White paper on STI

(Chinese version)

2.0

STI COIN

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Directory

The first chapter background

1.1 Blockchain is leading a new round of technological change and industrial change globally

The invention and widespread use of the steam engine in the 1760s ushered in the first industrial revolution, which was not only a technical reform but also a profound social change. And then the 1860s and 1870s

A series of electrical inventions. German Siemens made generators in 1866, 1870

Gelam, Belgium, invented the electric motor, and electricity began to drive the machine, becoming a new energy source to supplement and replace steam power.The electric power industry and the electric appliance industry developed rapidly. Man stepped into the electric age of electricity, assembly lines, and other mass production technologies, bringing about the second industrial revolution. Since the 1940s and 1950s, major breakthroughs have been made in the fields of atomic energy, electronic computers, microelectronics, space technology, molecular biology and genetic engineering, marking the arrival of a new scientific and technological revolution. This technological revolution is called the third. It produces a large number of new industries and the tertiary industry develops rapidly. One of the

most epoch-making is the rapid development and extensive use of electronic computers, which opened up the information age. It also brings a new kind of economy-knowledge economy. The level of knowledge economy has become the key to the success or failure of the comprehensive national strength competition. The scientific and technological revolution not only greatly promoted the changes in the fields of human society, economy, politics and culture, but also affected the way of life and thinking of human beings, enabling human social life and human modernization to develop to a higher level.

The first three industrial revolutions brought human development into an era of unprecedented prosperity. At the same time, they also caused huge energy and resource consumption, paid huge environmental costs and ecological costs, and dramatically expanded the contradiction between human and nature. In the 21st century, mankind is faced with multiple challenges of unprecedented global energy and resources crisis, global ecological and environmental crisis and global climate change crisis, which triggered the fourth industrial revolution --

In the green industrial revolution, a series of production functions changed from natural factor input to green factor input and spread to the whole

society. Now, amazing innovations, including the Internet of things, genetic engineering, mastery of architecture, artificial intelligence, driverless cars, robotics and smart devices will continue, with computer technology and microelectronics driving the fourth industrial revolution, the industrial 4.0 era.

As KLaus PPLhwab, founder and CEO of the world economy BBS, puts it, one of the main features of the fourth industrial revolution is that "it doesn't change what we do, it changes who we are Yourself."

As a disruptive technology, blockchain is leading a new round of technological and industrial transformation around the world. It is expected to become the "source" of global technological innovation and mode innovation, and promote the transformation of "information Internet" to "value Internet". As a result, blockchain is seen as the fourth after steam engines, electricity and the Internet The technological revolution.

At present, blockchain has gradually become an important infrastructure of "value Internet". Many countries have begun to embrace blockchain technology, open up new international industrial competition

routes and seize the commanding heights of a new round of industrial innovation, so as to strengthen international competitiveness and strive for first-mover advantage in the "new circuit" of blockchain. Nine out of 10 governments around the world are planning blockchain investments and will enter in 2018, according to IBM blockchain development report data Substantive stage.

The value of blockchain: machine trust, value delivery, smart contracts

What's the value of the blockchain that's produced? In fact, this can be concluded from the characteristics of blockchain: decentralization, transaction point-to-point, non-tampering features can realize machine trust; Transaction irreversible, information encryption features can achieve value transfer; In addition, information point to point, can not tamper and so on can achieve wisdom

Can contract.

Machine trust. For example, on the blockchain, there is no central institution of a third party, but entirely dependent on points

The trading mechanism such as point and tamper can guarantee the trust of both parties. The untamable nature of blockchain technology changes the centralized credit creation method, which reduces cost and establishes credit by mathematical principle instead of centralized credit institution.

(article "how can he make corporate credit transferable by reshaping the financial mode of supply chain with blockchain?")) is a blockchain technology

Current enterprise credit transferable block chain application project.

Value delivery. Blockchain is the first network that can realize value transmission: on the one hand, simple value transmission enables digital assets to circulate freely on the blockchain;On the other hand, issuing tokens makes financing even more so

Convenience, while the holder can enjoy the whole ecosystem of services (for example, a token is based on a blockchain should)

Generation by generation, owning tokens, means owning an application service.

Smart contracts. Recorded in computer language rather than legal language, the term refers to the combination of electronic contracts with block chain technology, when a pre-programmed condition is triggered, and the smart contract executes the corresponding contract terms.

For example, when company A signed A contract with company B, the product will be paid automatically after 3 months.

When the conditions (3 months later, product delivery) are triggered, the contract will be executed automatically and the money will be transferred directly to the other party's account.

The benefits of such smart contracts are that, on the one hand, they reduce the cost of signing, executing and compliance, especially in the case of a large number of daily transactions. On the other hand, it can prevent unilateral breach of contract, and guarantee the contract as stipulated

Line.

So as human information from the Internet into the value of the Internet, we found a problem, the data itself is not just a means of production, is under the condition of new Internet technologies, of man and nature, the interaction between people and society, and a digital description of the relationship, as a result, it not only contains a kind of

production factor, also includes the production rules. So in this sense, we should use blockchain

It's everywhere.

1.2 The beginning of the digital currency

Since 2009, when satoshi nakamoto came up with the concept of bitcoin, it has quickly spread across mainstream applications and commercial USES, becoming the first digital currency to attract a large number of users, in the history of digital currency

Milestone. But from the perspective of transaction currency receiving situation, we can find an important problem, is the currency block the confirmation of time is too long, and the traditional payment companies have figured out that buyers and sellers to implement currency trading zero confirm solutions, but this solution is usually outside the protocol USES the trusted third party complete the transaction.Bitcoin provides pseudonymous transactions, enabling a one-to-one transaction relationship between the sender and the recipient, and forever recording transactions that have taken place across the network. Bitcoin offers only low-level privacy protection, which is well known in the academic world. Despite this deficiency,

many still believe in blockchain's recorded history of money transfers. Based on Mr Nakamoto's work, AAC (AAC) is a cryptodigital currency with privacy at its heart. We have made a series of improvements based on the concept of bitcoin, resulting in a decentralized and well-anonymized cryptodigital currency that supports tamper-proof real-time transactions and a peer-to-peer secondary network that provides service incentives to the dac.com network.

Currently, there are 4,321 kinds of digital assets in the global blockchain (existing forms are mainly digital tokens issued by various blockchain platforms), with a total market value of over $110 billion. The trading volume and total market value of global blockchain digital assets will certainly surpass the trading volume and total market value of stocks.

Information revolution greatly changed the world we live in, purely fundamental structure of the dominance of the world is challenged, the singularity is near the big data and large-scale computing ability under the background of the era of ascension, the Internet is facing from the "information is power" to "computing power" transition stage, and the world economic structure and power move move more composed of

bits of information. The disruptive new blockchain technology will give rise to new social economy, new industry, new business mode and new mode, and will have unprecedented and even revolutionary influence on human production, life and even thinking mode.

1.3 the status quo of the digital currency industry

Digital currency blockchain technology is changing the world in its own way in 2017 Digital currency block chain technology is no longer unfamiliar now. Since the birth of bitcoin, people have been exposed to blockchain technology. As the underlying technology of digital currency, it has led the digital currency to a climax. Blockchain has been gradually integrated into our life, and it is very important. Why?

The Internet itself is like that. It began as an alien parallel universe called cyberspace,

And then it becomes part of everyday life. The idea that bitcoin was so new seems strange to most people. But consider how far it has come since November 1, 2008, when a name was used

The Satoshi Nakamoto white paper was published to the encrypted mailing list describing "the equivalent version of electronic cash, will

Allow online payments to be sent directly from one party to another

without passing through financial institutions." Now, nine years

later, tens of thousands of people have embraced bitcoin. You can also use it directly with the yuan

The deal. Even in the face of such traction, there are concerns that whether bitcoin, which is just a fad, an asset class, might fail after the total irrational exuberance fades and leaves the world. Like an internet-inspired new generation of fast and unexpected innovations, so, too, will inspire bitcoin - or its derivatives, of course, bitcoin has always been an unpredictable store of value. While people often focus on the volatility and performance of market prices as a speculative commodity, bitcoin is more than just a commodity or asset. It is used as a medium of exchange, store and unit account. Because being also a currency, an asset, in the future could even help unleash the economic power of the entire networked age.

Nowadays, digital currencies are diversified and various currencies emerge one after another. Now digital currencies have played an important role in the field of Internet finance. In the future, digital currencies may replace national currencies and become the world's only global currency. For example, the economy naturally tends to be inflationary, digital currency is used to resist inflation and so on, digital

currency will eventually integrate into our world. Are you still waiting as an investor?The growth of the Internet finance industry has been particularly rapid in the past six months of 2017, as more investors and companies have begun to embrace bitcoin as a digital currency and a safe-haven asset rather than as an investment vehicle. The blockchain technology of digital currency is constantly changing the world. "blockchain alliance", "blockchain insurance", "blockchain identity authentication", etc. Can you have your own territory in the future innovative Internet finance field? It is the only one who can make people trust each other in the illusory Internet industry. There may be big problems in the development of digital currency, but the digitization of currency has become an inexorable trend.

1.4 pain points for the digital currency industry

A growing number of merchants and nonprofits have chosen to accept bitcoin cash (BCH), and discussions about bitcoin cash won't stop at "" can replace bitcoin" ". March 23-25, 2018, one

The conference on the future development of bitcoin cash, "Satoshi's Vision," is being held in dongjing, as industry players from bitcoin cash communities around the world launch an in-depth exploration of technology and applications.

The conference focused on the prospects for bitcoin cash and digital currencies, and thought about how to bring it to a broader market and into the eyes of more mainstream investors. In terms of technology, practitioners will discuss hot topics such as zero-confirmation transactions, transaction data, stateless storage of data on the chain, and Turing completeness of bitcoin.With them

We are concerned about the development of digital currencies in Japan, Colombia, Africa and other countries and regions.

In addition to technological advances and in-app applications for bitcoin cash, community building is also a focus for developers and investors. At present, social channels are increasingly diversified.

Traditional platforms, such as WeChat, Twitter, Facebook and Reddit, still occupy the share of content communication of many digital currencies by virtue of their user base. On the other hand, new instant messaging (IM) software such as Telegram abroad and Beechat in China

It is also popular with virtual currency and blockchain enthusiasts. In addition, there are also a number of communities based on blockchain like Steemit and coinbank, which choose to encourage users to share content through the token incentive mechanism.

Yet the digital currency market has seen a flood of aircoins and their bogus teams, full of dry white books and false reports. However, the problem of information asymmetry faced by investors in this emerging market has not been solved. It is even more serious than the previous financial sector, and the cost for users to obtain industry information is higher and higher. COINS to see

Fang fang, CEO of BitKan, points out that there are many problems with the current social platforms used in digital currencies:

* due to excessive material incentives such as Token, community user behaviors tend to be driven by interests rather than the quality of content itself;

* the biggest feature of instant messaging platforms is information fragmentation, which cannot precipitate truly valuable content;

* the wide variety of currencies in which users are divided into different communities creates information islands.

1.5 As a blockchain digital currency for technological innovation

Blockchain is a Shared distributed database technology, as well as distributed data storage, point-to-point transmission,

New application modes of computer technologies such as consensus mechanism and encryption algorithm. Although different reports on blockchain

A one-sentence introduction may vary in wording, but the following five technical features are common.

1. Decentralization

Due to distributed accounting and storage, there is no centralized

hardware or management organization, and the rights and obligations of

any node are equal. The data blocks in the system are Shared by the nodes

with maintenance functions in the whole system

With maintenance.

2. open

The system is open, except that the private information of the parties to

the transaction is encrypted, the data of the blockchain is open to all, and

anyone can query the blockchain data and develop related applications

through the open interface, so the whole

System information is highly transparent.

3. The autonomy

Blockchain adopts consensus-based specifications and protocols (such as a set of open and transparent algorithms) to enable all nodes in the whole system to exchange data freely and safely in the trusted environment, making the letter to "people"

Any human intervention does not work.

4. Information cannot be tampered with

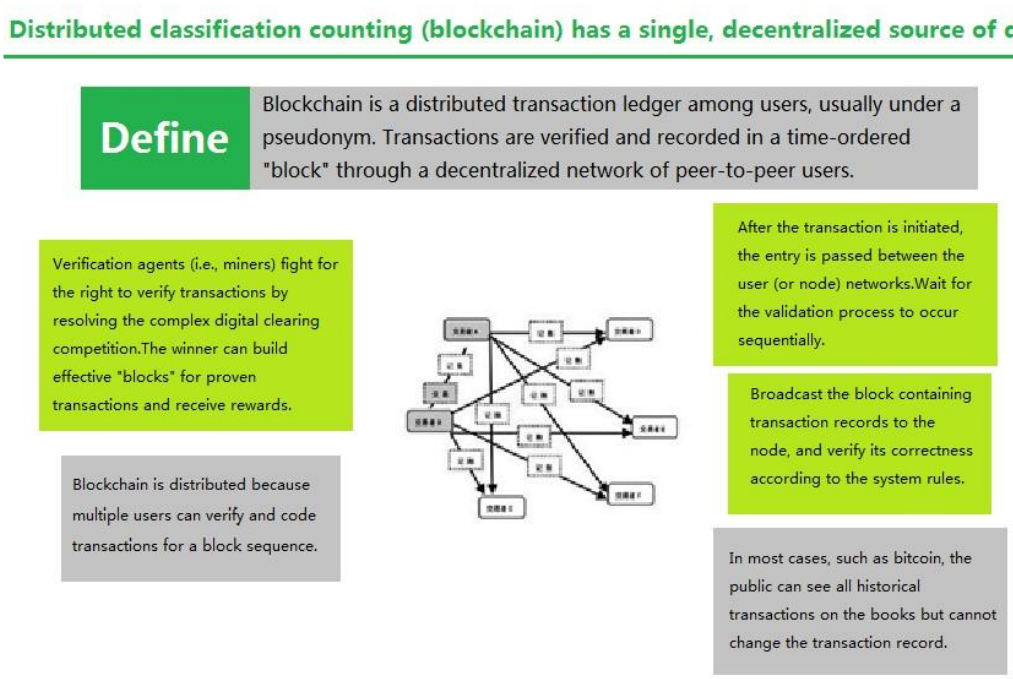
Once the information is validated and added to the blockchain, it is stored permanently, and changes to the database on a single node are not valid unless more than 51% of the nodes in the system can be controlled simultaneouslyThe data stability and reliability of blockchain is very high.

5. Anonymous

Since the exchange between nodes follows a fixed algorithm, its data interaction is untrusted (in blockchain)

So the counterparty does not need to be publicly identified

It is very helpful for credit accumulation to let others trust.



Chapter ii project elaboration

2.1 project positioning

The STI is a decentralized public chain of programming that focuses on transparency and professionalism in areas related to programming languages. The main chain will progressively cover all programming languages on the chain and present on the main network as standard modules for anyone to use. The user's development data and development process will be segmented by sharding technology and stored in the relevant equipment space of the main chain to ensure the safety of data and procedures.Finally, the unique authorization code of the

main chain is used as the identification basis to provide the user with a complete data extraction channel.

The application of STI main network is similar to the updated version of Github to some extent, which not only increases the convenience in the optimization of use, but also simplifies the professional programming development and realizes the zero foundation development. STI covers programming languages including but not limited to PHP, Java, SpringBoot, Python, C, C++, C#, HTML, CSS, JavaScript, HTML5, CSS3, JQuery, etc.

The STI main network can provide complete chain transmission, data interaction and program development for any industry, so that the industry can have stable community management and more convenient token circulation and payment.Moreover, the blockchain system is used to support more complex business logic through the mechanism of shard chain, and existing business data, user logic and other applications are applied in new applications driven by blockchain.

2.2 four advantages of the STI main network

(1) anonymity: applications and programs developed based on the STI main network have complete anonymity.Users do not need to carry out any KCY. At the beginning of the creation of use, the main network will

randomly generate the authorization code as the user's unique identity, and users can complete the development and sustainable use of any type of program based on the STI main chain only through the authorization code.

(2) security: any program developed based on the STI main chain will be segmented by sharding technology. The sharding will be dispersed and stored in the relevant equipment of the STI main chain, and then the shard recombination will be completed by the main chain as the intermediate link, so as to achieve 99.999% high strength defense network.Given the presence of an intruder, the intrusion into a program developed based on the STI main chain needs to attack all STI related devices simultaneously and extract the shards for permutation and recombination filtering. In the recombination process, multiple code alignment and permutation tests will be involved. Such intrusion is basically impossible to achieve.

(3) low cost: all program language codes in the STI main chain are reviewed by the project technical team and generated modules, which are stored in the equipment related to the main chain with the sharding technology. With the main chain as the bridge, users can directly import

the required applications after identifying with the authorization code.When the program combination is generated, the main network function will automatically review the module connection and data test, so as to minimize the development and test time. In summary, the program development based on the STI main network will cost one tenth of the traditional program development.

(4) applicable coverage: the STI main chain serves as the public technology underlying chain, and the modules on the main network will cover 39 programming codes, so the STI main chain can support the application development of any industry.

2.3 composition of STI code module

The STI main chain is the open main chain of public ownership, so all the codes in the main chain are provided by contributors, who apply for a unique authorization code through the main network as the basis for identity identification, and write a certain programming code or a group of programming code on the main network, and type the application logic and connection logic relationship.After reviewing and editing the code, the STI technical team will implant the main chain. When the code is used, the main network will record the use frequency, use time and link in the main chain

block. Thus, the contributor will get the TOKEN reward provided by the STI main chain.It's worth noting that a contributor can be anyone in the main chain.

2.4 main features of the STI

1. Open main chain of public ownership.

2. Developer identification is based on the main chain authorization code only.

3. Support the application development of any industry to complete anonymous payment and settlement across industries

4. The extended development and sustainable use of the application shall be settled by sticoin of sti main chain

5. When the application development is completed through the standard module, the main network will automatically determine the completion of functional connection test and data comparison.

6. The content extraction of the shard storage is completed by the main chain authorization code of the store to extract the splicing and present.

The main network applies the following features of blockchain:

1. Decentralization: the data of blockchain is open to all, and anyone can query blockchain data and develop relevant applications

through the open interface, so the information of the whole transaction system is highly transparent. Point-to-point decentralized transactions can enable consumers to buy games and equipment through digital currency, and cross-border consumption and game equipment transactions become possible.

2. Security: in traditional mode, once the central node has problems (such as information being leaked).

It's a big threat to the whole system. The security brought by the decentralization of blockchain technology is designed to solve this problem. The single point communication between nodes will not affect the security of the whole system even if one node crashes, and the information of each node in the platform will be kept secret.

3. Information transparency: based on the data transparency of blockchain, it is unchangeable. Each programming parameter can see the rule of STI, the developer can only make the rule, then up the chain can not operate and intervene it. The fairness of the STI was achieved.

4. Smart contracts: there are a lot of trading behaviors in the programming trading market, including payment transactions, transfer of

property rights, information transfer, etc., all of which can bring a smart contract with them in the process of trading

The ec will execute automatically according to the contract. Avoid transaction parties due to poor information, personal error and other reasons caused problems. In addition, smart contracts play an important role in building alliances. Furthermore, the financialization of the STI can be achieved through smart contracts, and more support can be provided to programming developers.

2.5 STI mining method

1. Realizing intelligent mining technology: the importance of artificial intelligence is an indispensable technology in scientific and technological network. In addition to mining, the smart mining method can also collect large transaction data.

2. By analyzing the data of major exchanges through the intelligent mining method, "potential" can be found accurately

Virtual currency, open to its mining. The wisdom mining method solves the problem that a computer can mine only one virtual currency currently on the market.

3. Smart mining transaction: combine blockchain technology and artificial intelligence algorithm to create smart transactions

AI ASSISTED TRADING and INTELLIGENT AI MINER.

4. Intelligent sharing: in the future, smart trading platform will gather core cryptocurrency traders around the world.

Form an intelligent sharing platform providing deep learning mode. The goal is to create a more accurate and mutually beneficial relationship

Cryptocurrency transaction payment platform.

2.6 Business model concept of STI system

STI is the intelligent contract theory of ether lane, which has used big data and cloud technology to overcome the traditional and complex computing mode and transaction mode of digital assets, and replaced it with a convenient and flexible cloud mode, which can be used, promoted and paid easily. STI combines "" unique promotion incentive mechanism + blockchain 2.0 technology + smart mining law transaction" "to create a new and unique business model. It makes STI have unique transaction mode. In the blockchain, transactions are convenient and secure, so there are huge application scenarios in the sharing economy. We will further evolve the digital financial system into an intelligent ecosystem and extend it to the computer programming value chain and ecological chain. We will cooperate with all kinds of financial institutions and real

industries to build an application ecosystem of "blockchain 2.0

technology + smart mining law trading + financial consumption".

Chapter 3 technical framework

3.1 platform framework

The design of the STI chain is based on the concept of ethereum smart contract agreement to integrate and enhance the base

With DAG technology, the Internet of things is the strongest application currency, enabling third-party service providers developers, merchants, users and users to create arbitrary consensus-based, extensible, standardized, feature-complete, easily developed and coordinated applications.

By using ethereum's underlying technology, the ultimate and abstract base layer - a blockchain built into the Turing complete programming language, enabling anyone to create contract and decentralized applications, and

Where they freely define ownership rules, trading methods, and state transition functions. The STI

In a linked system, the state is called an "account" (each account has a 32-byte address) the

An object and a state-transition group that transfers value and information between two accounts. Similar to ether square, the accounts in the STI chain contain four parts: random Numbers, which are used to determine which counters each transaction can only be

processed once; Account balance; Contract code (if any) for the account; Account storage (default is empty). The STI chain USES P2P distributed signature system to guarantee security. P2P network is characterized by self-organization, load balance, fault tolerance, low cost and high availability. A P2P network consisting of a large number of peer nodes can provide tremendous computing power at low cost. The distributed security CA scheme of this project disperses digital signature calculation which is completed by high performance server to P2P network.

3.2 functional description of blockchain

3.2.1 consensus mechanism on consensus mechanism

From the perspective of decentralization, practicality and technical reliability, we will build on the Proofof dyeing consensus. Add on - line Incentive mechanism to form a consensus agreement of initial margin (Incentive PoS). We take a lot of ETH protocol experience, refer to part of ETH source code, classify it into the block chain project of our STI chain, and develop new PoS (equity proof) consensus mechanism. We

will introduce a number of high-quality design strategies, and we will focus on the project's compatibility, ease of use, and modular PoS (Proofof equity) consensus mechanism based on security-based features. Those who hold the digital currency for a long time will get the corresponding age. When the new block is generated, the age will be automatically converted into the corresponding digital currency. This is similar to keeping money in a bank, which returns interest on a regular basis. PoS shortens the time to reach consensus to some extent. PoS will not need a lot of computing power to maintain network security, not a lot of mining. Similarly, PoS is more expensive than PoW in the face of 51% attacks, because if an attacker wants to make 51% attacks, he must hold 51% of the currency. In other words, the more money the currency is worth, the higher the cost of the attack. And the people who actually hold a lot of money, are the last people who want the safety of money to be affected, because that affects the value of the currency itself. Because of this, the PoS consensus mechanism in a sense addresses the shortcomings of the PoW mechanism.

The common mechanism functional component has the following functions:

1) Support multiple nodes to participate in consensus and validation.

2) Supporting independent nodes to verify the validity of relevant information submitted by blockchain network

3) Prevent any independent consensus node from recording or modifying line information in the blockchain system without the confirmation of other consensus nodes

4) It should be fault-tolerant, including non-malicious error of node physical or network fault, malicious error of node being illegally controlled, and uncontrollable error of node generating uncertain behavior.

3.2.2 Smart Contract

By Nick SzaboProposed in 1995, he defined it as: "one

A smart contract is a set of commitments defined in digital form, including agreements on which participants can enforce these commitments. Commitment defines the nature and purpose of smart contracts. The digital form means that the contract is run as a computer executable code, and the rights and obligations established by the intelligent contract are executed by the computer or computer network as long as the participants reach an agreement.

Smart contracts based on blockchain can not only give play to the advantages of low cost and high efficiency of smart contracts, but also

And can avoid malicious behavior to the normal execution of the contract interference. The intelligent contract is written into the blockchain in a coded form, and the data storage, reading and execution process can be tracked and transparent and cannot be tampered with by using the blockchain technology. In addition, the state machine system constructed by using the consensus algorithm of blockchain can make the smart energy contract run efficiently.

A development operation environment, including:

1) provide programming language support, and provide supporting integrated development environment if necessary;

2) support static and dynamic examination of contract contents;

3) provide operation support, such as virtual machine;

4) for the intelligent contracts that interact with the external data of the blockchain system, the shadow range of the external data source should be limited to the scope of intelligent contracts, and should not affect the overall operation of the blockchain system.

B storage environment, including:

1) prevent tampering with the contract contents;

2) support the contract content upgrade under the consensus of multiple parties;

3) Support writing contract content to the ledger.

3.2.3 encryption and security technology

A) Support international mainstream encryption algorithm, such as AES256 symmetric encryption algorithm and RSA, ECC, etc

Asymmetric encryption algorithm;

B) Support business secret algorithm, such as SM4, SM7 symmetric encryption algorithm and SM2, SM9 asymmetric encryption algorithm;

C) A clear key management scheme should be in place to ensure the normal operation of the underlying security mechanism of blockchain.

D) The core encryption algorithm (SCRYPT) has the ability to resist cracking, regularly reviews the security of the encryption algorithm, and adopts the encryption algorithm with higher computational complexity if necessary.

The public and private key pairs of asymmetric encryption are used in blockchain to build trust between nodes. The asymmetric encryption algorithm consists of the corresponding pair of unique keys (public key and private key). Anyone who knows the user's public key can use the user's public key to encrypt the information and exchange the user's security information. Because of the interdependent relationship

between the public key and the private key, only the user holding the private key can unlock the information, any unauthorized user or even the sender of the information can not decrypt the information.

3.2.4 payment function of STI Coin

With the development of blockchain technology, we have conducted in-depth research on this. If we combine blockchain technology with mobile payment, can we create a more secure, fast and effective payment environment? The answer is yes. Blockchain technology has prominent features of decentralization, trust removal and data tampering. Based on tamper-proof accounting books, it can effectively overcome the security problems of mobile payment. Moreover, by creating a faster network through blockchain technology, it can improve the speed and break through regional and national restrictions, realize globalized real-time transfer transactions, reduce fees and other costs, and greatly optimize the use experience, which is an efficient and low-cost value transfer function that cannot be replaced by traditional financial institutions.

According to the development status of the STI chain, the team will timely develop the payment function based on the STI chain. Under the

premise of following the consensus, businesses and users can use the STI chain to complete the point-to-point transaction payment.Payment will gradually support such functions as identity authentication, mobile phone mining, decentralized social chat system, real time price conversion and mainstream currency exchange.

3.2.5 networking technology

Networking technology is one of the core technologies of blockchain. In the decentralized networking architecture, blockchain can realize the feature of independent central network. Generally, the blockchain network protocol adopts P2P protocol to ensure that every computer in the same network is equal to each other, and each node provides network services jointly, without any "special" node.Different blockchain systems will make separate P2P network protocols as needed, such as bitcoin has a bitcoin network protocol and ethereum has its own network protocol.

3.3 technical specifications

The STI chain technology team, the 10 engineers in the technology department, have more than 30 years of Java in total

Experience, over 20 years of PHP knowledge, over 35 years of Javascript background. Our engineers have more than 50 years of SQL technical

experience, 10 years of cloud service knowledge, and over 20 years of project management experience. Both have years of experience in the development of the Internet and blockchain. In simple terms, compared with the traditional blockchain, the STI chain has the following characteristics:

security

The STI chain relies on encrypted authentication transactions to verify the identity of the parties involved in the transaction. This ensures that a "wrong" transaction cannot be added to the blockchain without the consent of the parties involved. Every time a new transaction is added to the blockchain, a complex mathematical calculation is needed to figure out the identity of the parties involved in the transaction and the outcome of the previous transaction. Existing blockchains rely on previous blockchains, a feature that ensures that malicious participants cannot tamper with transaction history. This is because if the previous transaction data is changed, the existing hash values will be affected and cannot be matched with other backups of the ledger.

The traceability

The STI chain is essentially a distributed database that is maintained and synchronized by multiple nodes - such as multiple counterparties that frequently trade with each other. In addition, transaction data must be consistent between the parties

Could be added to the blockchain. This means that multiple parties are designed to access the same data (in some cases local data within the machine) - thus greatly increasing transaction transparency and traceability, whereas traditional systems rely on multiple "private" databases hidden behind firewalls that are not visible from the outside.

Efficiency conceptually, maintaining multiple backups of a blockchain database is no more efficient than a single, central database. But in the real world, multiple parties are already maintaining a database backup that contains the same transaction information. In many blocks, data about the same transaction contradicts each other -- leading to costly, time-consuming and lengthy reconciliation procedures. Using distributed databases like blockchain across organizations can greatly

reduce the need for manual reconciliation, resulting in substantial cost savings. In addition, in some cases,

The STI chain allows organizations to gain common capacity and avoid duplication of work.

The STI chain adopts the mode of multiple VP nodes, and the NVP node shares the work pressure of VP node and undertakes the work of processing API requests and events. VP node needs to verify transactions, run codes, record books and reach consensus.

3.4 STI chain development mechanism

3.4.1 ECDSA account identity management

(1) decentralized user account system. The account is the user's passport in the Internet world and the user's identity identity. Traditional users

Identity stored in a centralized web server, the user's identity information preservation, modify, check card due to centralized server security and reliable, and centralized services are faced with the risk of the server being attacked, user information could be disclosure, tampered with at any time, at the same time, the user's identity depends on the center of the existence of the service, such as politics, economy, competition, interest reasons, there are various risks centralized service providers; In

the asset Token system, the diversification of user identity, the authentication of issuer/investor, the security of user's identity data storage, and the authentication and confidentiality of earnings confirmation have a strong demand for the security, flexibility, confidentiality and tamper-proof of user's authentication.

Block chain is the core of the user autonomous decentralized architecture, STI chain using ECDSA (elliptic curve digital signature algorithm) bill identity management system, and different from centralized account system will be the user's identity information and verification process is totally dependent on a central server, ECDSA adopt decentralized system of authentication, user identity information and credentials do not belong to any organization, really completely in the hands of the user's own; Decentralized account system carries out the user's identity information and authentication process in the blockchain network. The completely equivalent blockchain nodes in each region guarantee the security of the system, and there is no certain authoritative node. As an impartial "central service provider", smart contract replaces the traditional central service provider and realizes the "autonomy" of open and fair to decentralized organizations.

The unique token address is created on the blockchain to register the assets on the chain as the only token of the user's identity and the ownership of the asset, thus realizing the unique attribute of asset ownership. As long as you own the private key, you will have the right to use and ownership of the asset, and the identity of the user can be obtained through digital signature

Ownership and transfer of verification and ownership of assets.

(2) trusted authentication

ECDSA system will be the user's authentication on the chain, to the address of the token as the sole identity of users and assets, investment and benefits of uniqueness test certificate confirmed by block chain, realize intelligent control under the contract, no intermediary involved in the user authentication and verification, asset transfer in realizing the whole asset token cycle trusted authentication of user identity.

3.4.2 blockchain data management system

(1) STI chain asset data block chain storage management

STI chain asset Token of support system, the user after the investment, can instantly view on block chain network to the recording of my own investment, investment records stored in a block chain network,

no tampering and denied, official platform and partner STI chain platform provide chain data query function, the user can through the platform or directly chain; Asset data blocks, chain store management system is the core of the STI chain purchase color phase system, based on this system, the STI chain supported by the issuer, does not need to pay attention to the distribution of assets and storage power, only need to call the STI chain network public block chain data, ask the user for data query function, can save a lot of disclosure cost and reduce cost.

(2) STI chain equity data block chain storage management

The traditional asset digital rights and interests are distributed in a centralized way, and the cash flow is kept in a centralized organization. When the rights and interests are distributed, systematic checks and bonuses are carried out, which greatly reduces the possible efficiency of the equity distribution process. At the same time, the service fee or service fee of all layers of the system also reduces the profitability of the system. The STI chain equity settlement system, which stores the final investment records in the blockchain, connects to distributed ledgers of other systems, containing user identities and the composition of future cash flows, in

On the issuance date of the rights and interests, the STI chain settlement smart contract will automatically settle the rights and interests without any centralized or third-party control. The cash will be distributed to the identity address of users on the blockchain network immediately to guarantee the absolute openness, fairness and transparency in the settlement process.

3.4.3 developer ecology

As a platform to disrupt the digital industry of traditional assets, the developer ecosystem is a crucial link in the STI chain. Strong developer support is conducive to good development of the STI chain ecosystem. With the development of The Times, the traditional digitization of assets has been unable to meet the increasing demand for investment and financing, and the capital market is eager for more forms.

Under the blockchain network, the developer ecosystem becomes more open and diversified. As an asset Token technology platform, the STI chain is one of the main work of the STI chain, with its open application and diversified issuance methods for the choice of countries, ministries, agencies and investors.

New asset Token platform

In addition to the digitization of traditional assets, blockchain-based assets are an important part of the STI chain and enjoy unparalleled advantages in its transparency and openness. In addition to traditional assets can be directly accessed

Outside of the STI chain ecology, ecology encourages developers to offer a variety of new ways, especially for blockchain.

The STI chain decentralization system provides technical services for the underlying assets of the blockchain to multiple countries and departments, and the access to the STI chain system has the opportunity to provide services to tens of millions of users in multiple countries, which can bring extremely rich returns to developers. The STI chain will provide developers with complete, easy-to-use API access

It is convenient for developers to develop digital products of corresponding assets according to the interface specification and share the trillion-level market.

3.5 STI chain ecosystem

3.5.1 track of block chain itself, innovation capital controls operating mechanism is different from traditional multilayer, network,

department coordination, manual operation mode, STI chain to provide efficient and flexible control system operating mechanism, available to support block chain investment, recording, memory card, settlement of the underlying technology architecture, and compatibility with different shape and the way of organization and management, convenient countries access to adopt different management mode.

3.5.2 innovate the digitization mechanism of assets

As mentioned before, global capital markets are looking forward to new ways of playing with new technologies, and further expanding the ways of digitizing assets to attract investors' attention at the same time as the transparency and fairness of asset numeralization. The Token platform is a decentralized way to encourage issuers to issue assets and settle smart contracts, and jointly promote the industry's underlying technology system, which can greatly promote the development of the capital market. On the other hand, the technological revolution brought by blockchain also brings more possibilities to the capital market, and the technological properties of blockchain will bring more surprises to the industry.

Chapter 4 project team

The founder team of STI project gathers outstanding elites in finance and Internet industry, headquartered in London, UK, developed by UK blockchain company, comes from world-renowned university scholars and innovators who are actively engaged in blockchain and digital currency related fields to help the team grow and develop.

R&d and operations team

Giusppe Bianco

More than 30 years of executive experience at Microsoft, oracle and Akamai. Rich experience in developing complete business processes in technology companies and transforming technology into business value. Bachelor's degree in management and economics from guyav university, Canada.

Alexander Soviet

Rich front-end development experience, in-depth understanding of front-end performance issues and optimization solutions, proficient in various mainstream frameworks and their implementation principles. Worked as the front-end manager of a well-known e-commerce company in China, participated in and responsible for the successful launch of several large Internet projects, with solid CODING foundation and excellent project implementation ability. Open source community contributors, blockchain technology enthusiasts.

Antonino Samperi

Web developer with extensive experience in front-end (Bootstrap+Jquery+AngularJS) and PHP development, co-founder of BatchClub and member of the BitShares board.

Fabrizio Deidda

Responsible for the core technology research and development of the foundation. Excellent blockchain development team leader, excellent blockchain system architect, core developer, former technical director of busby company. Proficient in the principles and implementation of mainstream blockchain technologies such as bitcoin, ethereum, and HyperLedger, and have a profound understanding and rich practice of blockchain consensus mechanism, intelligent contract, cross-chain technology, side-chain technology, privacy protection, etc. Its blockchain network, which has been operating steadily for many years, now carries hundreds of thousands of transactions a day and more than a billion transactions a month.

ChenJunsheng overseas market manager

Lived and worked in the United States for many years, engaged in administrative, media, overseas operations and other work. Worked as an administrative assistant for international exchange programs in the United States for many years; Over the past year, I have been mainly engaged in the blockchain business.Good at English translation of blockchain materials and overseas media promotion and community operation of projects.

Project consultant

Billy

Jarred

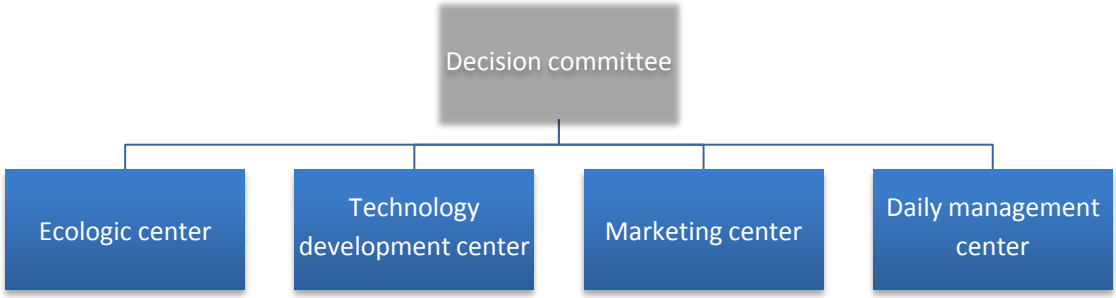
Aaron

The fifth chapter A governing body

The STI project is governed in the form of foundation. STI foundation (hereinafter referred to as "foundation")

We are committed to promoting and promoting the transparency of STI development and governance, and promoting the safe and harmonious development of open source eco-society. The foundation will help manage the general and privileged aspects of open source community projects by developing good governance structures. The design objectives of the

foundation governance structure mainly consider the sustainability of open source community projects, the effectiveness of management and the security of fundraising. The foundation is composed of ecology center, technology development center, marketing center and daily management center.



The functions of the organization are as follows:

STI decision-making committee: responsible for the management and decisions of major matters, including the appointment or dismissal of the executive directors and the heads of the centers, making important decisions, etc. Members of the decision-making committee serve a term of three years and may be re-elected. The committee shall have a chairman who shall be voted upon by the members of the committee. Members of the first decision-making committee are elected by the STI founding team and the investors.

Ecologicalization center: responsible for exploring the feasibility of the combination of STI and industry, so as to achieve commercial implementation. Key areas to explore are supply chain finance, big data, social networking and cross-border transactions.

Technology development center: the technology development center is responsible for the development, testing, launching and auditing of the underlying technology. Members of the technical center communicate with Token holders in the community and hold technical communication meetings at irregular intervals.

Marketing center: marketing center is responsible for the promotion and promotion of technologies, products, communities, and open source projects

Propaganda.

Daily management center: daily management center includes finance, legal affairs, personnel, administration, etc. Use and audit of financial project funds;

Legal affairs: responsible for the review and formulation of all kinds of documents to prevent possible legal risks; Administrative and

Responsible for personnel, salary and other personnel and schedule administration.

Chapter 6 introduction of STI phone

6.1 STI phone (ore machine) function introduction

1. Huge screen: 6.2-inch mainstream X full screen: 95% of the screen, video synchronous super shock visual feast.

2. Face unlock: overcome the problem of thin and thin smart phones without accurate facial recognition, lead the technology, and defend your privacy at any time.

3, fingerprints to unlock: the touch type 360 ° fingerprint identification, accurate identification of fingerprints, give you the perfect experience.

4. Capacity expansion storage: 4+64 4g + free 500G super-large cloud storage, no longer afraid of super-large files nowhere to be placed.

5. Multi-core processor: 8-core processor equipped with MT6763VE 14nm process, more stable background of business machine, no resistance to multi-open software, intelligent CPU adjustment, anti-accidental touch, swimming chicken refuse card.

Pure systems: pure android 8.1 whatever you want, pure and unbundled.

7. 3800 bick cell: compared with ordinary 3500+- battery, it can expand capacity for 15 days.

8. AI beauty: 9500W+6p sapphire lens without fear of dark color,1600W+200W hd camera.

6.2 STI phone (mine) safety performance

Exclusive authorization: the STI phone generates the unique authorized initial code randomly, even if the phone is lost without authorization, no one can operate the phone. Back fingerprint + face unlock + initial code triple insurance, 360 degree defending your privacy.

PS: ordinary mobile phones can only store data locally or in the cloud. Currently, the technology is very simple to attack the unlock password.

The STI main chain provides intelligent cloud storage based on the underlying technology of blockchain, with user data encrypted and stored in distributed

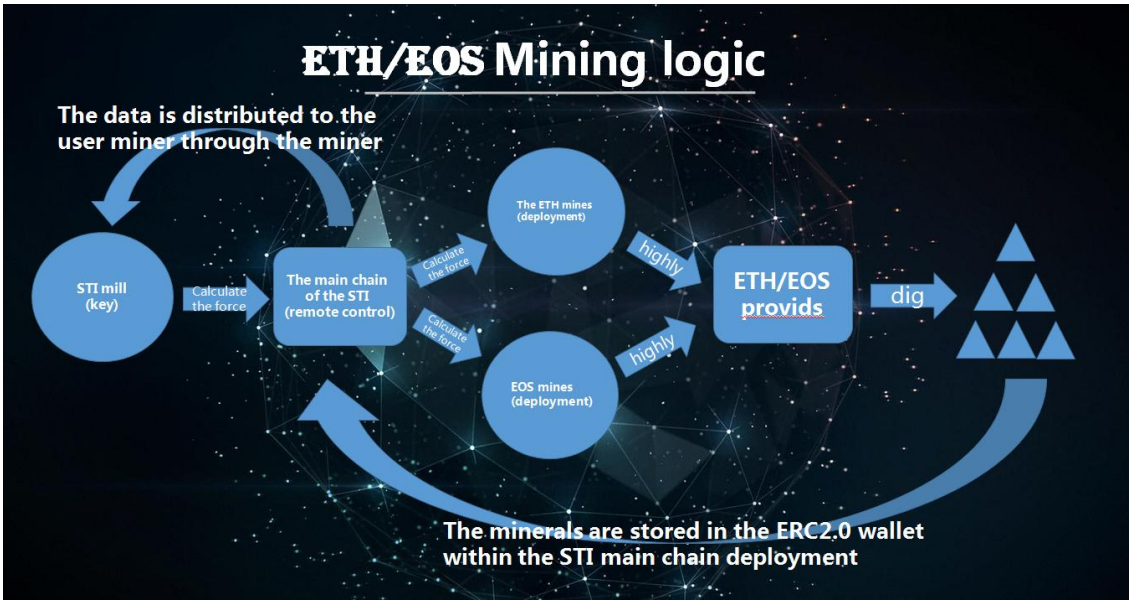
In the STI ecological node, offensive technology is now almost zero. Data will never be lost, even if the phone is stolen and passes through the smart cloud one-click management device, the attacker cannot steal the data on the chain without authorization.

Digital asset security: the STI phone password layer ensures isolated touch network of mobile wallet through hardware chip encryption, and supports the storage of all ERC2.0 tokens

6.3 value of STI phone (mine)

Cloud perspective: the world's first introduction of the concept of "cloud perspective" : one-click download information, market, trading platform and other blockchain apps. Ordinary smart phones have no such function.

Mining machine: the main chain authorizes the mining machine, the user combines the computing power data through the network node, and the block height and other main chain blocks are rewarded, including STI, ETH, EOS and other mainstream tokens. A mobile phone is a miner.



Marketing magic device: STI phone pre-installed diversion magic device, into the group + add powder +5000 people forwarding + black + micro lesson transfer + community construction + So powerful!

STI Phone has its own marketing software, which is deployed based on the main chain of STI, which is more experiential in use compared to similar products, and has a built-in VPN, which also helps users to save unnecessary expenses.

3.4 introduction of STI Phone architecture

1. Millions of people around the world now own bitcoin, but the complex and random private keys formed by the cryptocurrency's cryptographic algorithm make it difficult to use for daily transactions. With the capital boom, blockchain concept companies and products emerge. There have been attempts by enterprises as third-party services to help users save their digital currency private keys to

Prevent the tragedy of digital currency assets blowing up after losing passwords.

2. In recent years, with the increasingly mature application of artificial intelligence technology, the technological concept centering on "AI+" is constantly innovating. STI Phone built around the blockchain 3.0 platform that incorporates IPFS and AI

Self-development.

3.STI Phone developed the blockchain operating system Os based on the STI underlying main chain, and the system has built-in qianbao cloud service establishment and storage service, as well as smart Phone hardware with features such as blockchain security. Users can not only store data on the STI main network, but also publish the site code on the blockchain, which is dynamically parsed by the STI super node.STI Phone USES DPOS with Byzantine fault tolerance as the main consensus algorithm, and USES Proof Of Space as the incentive algorithm for big data storage nodes.

4. STI Phone project does not conduct any ICO, and the team focuses on ecological cultivation and the landing of business value. There have been a number of blockchain industry institutions and a number of Dapps projects, and at the same time, the project only provides angel investment to the investors.

Chapter 7 STI Coin related explanation

STI Coin issuance total: 4.8 billion (node mechanism 100% node output)

STI Coin issuance standard: ERC2.0 smart contract, open source.

First year bottom: 450 million, 10,000 STI phones are a floating node of mineral.

Floating output distribution: initial node bottom + new node bottom (new node bottom is 1/2 of the previous node)

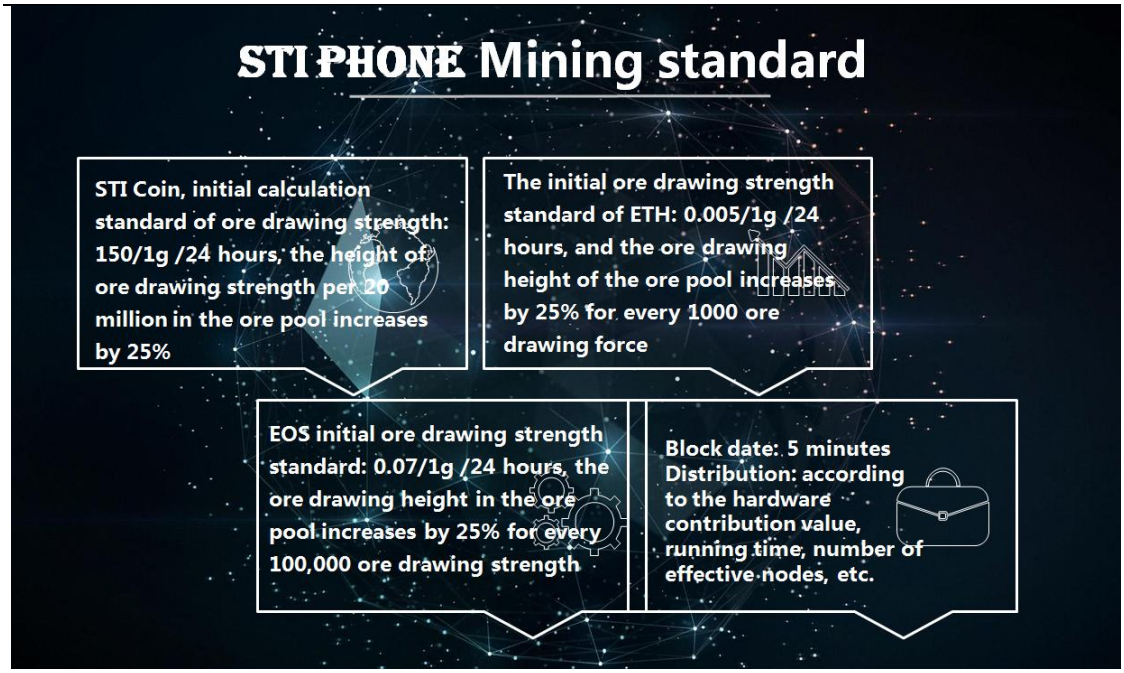
Standard value of calculation force: H=1 times /s, 1000H=1K, 1000K=1G, 1000G=1T, 1000T=1P,1000P=1E

Mining algorithm: POW (certificate of authority) +POS (work certificate)

That is: number of nodes running effectively + number of times * uplink transmission value (calculation force)

STI Coin's initial calculation standard for ore removal: 150/1g /24 hours;

The calculated height of every 200 million ore produced in the pit increases by 25%.



Block date: 5 minutes

STI Phone constant computing force: 1G

Distribution: according to the hardware contribution value, running time, number of effective nodes, etc.

Safeguard mechanism: 50% of STI Phone's total sales will be owned by STI foundation as the price guarantee of STI Coin.

Calculation force motivation: daily check-in increases the calculation force by 1K, and it is recommended to increase the calculation force by 3K for primary users and 1K for secondary users.

Super node mechanism: the STI will set up 21 super nodes, which will be generated by 1+8+12.(1 foundation, 8 miner sales rankings, 12 votes)

Supernode excitation: each distribution node increases its computing power by 5K

Calculation formula: actual calculation force/current calculation height * block output * running time

STI Coin:

The current total amount of ore output is 10 million, a user has signed in for 3 days, 8 first-level users and 5 second-level users are recommended, then his ore output every 24 hours is as follows:

(1 g + 3 k + 24 k + 5 k) present 1 g * 150 present 24 * 24 = 154.8

7.1 STI Coin commercial category value

* Payment and settlement tools developed and extended based on the STI main chain.
* Transmission of natural gas settlement tool on STI main network.
* STI margin settlement tool.
* Sti-based eco-directed flow incubation settlement tool.
* STI product settlement and payment instrument.
* STI ecological deployment equity certificate tool.
* Market circulation.
*

7.2 destruction and reward mechanism

The foundation will place 10% of the monthly repurchase proceeds into an address that no one has a private key to destroy for surveillance purposes.40 percent of the award goes to the holder of the lock, and the remaining 40 percent is managed by the foundation.

Chapter viii law and risk disclosure

8.1 disclaimer

Except as expressly stated in this white paper, the STI developer makes no representations or warranties whatsoever to the STI (especially

It is to its marketability and specific function). Any person's participation in the STI ecosystem is based on their own pair

Knowledge of the STI and information on this white paper.

The STI developer hereby expressly disclaims and refuses to accept the following responsibilities:

1. Any person who violates any country's anti-money laundering,

anti-terrorist financing or other regulatory requirements when buying

STI Coin;

2. Any person who purchases STI Coin in violation of the

requirements or obligations imposed by this white paper and the

resulting inability to pay or withdraw STI Coin;

3. The ecological planning plan is abandoned for any reason;

4. The development of the STI fails or is abandoned, and the resulting failure to deliver STI Coin;

5. Delay or extension of the STI development and, as a result, inability to agree on a previously disclosed schedule;

6. Errors, defects, defects or other problems in the STI source code;

7. STI or STI Coin fails to realize any specific function or is not suitable for any specific purpose;

8. Failing to disclose information on STI development in a timely and complete manner;

9. Any participant who leaked, lost or damaged the private key of the digital cryptocurrency or token (especially the private key of the STI Coin wallet it used);

10. Breach, violation, infringement, breakdown, paralysis, service termination or suspension, fraud, misoperation, misconduct, error, negligence, bankruptcy, liquidation, dissolution or closure of STI Coin's third-party crowdfunding platform;

11. There are differences, conflicts or contradictions between the agreed contents between any person and the third-party crowdfunding platform and the contents of this white paper;

12. Any transaction or speculation in STI Coin;

13. STI Coin is listed or delisted on any exchange;

14. STI Coin is classified or considered by any government, quasi-government agency, competent authority or public agency as a currency, security, commercial paper, negotiable paper, investment goods or other things to the extent that it is prohibited, regulated or restricted by law;

15. Any risk factors disclosed in this white paper and any damages, losses, claims, liabilities, penalties, costs or other negative effects related to, and resulting or incidental to, such risk factors.

8.2 security and management of funds

Funds received for the STI eco-deployment should be kept and managed on a transparent, auditable and efficient basis. To raise the

BTC and ETH are held separately by multiple signed wallets and reviewed by the public. For security, the private keys of these multi-signed wallets are controlled by five trusted individuals. To make any payment, the wallet requires the signatures of all five people.

Funds received from the STI eco-deployment will not be used for the shareholders' dividends or profit distribution of the STI developer.All of them will be used for the development, maintenance and other technical work of the STI and the construction of the STI ecosystem (for example, investment in the cultivation of STI)

Various applications, etc.

8.3 risk disclosure

There are risks in the development, maintenance and operation of the STI, many of which are beyond the control of the developer. In

addition to the content of this white paper, each participant of the STI eco-deployment should read, understand and carefully consider the following risks before deciding whether to participate in the STI eco-deployment.

Participation in the STI eco-deployment should be a deliberate decision to be taken as participants are fully aware and agree to accept the following risks:

1. The STI cannot be normally developed or used due to changes in legal policies or government actions, or caused

STI Coin is prohibited from holding or using risk;

2. Due to the development of cryptography or the commercialization of quantum computer, cryptographics-based currency no longer has the risk of sufficient security (such as private key being easily cracked);

3. Risk of failure due to high technical development difficulty of STI;

4. Risk that the development of STI cannot be sustained due to the theft of BTC and ETH obtained by the STI ecological deployment;

5. The source code of STI is subject to the risk of various fault problems in the process of STI operation caused by defects, defects and vulnerabilities;

6. The source code of STI is updated or modified based on community requirements, thus resulting in unpredictable wind

Risks;

7. Risk of STI being attacked by "distributed denial of service" or other types of attack during operation;

8. The risk that STI Coin held by any person is stolen, forgotten or lost;

9. Risk of STI Coin lacking secondary trading market, price

instability or no others willing to buy STI Coin;

10. Development and operation of other blockchain with similar functions or with competitive relationship with STI

As for the risk of the STI being marginalized or priced out of the market;

11. Risks caused by failures and defects of various applications on the STI developed by the third party.