Trade Chain

Global Trade Ecological Chain

TC

White Paper

Trade Chain Team

V2.0 12mar,2018

Preface

Trade Chain believes blockchain as a trust infrastructure in an untrusted environment will integrate a series of technologies to establish a fair, transparent and credible mechanism . which will bring global trade to the digital era of trust economy and solve the problems left over for many years in the field of economy and trade. Blockchain will truly reach the economic and trade of various enterprises and countries, and will be deeply integrated with its core business and other information systems.

Trade Chain attaches great importance to the construction of credit ecology and will be committed to globalization and open blockchain ecology. As a business-supported infrastructure, Trade Chain values the support of real-world applications and provides a technical infrastructure for a wide range of trading applications, allowing global trade to easily provide a variety of trading services without the need for blockchain or other underlying technologies.

Trade Chain is committed to promoting and applying Token Economy.It's mission is that creating a credit-based commercial trade eco-civilization system and a new business model for global multilateral trade through the Token Economy.

Contents

1.The background and current status of block chain

1.1The birth of BlockChain

The blockchain is the underlying technology of digital cryptocurrency represented by bitcoin. With the rapid development and popularization of bitcoin, the blockchain technology has experienced explosive growth, which has attracted great attention of government departments, financial institutions and social media. Bitcoin was born in 2009. It is a de-centralized, peer-to-peer digital Cryptocurrency designed by an anonymous person who claimed to be Nakamoto.On October 31, 2008, the first email was sent through the password team, and the white paper for Bitcoin was first published, and some features of the Bitcoin network were proposed:

1) Decentralization

2) Uniqueness

3) Anonymity

4) Scarcity

5) Information cannot be tampered with

6) Openness

7) Autonomy

On January 3, 2009, the genesis block of Bitcoin was dug up and the

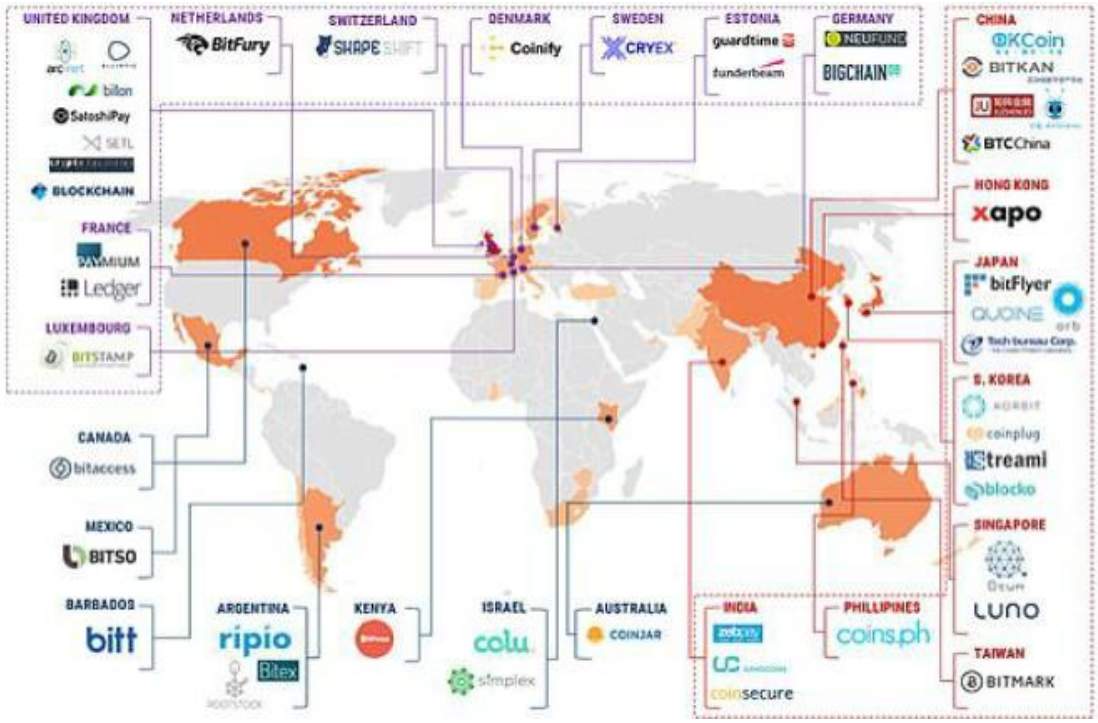
first transfer transaction took place in the 170th block, Since then bitcoin network has been flourishing as a peer-to-peer value exchange network and an era of vigorous development began. Despite various crises in the era of development,the value exchange of the Bitcoin network has started from scratch, and today it has become a peer-to-peer payment network worth about tens of billions of dollars. It took a long time to extract the concept of blockchain.

1.2The development status of blockchain market

Blockchain is a distributed database technology that builds a trust mechanism at low cost. Compared with traditional database technology, the blockchain evolves from centralized accounting to distributed accounting, from additions and deletions to non-tamperable, from unilateral maintenance to multi-party maintenance, from external contracts to built-in contracts, and its unique trust-building mechanism hits the pain point of the traditional industry. Blockchain is an indispensable key technology for the development of the digital economy and the construction of a new trust system.

The cross-development of blockchain and emerging technologies will synergistically drive the formation of a future intelligent social infrastructure and reconstruct the development ecology of digital economy .which will have broad application prospects in the verification

of information validity and the resolution of social credit problems. It has attracted high attention of governments and investors, and has rapidly evolved into a "armament" competition with global participation. Governments of various countries began to design the development path of blockchain from the national level.



2. Problems and pain points in global trade

According to the forecast report released by the World Trade Organization, the growth rate of global trade was 2.6% in 2019, which was the same as the GDP growth rate in the same period. The trade growth rate will reach 3.0% in 2020. As the GDP growth of developing economies accelerates, trade is expected to grow rapidly after 2020.

Despite the rapid development of global trade, Traditional trade methods are difficult to effectively solve thevarious long-term risks in the

industry such as:

(1)Transaction efficiency : The current general trade model and its underlying technical rules have the phenomenon of lengthy trade links, high transaction costs, inefficiency and waste of resources.

(2)Credit problem of process collaboration:In the process collaboration without center-led, the trust between collaborators is often difficult to establish, especially the more participants, the harder it is to establish credit in process collaboration.

(3)Data exchange and sharing issues: based on the existing centralized data exchange system, the data precipitation of the centralized server often causes harm to the data source and poses a business threat to the data client. Moreover, the risk information sharing mechanism is weak, and data security and quality are not guaranteed. Lack of incentives, the data usage rate and update frequency after sharing are not high.

(4)The problem of false falsification: Based on the opacity under the traditional trade mode, the widespread dissemination of false information and the emergence of falsification problems, it is always difficult to judge these false news. How to crack down on fraud is even more difficult.

3.What is the trade chain?

Trade Chain code: TC is a global, open blockchain ecosystem based

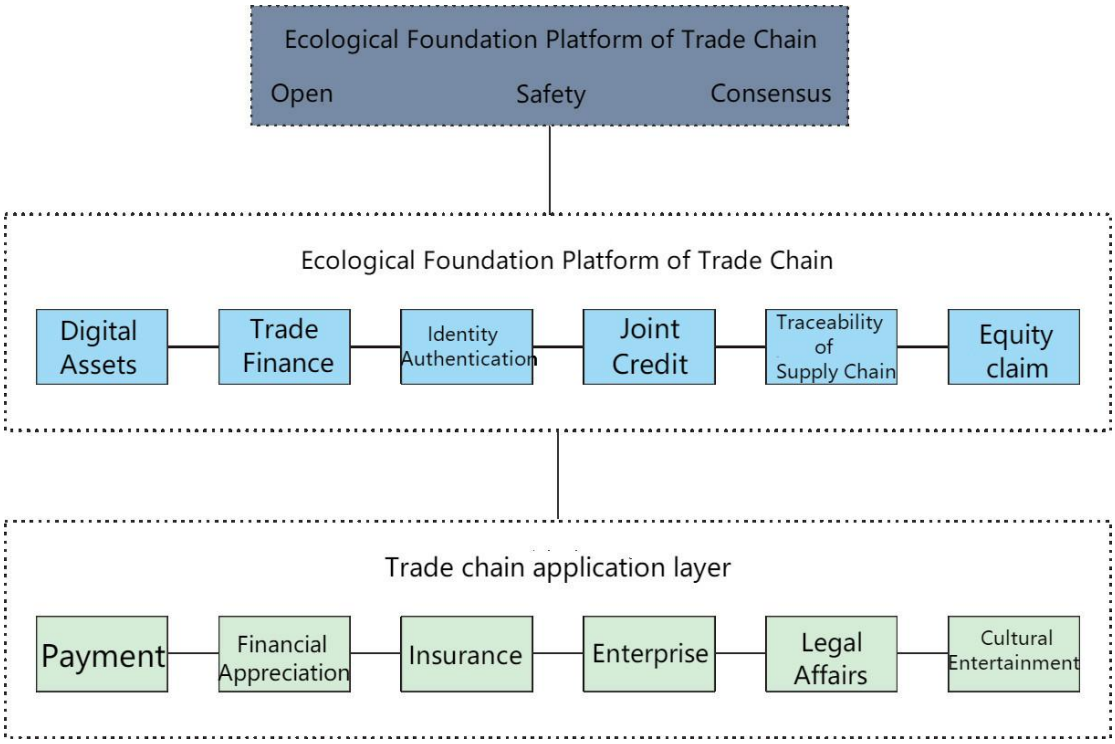
on blockchain technology. The platform open source code, developers can build and release new projects, and enhance the trade application of blockchain technology in more industries. The projects operate independently and cooperate with each other to form a strong centripetal force.

Trade Chain is a leading international public chain project based on innovative consensus mechanism: Dpos+BFT consensus mechanism and light speed contract, compared with traditional POS/POW/DPOS mechanism, which greatly improved system efficiency and massive trading processing capacity, enabling commercial-grade applications. It is an intelligent asset-based platform that can be used by any organization, individual, or organization in the world to distribute digital assets, and can provide technical, business, and transactional support to capable organizations, individuals, or organizations to help them with funds, products, and traffic. Trade Chain provides commercial infrastructure services in blockchain, scalable applications, and intelligent applications, which are divided into three layers, as shown below.

1) Build the underlying technology of the Trade Thain,

2) Building a highly scalable business support system on it,

3) Building Intelligent Online Applications.



System advantage

Open: Projects can be stationed on the platform or developed conveniently based on the platform. Convenience: supporting basic services and mature supporting system.

Ecology: Independent operation and coordination among projects, data security, resource sharing Globalization: Global Sharing of Open Source Code,mature mode in overseas station.

Application scenario

Individual: cross-border exchange, convenient payment, shopping, social, etc.

Enterprises: Global trade, e-commerce, revenue, fast payment, bilateral liquidation, insurance, marketing promotion, etc.

Developer: application development, application access, code editing,

data docking, model building, etc.

4. What is TC

TC is a digital asset generated within the trade chain system,which limited, open, unique, and so on. The trade chain system implements decentralized applications from the underlying technology architecture. Through the trade chain system TC drives various commercial applications and development, so that the trade chain can truly integrate with the real business world, let digital assets truly circulate.

TC is an endogenous settlement bridge of Trade Chain technology for the incentives of trade chain system builders, participants, developers, users and various commercial applications, digital assets, point remittances, etc.

5.Technical Characteristics of Trade Chain

The goal of the trade chain is to develop the underlying API of the blockchain for the entity enterprise, realizing the application scenario docking and the superposition of digital assets, so as to solve the financial problems of the enterprise. It also addresses issues such as transaction speed and payment issues in international trade, and supply chain traceability. The trade chain hopes to build an application platform that can bridge the trade between entities and world assets. In order to achieve this vision, the trade chain has been laid out in the underlying design and top-level application adoption.

5.1 Increase transaction speed

Through the optimization of signature algorithms, account structure, data manipulation, serialization, consensus mechanism, message diffusion and other key links, the trade chain will achieve second-level fast transaction verification and meet the user experience of most blockchain application scenarios.

5.2 Increase data storage

The block-chain double-entry bookkeeping mode, in the continuous use of the system, accumulates a large amount of data, resulting in a decline in operating speed. The trade chain will realize separate storage and partition table storage mechanism, and achieve massive storage of data.

5.3 high throughput

The essence of the blockchain is a distributed shared accounting technology. Its distributed features are mainly reflected in distributed consistency rather than distributed concurrent processing. In order to ensure data consistency and prevent the Byzantine general problem, certain links can only be executed serially, but not in parallel. Through long-term testing and optimization practices, the processing of the trade chain will further increase transaction throughput.

5.4 Fast synchronization of node data

The trade chain will develop a mirroring mechanism, which can periodically mirror the local ledger and implement a convenient rollback mechanism. Under the unified consensus, the mirrored label can be specified for rollback. At the same time, the cycle of new added nodes to join the operation is shortened. Simply syncing the latest image and a small set of recent transactions, and they can integrate into the network and participate in consensus verification.

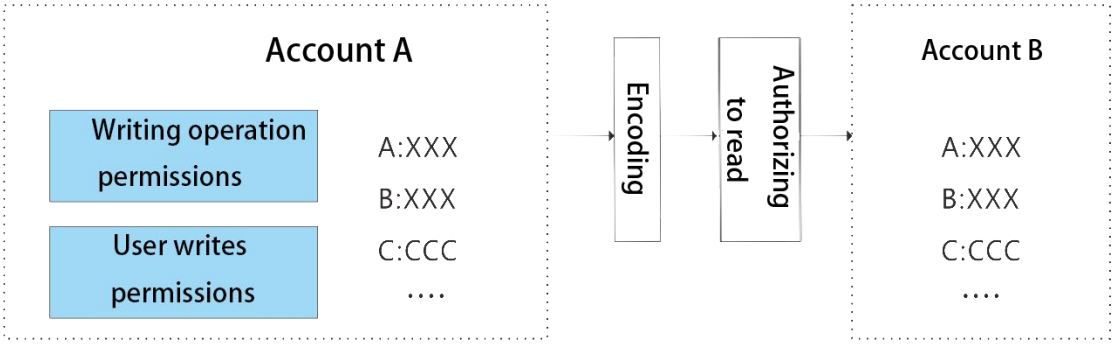
5.5 Scalability aspects

The blockchain structure of the trade chain can meet the needs of different business areas and improve the scalability and maintenance efficiency of the system. It can be used to tag assets and asset transfers, as well as provide multi-dimensional event records that cannot be tampered with, and can also be used to trace sources to track the flow of

items.

5.6 permission control strategy

It provide two types of permission control policies for data information writing and reading. In data information writing permission, multiple users are set under the same account, and corresponding permissions are set for different operations to satisfy the usage scenario of multi-party signature control. The data information reading permission allows the user to grant and withdraw the operation rights of the single user or user group to the data. The user group can be flexibly configured by the user. The data includes user account information, transaction information, etc., and the granularity can be refined to the attribute fields of the transaction or account.

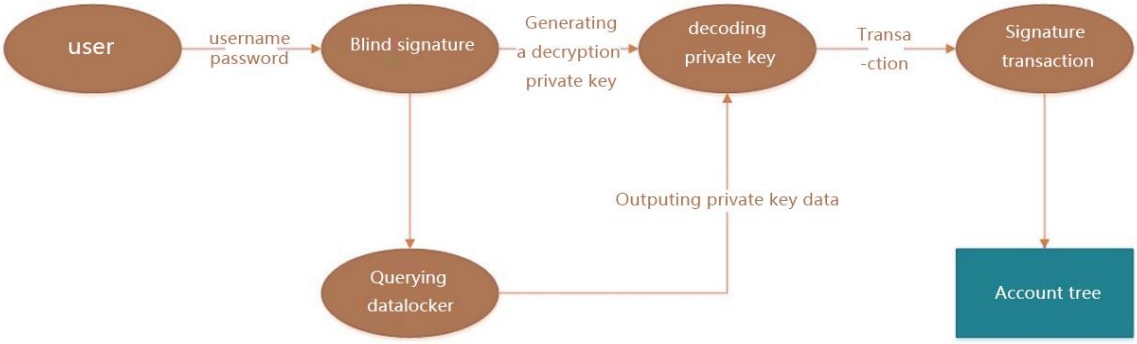


5.7 Security aspects

1) Secure private key accessing

In order to facilitate the use of trade chain products and services, in addition to the traditional client generation and preservation mechanism,

the trade chain also provides network hosting accessing and private key hardware accessing (U-key). Web hosting accessing, that is, the username and password are mapped to a private key by a specific algorithm and stored on the server. The private key stored on the server side is encrypted data, and the private key can only be decrypted at the user end; the hardware private key is to meet the needs of the financial industry and the Internet of Things industry.



2) Multiple privacy protection scheme

It provide multiple privacy protection features. First, the underlying transaction chain provides homomorphic encryption, and all user data is encrypted and stored only visible to the user. Second, BubiAdaptors provides a cryptographic middleware service that users can choose based on business needs. Finally, the upper application can encrypt the data when it is entered, and the trade chain platform is responsible for writing and reading the encrypted data generated by the user.

6.Application scenarios of Trade Chain

Trade Chain is used in trade finance, payment, digital assets, equity bonds, supply chain traceability, business credits, joint credit, public

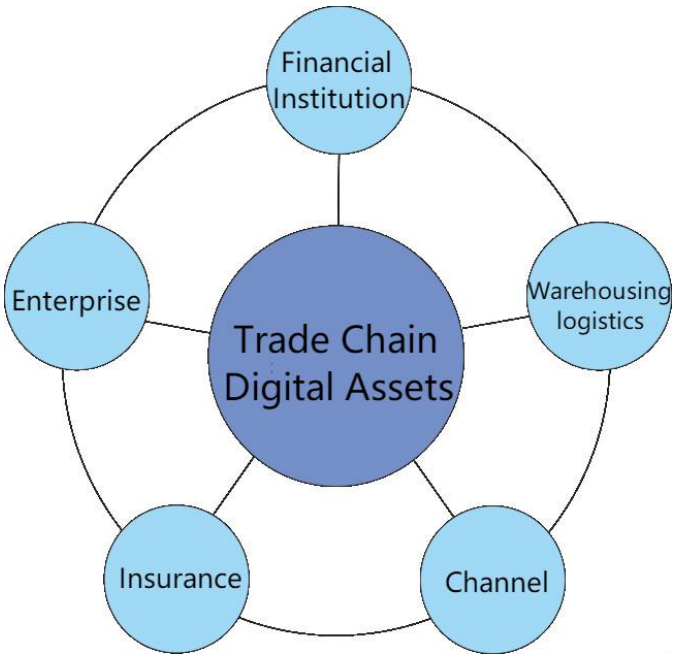
notice, data security, etc.,Focusing on multi-centered trust, the trade chain is committed to creating a new generation of value distribution network, Let the digital assets circulated freely, and solve the pain points of the transaction costs, transaction speed, anti-counterfeiting traceability, logistics tracking and other industries in the trade process.

6.1 Digital Asset Issuance and Circulation

Compared with the traditional centralized system, the advantage of the trade chain in the field of digital assets is that once the assets are issued in the trade chain, the subsequent circulation links can no longer rely on the issuer system. In circulation, the assets are changed from single-center control to society dissemination, any channel with resources may become a catalyst for asset circulation. Therefore, the trade chain can greatly improve the efficiency of digital asset circulation, and truly achieve "multi-party issuance and free circulation". Traditional asset services require corresponding intermediaries, such as asset owner certificates, authenticity notarization, etc., which require third-party intervention to complete. Only through the three parties involved in asset issuers, asset receivers, and distribution platforms can the entire circulation process be complete.

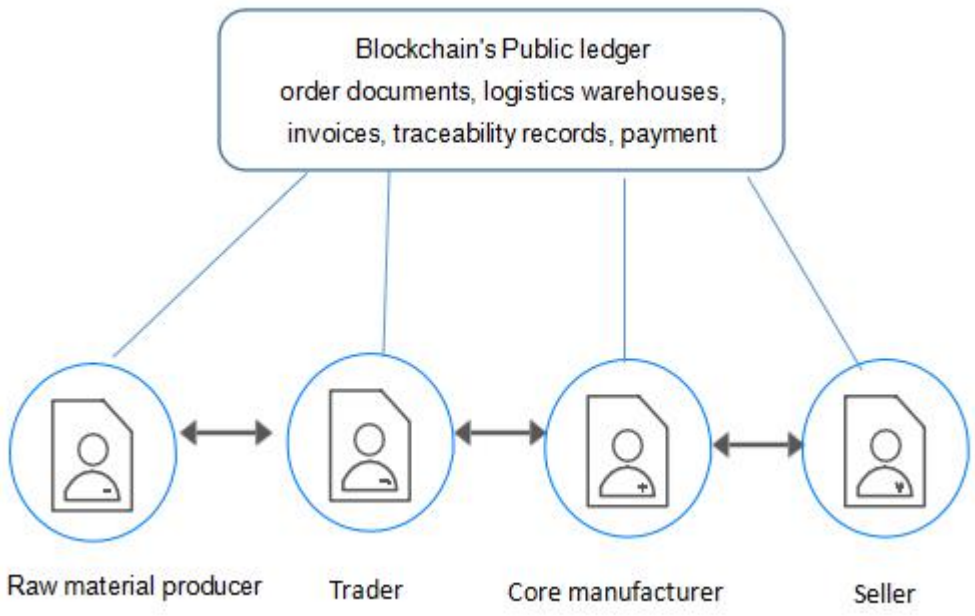
6.2 Trade Finance / Supply Chain Finance

Trade finance / supply chain finance is a multi-participating business chain.In which ,mutual benefit, use of trade chain ecological assets, and quickly complete the financial needs of any party in the ecology, such as insurance claims, debt payments, working capital payments, loans, etc. No third-party agency review or intervention is required, all cost capital requirements are completed by professional financial institutions, which reduces corporate financial pressure and speeds up transactions. The trade chain platform links the upstream and downstream enterprises of the indirectly related while linking the ownership relationship and transfer relationship of the commodity supply chain.



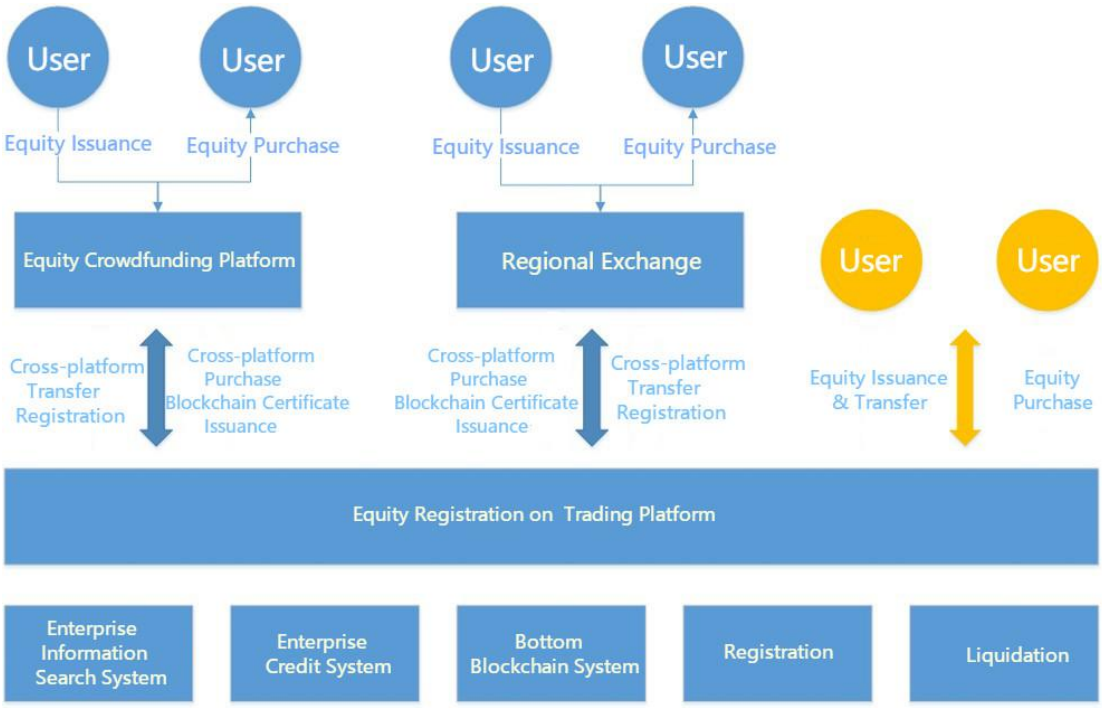
6.3 Traceability of Supply Chain

Make static (intrinsic characteristics) and dynamic (flow, credit, etc.) information for each item sharing and consensus among manufacturing companies, warehousing companies, logistics companies, distributors at all levels, retailers, e-commerce, consumers, and government regulators. Through the common ledger of blockchain , it can promote the separate and independent individual centers to a unified multi-center with multiple parties, and open up all links of upstream and downstream of trade, open ,transparent and fair, improve the efficiency of trust transmission, reduce transaction costs, and promote the benign ecological construction of trade.



6.4 Private equity registration and transfer

Securitization of assets using Trade Chain technology such as encrypted equities and bonds will help to improve registration and transfer services, especially the multi-center system constructed by trade chain , which can greatly improve the efficiency of cross-domain circulation of assets and reduce transaction costs. This makes management safer, more efficient, more reliable, less costly, and compliance.



6.5 Trade Payment

In principle, the core payment methods of centralized payment systems are based on the bank account system. In other words, the premise of payment is that both parties must have a bank account and the bank credit rating as a credit guarantee for both buyers and sellers. Even relatively secure third-party payments solve transaction security

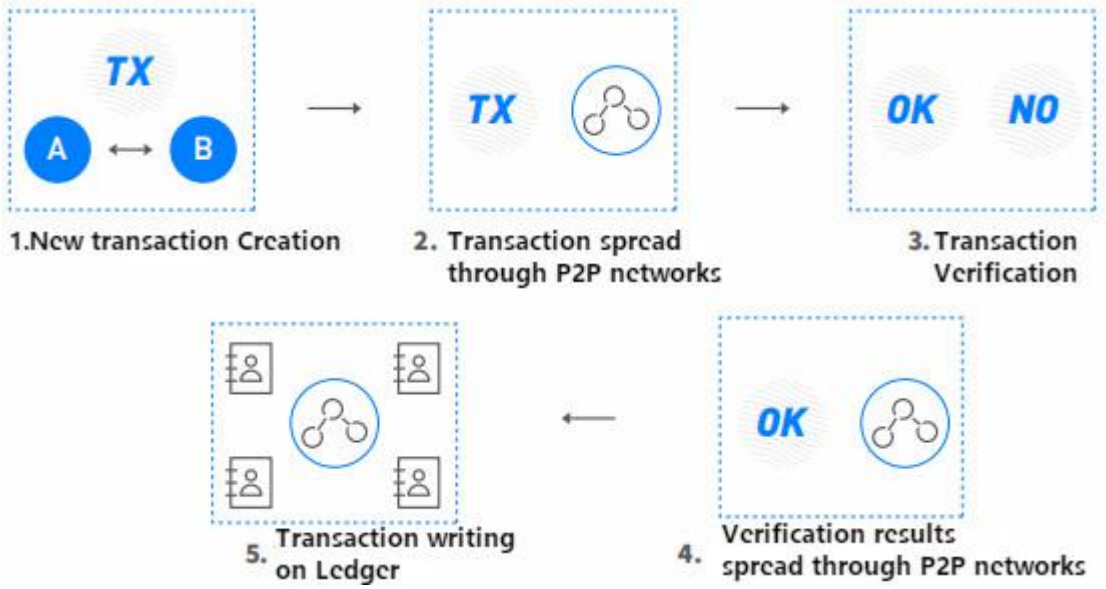
problems only through a step-by-step payment strategy. It can be said that the centralization mechanism is a reliable credit endorsement with high cost and low efficiency.

Taking cross-border e-commerce as an example, according to World Bank statistics, the global cross-border e-commerce transaction volume in 2016 has reached 601 billion US dollars. According to estimates, the scale of payments will increase at a rate of 5% per year. However, the high fees and lengthy time of cross-border remittances hindered its development. The average fee charged per remitter is as high as 7.68%. Take online banking wire transfer as an example. The handling fee mainly comes from the remittance fee between banks and the telegraph fee of SWIFT. Not only that, the remittance cycle is usually 3~5 working days. Even the more convenient third-party payment credit card online payment and Paypal based credit card. Cross-border payment also requires a certain handling fee, and the liquidation time is usually 1~3 working days.

The current payment technology of blockchain has been developed more maturely. Its ultimate goal is to create a decentralized global settlement system. In the payment system based on trade chain, a gateway system is introduced to solve the trust problem of transfer remittance between non-acquaintances. Gateways are generally held by subjects with credibility, such as banks, third-party agencies, and so on.

The system ensures data security through certain encryption technologies.

According to the consensus, it sets up multiple optional settlement encryption digital currencies, such as Bitcoin, Ripple, etc. The digital currency acts like a margin and transaction fee in each transaction process, which is convenient, transparent, and does not require high transfer fees.



7.TC token introduction

In order to make the trade chain ecosystem performing more perfectly, the trade chain team issued TC tokens to reward buyers and sellers who contributed to the construction of the TC community and supported the circulation of tokens in the TC ecosystem.

The total amount of TC tokens (hereinafter referred to as the total amount) is 2 billion pieces, and the distribution forms are as follows:

7.1 Release replacement 30%

Under the leadership of the TC Foundation, according to the needs of the project development schedule, some TC tokens are allocated to the community by the replacement form in batches, and the first phase recognizes enough funds to support the development and improvement of the project. The distribution plan is as follows:

(1). Angel investment recognizes 5%

For the early influential investors and strategic investment partners in the community, the distribution ratio is 5% of the total, a total of 100 million pieces, intending to accept BTC or equivalent ETH replacement subscription. The final currency of acceptance is subject to the announcement of the angel investment.

(2). Public blockchain release recognition 25%

For early-stage community investors, major players, industry partners, and commercial customers, the distribution ratio is 25% of the total, totaling 170 million pieces, which are released in two rounds:

The first round, 20% of the total are released, a total of 136 million, mainly for early investors in the domestic market and early introduction of ecological cooperative enterprises;

The second round , 5% of the total are released, a total of 34 million, mainly for global market investors.

7.2 The founding & development team incentives 30%

The TC founding team has done a lot of work for project design, resource organization, and early business environment incubation, and has continuously invested a lot of manpower, intelligence and material resources in the process of ecological environment formation. Therefore, the Foundation will reserve 30% of the TC token share as a team award in the token allocation plan, that is, 204 million pieces.

This part of the TC token is initially banned by 5%, the remaining 25% will be locked, and 2% will be lifted every quarter from the second year.

7.3 Operation & Ecological Construction 40%

To maintain the rapid formation and subsequent healthy and sustainable development of the community and the entire ecosystem, the Foundation has set aside 40% of the total, 272 million for ecological incubation, marketing, commercial development, and legal compliance.It specifically include:

(1). Technology development 10%

It is used in comprehensive trading platform for high concurrency, high availability and high security. It has many characteristic requirements, and its implementation is difficult. In addition, in order to promote the rapid formation of commercial ecology, it is necessary to

minimize technology use threshold of the system .The development of a large number of middlewares, interfaces, SDKs, secondary development tools, APPs, and DAPPs , will also consume a lot of research and development strength. Therefore, TC will invest a large amount of funds for the development of the basic technology platform.

(2). Operation and maintenance and safety 10%

Transactions in TCC platform have high security requirements, and the hardware requirements and security requirements of the platform are very high.

There is need for targeted optimization and investment, as well as the establishment of a scientific management mechanism.

(3). Marketing and commercial operation 15%

To build a scaled platform ecosystem in a relatively short period of time, and to bring more payment scenarios to compatible end users, TC faces a complex business scenario with diverse roles and requires a diverse strategic layout. In order to promote the rapid formation of the ecological environment, it provides initial closed-loop service capabilities for end users, and maintains a large proportion of investment in overall promotion, commercial customer development and operational service capabilities.

(4). Maneuvering 5%

A small amount of funds is reserved for handling of emergencies and

other financial preparation expenses in addition to the above projects.

8.Risk alert

8.1Policy risks

At present, the state's regulatory policy for blockchain projects is still unclear, and there is a certain possibility of loss of participants due to policy reasons. Moreover, if the overall value of the digital asset market is overvalued, the investment risk will increase.If participants have too high expectations, it may not be possible.

8.2Regulatory risk

Due to the lack of clear regulatory rules in the field of digital asset trading, Token has the risk of sharp rise and fall being and being manipulated by market makers. If individual participants lack experience after entering the market, it may be difficult to resist the floating impact and psychological pressure caused by market instability.

In the future, relevant regulations will be introduced to regulate the development of blockchain technology and Token. If the regulatory authorities regulate the field, the Token purchased during the swap period may be affected, including but not limited to fluctuations or restrictions on price and ease of sale.

8.3Technical risk

First of all,This project is based on cryptographic algorithms . The rapid development of technology will bring potential risks to be cracked. Secondly, during the process of updating and adjusting the project, there may be loopholes, although it can be compensated by issuing patches. However, the extent of the impact of the vulnerability cannot be guaranteed.

8.4Security risks

In terms of safety, the amount of individual supporters is small, but the total number is large, which also puts high demands on the safety and security of the project. Because Token is anonymous and difficult to trace, it is easy to be used by criminals. It may involves criminal activities such as illegal assets transfer,and it may also be attacked by hackers.

For the above reasons, participants are required to fully understand the team background, the overall framework and ideas of the project, and rationally adjust their vision and participate rationally.

9.Disclaimer

This document is for informational purposes only and the contents of the document are for reference only and do not constitute any investment advice, instigate or solicitation.