi tokens to obtain its asset backing share. This guarantees that every SmartRocks token will always have value regardless of the market price. Every time you buy/sell, the baseline value will always increase, thus forming a baseline value that will never decrease.

The benchmark value of each SmartRocks token will never fall-it can only rise! Since all SmartRocks tokens are based on BSC technology, their market prices will even rise when the trading volume is zero (0). SmartDeFi "DeFi" follows the laws of physics. When selling any token, the benchmark value will rise instead of fall.

Since the benchmark value is transparent, the buyer knows what the risk ratio is even before the transaction. If the market price falls below the benchmark value, users can arbitrage and burn the asset backing, which will make the market price consistent with the benchmark value. All holders will be 100% assured of holding SmartRocks tokens, because the benchmark value will never decrease-even if the market price drops to zero (0)!

Therefore, SmartRocks tokens are not only sturdy and durable, but also 100% backed by assets that guarantee their value. When SmartDeFi tokens burn for the assets it supports, it creates a "black hole", which will automatically and effortlessly burn more and more tokens over time. The burned tokens forward their support to the remaining tokens, thereby increasing the support of each token faster.

4.2 Application circulation of SmartRocks

SmartRocks tokens can be obtained from official task rewards, resource rewards, from the exchange of secondary assets, or through mortgage loans. SmartRocks tokens circulate in the ecosystem, such as digital asset auctions, transactions, mortgage lending, etc., from NFTs digital asset casting, auctions, mortgage lending, to NFTs exchanges, and then to Play-to-earn development and physical communication. For certification, community node voting, etc., users can contribute and earn income in a variety of ways, and can also be exchanged for other secondary assets. In the future, in the SmartRocks ecological application ecosystem, SmartRocks tokens will be used for:

• Incentivize users to participate in asset transactions in the NFTs network, obtain transaction fees and notarization fees, and jointly maintain SmartRocks network security; reward transaction nodes and notarization nodes to support mortgage lending;

• As a measure of equity, it supports various consensuses in the early stage and realizes SmartRocks's original consensus system;

• Support the SmartRocks ecosystem to implement advanced smart contracts, avoid "logic bomb" contract execution from disrupting network performance, and provide an anti-fraud mechanism;

• Give full play to the basic currency function of the SmartRocks ecosystem, and provide the corresponding Token characteristics of the DApp sub-currency and the basis for asset liquidity;

• As a hosting target, realize the management of SmartRocks DApp products, and improve the visibility and exposure of DApps.

After the user obtains the SmartRocks token, it will have a wider area of circulation. SmartRocks tokens can be exchanged with all digital currencies on the exchange and settled with global legal currencies. The SmartRocks token supports circulation and payment in all aspects of the ecosystem, such as receipt and payment, transfer, legal currency transactions, deposits, withdrawals, voting, etc. In addition to the circulation in the SmartRocks ecosystem, it will also be circulated in third-party applications developed based on the BSC public chain technology. This will accelerate the circulation rate of SmartRocks tokens, add more circulation value attributes to the scarce SmartRocks tokens, and increase the overall value and price.

4.3 SmartRocks Development Planning

First, SmartRocks set up an executive team to clarify business development needs, determine the design ideas of BSC+SmartRocks DAPP, formulate preliminary development and operation plans, and complete white papers, token development and demos. Tokens are issued and online exchanges are formed to form trading pairs, which are combined through the blockchain to open up the flow of digital tokens.

Then, SmartRocks provides a block link interface framework, which not only supports the third-party ecology on the BSC public chain, but will also build its own public chain main chain in the future, allowing users and developers to easily and efficiently create blockchain-based applications. The executive team promotes the project in accordance with the plan, including the development of dual-chain basic components, application modules, and smart contract standards, and gradually improving the community governance related systems.

Finally, the independent public chain was launched to complete the test and upgrade. Complete node construction, including purchasing free node servers, expanding community nodes, etc. Complete the development of the developer community, carry out publicity activities, set up a bounty plan, and attract global technology development talents. SmartRocks log on to FEGEX exchange.

SmartRocks' NFTs ecological landing plan is as follows:

• Build trust: based on the blockchain digital encryption algorithm, establish a completely decentralized trust foundation;

• Design ecology: Establish a consensus mechanism based on distributed computer nodes and design an ecological model of NFTs application;

• Formulate rules: Formulate rules and rewards and punishments based on smart contracts, and the system automatically executes the rules;

• Issuing tokens: issuing ecological circulation tokens-SmartRocks through application value;

• Start ecology: SmartRocks is based on BSC circulation and launched on FEGEX exchange

The development path of SmartRocks is as follows:

☑ Stage 1:

- Start in orangutan swap
- Suitable for orangutan swap, Coinhunt, Coinvote and Coinsniper
- 1000 holders
- 5000 Telegram members
- Shilling giveaway for the community
- Start of marketing campaign
- Apply for CG and CMC

☑ Phase 2:

- Listed on the FEGEX exchange
- Start the ecosystem expansion of the SmartDefi ecosystem
- Expand marketing activities
- There are greater influencer promotions, advertising, etc.
- Start of marketing campaign
- Community/shilling rewards.

☑ Stage 3:

- Build NFTS trading platform
- Audit

- 2000 holders
- The final stage of marketing
- Build an NFTS trading platform and use the proceeds to repurchase and destroy tokens.

Chapter V SmartRocks Team with DAO Construction

5.1 The SmartRocks Team

SmartRocks has formed a cross-domain core technology team that guides its strategic planning, development, and operation with its extensive skills and experience.The team includes former BSC development members, NFT experts, crypto digital asset trading experts, blockchain software engineers, NFT early evangelists, and more.

Adrian——C language experts, blockchain technology experts, have long studied the application of blockchain technology in the financial field.Responsible for mining algorithm cross-platform transplantation and mining machine software development and management of virtual currencies such as Bitcoin and ETH.Rich experience in virtual digital currency wallet and virtual digital exchange technology architecture.

Stanford——Senior Programmer, Caltech, Senior Expert in blockchain technology application, NFT application Expert.He has rich experience in big data parallel computing and distributed algorithm optimization, and has had in-depth research in blockchain, cryptography, and data mining.

Samuel——Harvard University, specializing in intelligent voice technology, social networking and traceability technology, Python, application development.In the field of intelligent interaction, he has more than 100 professional works and over 80 core patents. He is also the drafters of multiple international standards.Samuel provides overall consulting services for the project and provides strategic support to implement the project application.

Giles——Technology Developer, Master of Computer Science, Harvard University, Python Language Expert, Blockchain Technology Engineer.Its research involves data mining, artificial intelligence and algorithm optimization.Responsible for the construction and optimization of the project AI algorithm.

Hubery——Program developer, senior engineer in blockchain technology application, has senior development experience in the field of private social networking industry.With 15 years of experience in the Internet industry, proficient in a variety of computer languages, good at long and large volume and high concurrent usable architecture design, with rich experience in R & D and management.

Jonny Wong——Good at blockchain, encryption communication technology, and long-term attention to the application of blockchain technology.He is proficient in the principle and implementation of mainstream blockchain technologies such as Bitcoin, Ethereum and HyperLedger, and has a deep understanding and rich practice of blockchain consensus mechanism, intelligent contract, cross-chain technology, side chain technology, privacy protection, etc.

5.2 SmartRocks DAO

The development of NFT shows that the rise of NFT has given greater support to the industry.In addition, the popularity of DeFi, NFT, GameFi and metaverse also makes DAO,, which has been quietly contributing core value to the industry, supported by users.

With the development of information technology and the increasing complexity of the organization itself, it has been difficult for the employment relationship and management mode of traditional organizations to adapt to the complex and changeable environment and the requirements of a new generation of individuals.Decentralized autonomous organization (decentralized au-tonomous organization,DAO) will be decentralization, autonomy, autonomy and certification economic incentives, the elements of the system as assets, make monetary capital, human capital and other elements capital fully integrated, so as to better stimulate the efficiency of the organization and realize value circulation, provides a good idea to solve the existing organization management problems.

The full name of DAO in blockchain is a "distributed autonomous organization", which is a form of blockchain-based organizational structure.It is able to operate autonomously without intervention and management through some open and just rules.These rules often come in the form of open source software where anyone can buy a stake in the organization or in the form of providing services.The DAO is somehow like a fully automated robot, and when all its programs are successful, it starts working under the original rules.In the process of operation, it can also continue to self-maintain and upgrade according to the actual situation, through the continuous self-improvement mechanism, to adapt to its surrounding environment.

DAO changes very much, can be a digital currency or a system or institution.Their valuable services to their customers can be currency transfer (such as Bitcoin), application platforms (like Ethereum), domain management systems (such as domain currency), or any other business model, apparently more like a stock of a particular institution than a single currency.Each DAO has its terms and conditions.In their own, disposable, digital currency form of DAO shares, users will always have the right to view, and may receive rewards.

The SmartRocks DAO community has a strong consensus to create a DAO autonomous community, 100% of which is managed by the community. After the project goes live, the community will vote to develop its own decentralized applications and DAPPs. The global community construction of SmartRocks DAO follows a high degree of decentralization and is carried out through a combination of on-chain and off-chain models. After all the programs of SmartRocks DAO are successfully set, it can start to operate according to the original rules. In the process of operation, it can continuously maintain and upgrade itself according to the actual situation. Through the continuous self-improvement mechanism, it not only

eliminates the trust problem, but also achieves an unprecedented level of collective coordination, thus forming the technical foundation of SmartRocks DAO.

• Smart contracts enable the technical implementation of SmartRocks DAO rules;

• The SmartRocks token economic model provides a realistic incentive basis for the distribution of SmartRocks DAO's benefits;

• The blockchain itself connects individuals or organizations around the world, allowing the expansion of SmartRocks DAO to break through geographical restrictions.

Use SmartRocks tokens as value circulation proof and incentive means, and then use smart contracts to determine the cooperative relationship and benefit distribution mode of members. There is no clear identity division among members. For example, investors, developers, collaborators, operators, consumers, etc., will become part of the community because of their token holdings. Members can continue to optimize the contract structure on their own, constantly seek the shortest path, maintain efficient coordination and better development direction.

Chapter VI Disclaimer

This document is used only for information transmission, is for reference only, and does not constitute any investment advice, solicitation or invitation for the sale of shares or securities in SmartRocks and related companies.Such invitations must be made as a confidential memorandum and must comply with relevant securities laws and other laws.

The contents of this document shall not be construed as a forced participation in the Token public offering.No act related to this White Paper shall be considered as participating in the Token public offering, including a request to obtain a copy thereof or to share it with others.Participation in the public offering of Token represents that the participants have reached the age standard, have complete civil conduct, and the contract with SmartRocks is real and valid.All participants contracted voluntarily and had a clear and necessary knowledge of SmartRocks prior to signing the contract.

The SmartRocks team will continue to try reasonably to ensure that the information in this white paper is true and accurate.During the development process, the platform may be updated, including but not limited to the platform mechanism, tokens and their mechanism, tokens and token allocation.Parts of the document may be adjusted in the new white paper as the project progresses, and the team will make the update public by publishing a notice or a new white paper on the website.Participants are sure to get the latest version of the white paper and adjust their decisions according to the update.In SmartRocks, participants are not responsible for losses caused by (a) reliance on the content of this document, (b) information inaccuracies in this article, and any behavior resulting in this paper.The team will spare no effort to achieve the goals mentioned in the document, but based on the existence of force Majeure, the team can not fully make a completion commitment.

SmartRocks tokens are an important tool for platform efficiency, and are not an investment product.Having a SmartRocks token does not mean granting its owner ownership, control, and decision-making power over the platform.SmartRocks tokens, as crypto assets used in ecology, are currencies in any of the following categories; (a) securities; (b) equity in legal entities; (c) stocks, bonds, notes,

warrants, certificates or other instruments conferring any rights.

Whether the value of the SmartRocks token depends on the market rules and the demand after the application. It may not have any value. The team does not make a commitment to its value appreciation, and is not responsible for the consequences caused by the increase or decrease in value.To the maximum extent permitted by applicable law, the Team is not liable for damages and risks arising from participation in the Token public offering, including, but not limited to, direct or indirect personal damage, loss of commercial earnings, loss of business information or any other financial loss.

SmartRocks complies with any regulatory regulations conducive to the healthy development of the industry and industry self-discipline claims, etc.Participant participation means that the representative will fully accept and comply with such examinations.At the same time, all the information disclosed by the participants to complete such checks must be complete and accurate.The platform explicitly conveyed the possible winds to the participants