White Paper

--- Absorbed In Creating Global Biggest Traceability Public Chain

Traceability Chain Foundation LTD.

May 2018

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Outline

Traceability Chain (referred to as TAC for short) is traceability public chain erected through block chain technology. According to the trans-chain protocol with ETH, it builds traceability cloud platform by using the blockchain’s unique non-temper distributive book recording feature. Through the sub-chain of the implementing project and corresponding DAPP application, TAC solves the enterprise puzzles during raw material procurement, production, storage, circulation, distribution and terminal consumption such as information traceability, anti-counterfeiting and verification and accurate marketing, provides swift and high-efficiency development cloud service cluster for the technological developers and solves the “trustable” puzzles for the brand enterprise and consumers.

TAC ecology includes major chain, cloud platform, developer, enterprise and consumer.

In aspect of commercial mode, TAC erects basic blockchain platform and provides intelligent contract interface. The developer may provide blockchain traceability anti-counterfeit technology solution for the brand client and the brand client pays corresponding fee. The consumer may obtain different awards from the brand enterprise via free scanning research.

Thanks to the business model design and the basic platform erected based on core idea, the traceability chain enables more technology developers to join in ecology and facilitate more brand clients to upload the commodities on the chain, in which way the traceability chain may enter into the market and capture the market faster.

On Big Data Expo in Guiyang on May 28, 2017, in regards to the anti-counterfeiting problem of Maotai, Ma Huateng, Tecent CEO, expressed that in the future, the networking anti-counterfeiting form that was based on cloud end and mixed blockchain technology was far effective than the traditional anti-counterfeiting trademark. The blockchain technology is a medium existence. Like a accounting book, it may record all trading data which can be used to verify whether the information is true.

Firstly, the blockchain is different from the usual centralized information storage organization. The decentralization feature realizes the openness and equality of the data together maintained by many nodes of the blockchain.

Secondly, the verified information will be stored forever after being added to the blockchain.
and the data cannot be revised with single node. Thus, the blockchain data have higher stability
and cannot be tempered or repudiated.

Thirdly, anybody may check the blockchain data and share and exchange the data in the
whole system on public interface. Therefore, the blockchain keeps the highly openness and
transparency of the system information.

Vitalik Buterin, God V, Founder of Ethereum also said: “Traceability” business is an
awesome blockchain implementation application.

The blockchain provides a wonderful chance for the traceability business. Traceability refers
to the circulating chain used to trace and record intangible goods or digital goods. Through each
circulation registration, it may realize the objective of information collection and record, sourcing
traceability of raw materials, production course, batch inspection, logistics circulation and
anti-counterfeiting and verification and improving supply chain and providing financial services
of supply chain. The internal logic and data storage and verification situations for applying the
blockchain technology on traceability, anti-counterfeiting and supply chain improvement are much
familiar—non-temper data and time stamp.

The traditional traceability system adopted centralized account book mode or adopted
dispersive and separate record and storage by the market participants. It was a kind of information
island mode. In the centralized account table mode, it is the key whoever maintains the account
table as the center. No matter whether the source enterprise stores or the channel distributer stores,
since they are both the interested parties on the circulating chain, when the information on the
account book is against their interests, they may temper the account book or tell a lie that the
account book gets lost due to technology reason.

As a global project, TAC starts up in China and accumulates experience and improves the
platform. As the project develops, TAC will set the technology research and development center
and the market expanding center in Silicon Valley and radiate North America and Europe. In other
regions, we continually insist on the fastest application landing and focus on traceability,
anti-counterfeiting and supply chain application to solve the “trustability” for global goods
circulation, and win bigger value increment for the whole ecology in virtue of the industrial
reform of the blockchain.
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I. Traceability Chain Understanding on Blockchain

1.1 Background of Blockchain Project

Internet has experienced two huge changes during its near 50-year development history. The first change was global computer networking. Since the birth of ARPA network in 1969, the world mainstream countries were gradually connected to internet to start the global networking journey. The second change was that the global internet application. Since world-wide-web thesis network appeared in 1989, the internet application realized global application outburst like “a hundred flowers in bloom”. Now the third change is in pregnancy.

e-Cash proposed in 1983 is a digital payment system but failed later due to the centralization reason.

HashCash proposed in 1997 is a digital currency that adopts proof of work (PoW) and has been widely and hugely applied by digital currency.

B-money proposed in 1998 is the first de-centralized digital currency system. It is a pity that it did not propose detailed implementation.

In 2008, Satoshi Nakamoto firstly proposed blockchain conception. Although the blockchain has experienced revolution of several generations beforehand, this period is the development stage of digital currency. Until the birth of bit currency in 2009, which symbolized that the blockchain technology brought huge hope for the digital economy era, it then really realized decentralized and public-financial digital currency system, formally opened the development of the blockchain technology and also started human research and exploration in the aspect of intelligent contract.

Version 1.0 blockchain was featured with digital currency and version 2.0 blockchain was featured with intelligent contract. Then version 3.0 blockchain was featured with application landing, which digitalizes the offline situation and synchronizes to blockchain network. Any great creative technology will form huge change to the world. The steam engine has changed the production form; the internet has changed the interaction form; what’s the blockchain changed is value form. The change from blockchain to the world is mainly expressed through changing the company organization form, commercial cooperation form and social governance form.

1.2 Significance of Blockchain Project

With the support from the blockchain technology, people find that the blockchain meaning is that it can build a much reliable internet system and fundamentally solve the cheat and rent-seeking during value exchange and transmission. As the blockchain technology becomes popular, the digital economy will be much authentic and reliable since it can not only publicize the information but also protect the privacy; not only make decision together but also protect individual benefits. This mechanism will enhance the value interaction and lowers the cost.
In the public service layer, the blockchain technology is exploring the application in fields of public management, social protection, intellectual property management and protection, anti-counterfeit and traceability of commodity and land ownership management. Relevant practices prove that such technology may assist to promote the public participation, reduce the social running cost, enhance the social management quality and efficiency and play important facilitating effect to the tips for social management and governance level.

In the economic meaning, the new value interaction form created by blockchain is based on “weak centralization”, which however doesn’t mean that various “centralizations” in the traditional society may disappear completely. In the future, there will be huge amount of “multi-center” systems in blockchain. Focusing on union chain, private chain or mixing chain, the blockchain will further enhance the running efficiency of the “center” and reduce rather a part of cost.

In the view of technology, we think that the blockchain is a kind of technology system that is maintained together by many parties, stores the data with blockchain structure, uses cryptology to guarantee the transmission and access safety and can realize consistent data storage and avoid temper and refusal. Such technology brings indefinite imagination space to the world. The global concern about the blockchain overheats continually. The major global economic entities start the research on blockchain technology and development trend in the state strategy layer.

The birth of the blockchain technology symbolizes that the people start building the real trustable internet. While, the application innovation of “blockchain plus” then points out the new development direction of the industrial innovation and public service.

1.3 What’s the Traceability Chain

We hope to, basing on the technology of blockchain, adopting unique non-tamper distributed ledger characteristics of the blockchain, build the communication node at bottom layer, traceability cloud platform and distributed storage cloud service; solve the enterprise difficulties in information traceability, anti-counterfeit, verification and mobile marketing during raw material procurement, production, storage, circulation and distribution, store and terminal consumption process of the commodity through the sub-chain of the landing project and corresponding DAPP application, and provide a fast and efficient cluster of cloud services development for the technical developers, so as to solve the problem of "trusted" for brand enterprises and consumers, and then build a new blockchain ecosystem ---Traceability Chain as the future world-selectable commodity information and internet value transmission protocol, and push forward the practicability and usability of the whole block chain industry.

As the most promising blockchain ecosystem, TAC thoroughly combines the system framework advantages of Ethereum, Ripple and Fabric. TAC will also constantly and gradually form the blockchain economy through the construction of the foundation platform, the design and development of the software and hardware products, the development of various products and the development and iteration of the commercial landing project, gradually form TAC economy.
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system, improve the industry efficiency, and promote the effective and collaborative development of the society.

1.4 Advantages of Traceability Chain Project

Through tracing and recording the circulation chain of the tangible goods or intangible information and registering each circulation, TAC realizes full-course traceability from information collection and record, the sourcing, sourcing traceability of the raw materials, production course, processing round, storage information, verification batch, logistics circulation, the third party’s quality inspection, immigration control of customs, anti-counterfeiting authentication, and improve the service accuracy and safety of the supply chain data according to the traceability information and further provide blockchain financial service for the participants in the industrial chain. The internal logic and data storage and verification situations for applying the blockchain technology on traceability, anti-counterfeiting and supply chain management are much familiar—non-temper data and time stamp.

The traditional traceability system adopted centralized account book mode or adopted dispersive and separate record and storage by the market participants. It was a kind of information island mode. In the centralized account table mode, it is the key whoever maintains the account table as the center. No matter whether the source enterprise stores or the channel distributor stores, since they are both the interested parties on the circulating chain, when the information on the account book is against their interests, they may temper the account book or tell a lie that the account book gets lost due to technology reason.

Such example is usual in real life. The camera is always off at key moment. Therefore, the centralized account book maintained by the interested party is not reliable. Under information island mode, the market participants themselves maintain an account book which is commonly known as standing book and named to input into invoicing system after electronic input. No matter whether the real standing book or the electronic invoicing system, the owner may temper or edit later freely. The real-time checking ability in registration and settlement situation and the non-temper and time stamp ability in data storage and verification situation of the blockchain provide powerful tool for the traceability, anti-counterfeiting and supply chain financial and management situation.

II. Background of Traceability and Anti-counterfeiting Market

According to the statistics, the loss from the false and counterfeited products to the markets worldwide has reached USD300 billion. The annual deal amount of the false and counterfeited products has occupied 10% of the total trade worldwide. In China, due to the powerful imitation and production ability, the false and counterfeited product scale made in China has exceeded CNY300-400 billion, especially in the fields where counterfeit and infringement are much common, namely currency, medicine, food, cosmetics, clothes, agricultural material products, auto and farm machinery parts, audio and video products, software and computer chips. It has been the “severe area” of the false and counterfeited goods.
2.1 Three Great Demands in the Future

(1) Public safety field. The informatization and electronization trend becomes much obvious and provides much effective technical means and platform for the criminal prevention and strike in public safety field. For instance, since January 3, 2011, 17000 taxis in Shenyang have been installed with anti-counterfeiting sign. The anti-counterfeiting sign will become effective formally and the “unlicensed taxi” will have nowhere to hide.

(2) Food safety field. The “Twelfth Five-year” Development Plan in Food Industry puts quality safety at first and proposes to enhance the food quality sampling qualification rate from 94.6% in 2010 up to higher than 97% in 2017, which may hugely reduce the rate of food safety accidents, obviously enhance people’s food satisfaction, ensure that the consumers are not worried about food and further safeguard people’s fundamental interests. As people’s concern and high attention to food safety increases, how to guarantee the food safety and prevent the infringement of the false goods has becomes the technical and management puzzle in food safety field. The government and consumers long for a simple but easily-operational technology to protect the food safety. How to let the food put on the dining table safely becomes the hot point and difficulty of the new technology, new equipment and new application.

(3) Drug safety field. According to the requirements of relevant policies and documents such as Notice on Implementing Electronic Supervision on All Kinds of Basic Drugs, till April 1, 2011, all basic drugs shall be implemented with dynamic management via electronic supervision code during the circulation. It almost covers all medicine enterprises and manufacturers that produce drugs. The involved scope is wide. The electronic supervision code is the unique symbol to distinguish the drugs and is the “ID Card” of each box of drugs. The application of the electronic...
supervision code aims at helping state relevant organs to carry out much accurate and timely supervision in the drug production and circulation rounds, providing convenience for the producers to carrying out effective management and control to the drug sales and meanwhile providing supervision platform for the people so as to realize medication to certain extent. According to the development schedule of the electronic drug supervision work, the basic drugs that are not connected in the network and are not marked with electronic drug supervision code shall not be allowed to join in the drug bidding and procurement. According to the reckoning, 307 kinds of basic drugs will get involved in more than 3000 medicine plants which will need about 30-50 billion tags annually.

2.2 Traceability and Anti-counterfeiting Application Condition in China

Ali-Health & Tmall Medicine Together Started “Nutritious China” Brand Strategy

In October 2016, Ali-Health and Tmall Medicine together started “Nutritious China” brand strategy and declared to build “Nutritious China Traceability System” to realize the “one code for one nutritious product” traceability. In virtue of “Relieved on Code” platform of Ali-Health, we can realize the traceability to relevant nutritious products, meaning that the nutritious products have “ID Cards”. The consumer may find the nutritious products with authorized sign “Nutritious China” of Tmall quickly as long as logs on the home page of Tmall and searches “Nutritious China”, namely medlar, Chinese caterpillar fungus, bird’s nest, colla corii asini, dendrobe, Ginseng, pseudo-ginseng, honey, and pilose antler, which have basically covered the popular nutritious products in the market.

Yunnan Baiyao: “Truth Traceability” Was Brand Commitment

On November 1, 2014, Yunnan Baiyao erected a platform for assisting enterprise brands and launched brand-new electronic tag anti-counterfeiting and traceability solution to solve present bad situation that the good and the bad mixed in the market and the consumers cannot tell the truth from the false.

Junlebao Dairy Built Anti-counterfeiting and Traceability System

In December 2016, Junlebao trademark is Chinese famous trademark. After entering into the mobile internet era, Junlebao Dairy responded state policy call, followed the enterprise
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devlopment trend, protected the consumers’ benefits, and started implementing enterprise
internet+ plan and built dairy anti-counterfeiting and traceability system.

**FIR MUS Powder Milk Launched Cell Phone APP to Check Whether the Product Is True or False**

FIR Mus created and launched product traceability APP on cell phone in 2014 and realized
that 15 kinds of information such as fresh milk, finished product, place of origin, inspection place,
logistics head warehouse and the initial distributor can be traced and checked. In the aspect of the
information completeness and transparency, it not only complies the state requirements but also
the first in the industry. After creating the leading traceability system in dairy product industry,
FIR MUS still carries out innovation and upgrading unceasingly and continually improves the
product safety traceability through informatization and digitalization to seek self break-through.

**Anti-counterfeiting and Traceability System of Maotai**

![Image of Maotai traceability system]

**RFID Anti-counterfeiting of Wuliangye**

Wuliangye started using RFID anti-counterfeiting technology since 2014. On the basis of
bottle code and box code, Wuliangye added the unique RFID code and combined the three codes.
It is the first enterprise inside to apply RFID technology in wine anti-counterfeiting and
traceability. In 2017, Wuliangye improved the anti-counterfeiting overall and the consumers may
check whether the wine is true or false via cell phone directly.

![Image of Wuliangye RFID system]

**2.3 Overseas Traceability and Anti-counterfeiting Application Condition**

Since 1990s, many countries and regions have applied the traceability system in agricultural
product quality safety management.

(1) Agricultural product traceability system of the European Union. The EU’s application of the agricultural product traceability system is the earliest, especially the traceability system of live cattle and beef products. EU includes the agricultural product traceability system into legal framework. According to the beef tag law, the countries of EU shall build verification and registration system for live cattle during production round and provide clear enough product sign information to the consumers during sale round.

In January 2000, the EU published Food Safety White Paper, which proposed a fundamental reform, namely to, based on controlling the whole course “from farmland to dining table”, define the liabilities of all relevant producers and business runners.

In January 2002, the EU issued No.178/2002 decree ruling that each agricultural product enterprise shall provide guarantee measures and data for the raw materials, ingredients and relevant materials used during the production, processing and sales in order to ensure the safety and traceability.

(2) Agricultural product traceability system of the US. In the US with extremely developed market economy, the agricultural product traceability system is mainly built by the enterprise out of own accord and the government plays a driving and promoting role. American industrial association and enterprises built voluntary traceability system. More than 70 associations and organizations and more than 100 professional livestock raising and veterinarian people composed USAIP to jointly join in making and establishing livestock sign and traceability plan, aiming at being able to determine all enterprises involved in direct contact within 48h under the condition that foreign epidemic diseases were found.

In May 2003, FDA published Food Safety Tracing Regulation, which requested all enterprises involved in food transportation, distribution and importation shall build and keep the all course records relevant to food circulation.

(3) Agricultural product traceability system of other countries

The British Government built internet-based Cattle Traceability System. The system records the cattle’s transfer condition from birth to death. The farm owner may record and register new cattle and check the conditions of other cattle he owned through the online network of the system.

Canada started implementing compulsory live cattle and beef product labeling system since July 1, 2002 and demanded that all beef products shall be labeled with bar codes up to the standards.

National Livestock Identification System (NLIS) is Australian livestock label and traceability system. The live cattle shall be identified according to the ear label or rumen label identified by NLIS. When the cattle moves to a new place the RF identification reader of the plant or slaughter house may be read and recorded in NLIS database as migration information.

The Ministry of Agriculture of Brazil decided to carry out compulsory growth record to the beef cattle since March 15, 2004 and realize a growing condition supervision from birth to the table.
2.4 The Significance of Product Quality Traceability for Enterprises

The product quality traceability system is not to supervise enterprises, but to help enterprises to build brand images and improve social effect and economic benefit. The whole process of traceability management not only strengthens quality management of enterprises and reduces the cost of error correction, but also facilitates enterprises to collect commodity information, understand consumption trend and improve quick response capability. In the fields of circulation and manufacturing, especially in the fields of food safety, drug production and manufacturing of some chemical products, the establishment of product quality traceability system has become an important means of management for enterprises to survive on. In retail and manufacturing enterprises, such as automotive and electronic products, when quality problems arise, by establishing the traceability system, the enterprises may quickly find out relevant batches and key quality problems in them and recall relevant batches of products. On the one hand, the enterprises can quickly deal with the problems of consumers; on the other hand, the enterprises can reduce losses arising from recalls.

2.5 The Significance of Product Quality Traceability to Consumers

Product traceability allows consumers to comprehensively understand the lifecycle information of products and make consumption more transparent. Meanwhile, the establishment of product traceability system can propose appropriate countermeasures to reduce losses of consumers when accidents due to poor quality happen, so that consumers’ benefits can be protected. For example, recall system of the automotive industry is based on product traceability system.

2.6 Famous Companies Lay Out Blockchain Traceability

2.6.1 Ant Financial

The blockchain technology developed by Ant Financial Technology Lab will be implemented and applied to food safety and certified product traceability. According to the introduction of Ant Financial, milk powder products of 26 brands from Australia and New Zealand, such as Abbott, Aptamil, Wyeth and Bellamy, have their own “ID cards”, namely, Traceability QR code. Users can know all information, including place of origin, date of production, logistics and inspections by opening Alipay App and scanning QR codes after buying milk powder products in Tmall Global and receiving them.

Product anti-counterfeiting query with blockchain is different from previous commodity information query typed in by merchants because blockchain has permanent traceability and is difficult to be tampered, so as to ensure the correctness of information and records and prevent false information. Previously, Ant Financial applied blockchain to public welfare and mutual-assistance insurance. The former is similar to supply chain traceability in principle. The latter mainly uses transaction transparency and nonrepudiation to ensure trust. Product anti-counterfeiting is the third scene of the implementation and application of Ant Financial
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Blockchain Technology.

2.6.2 JD

With the guidance and witness guidance of the Ministry of Agriculture, General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, the Ministry of industry and information technology, China Quality Certification Center, China Chain-Store & Franchise Association and China Animal Agriculture Association, Jingdong will set up “Jingdong Quality Traceability and Anti-Counterfeiting Alliance” jointly with brands in the fields of fresh food and consumption goods, such as Kerchin, Shuanghui, Jingqishen, Wuliangye, Huggies, Wyeth and Nestle. Jingdong thinks data untamperability and existence proof of time stamp that blockchain has can well support the traceability and anti-counterfeiting of commodities. Take fresh food as an example, in the future, after shopping at Jingdong, users only need to open APP, find the order and click “One-Click Traceability” or directly scan the Traceability code on the product for information traceability. Take beef as an example, through the only traceability code of the beef purchased, you can see which farm does the beef purchased come from, breed and age of the cattle, the fodder, quarantine certificate number of the place of origin, enterprise information of the processing plant, slaughter date, information of pre-delivery inspection report, time to warehouse, temperature and spot check report for storage. Even delivery information for final delivery can be traced and shown one by one. Therefore, illegal transactions and frauds may have nowhere to hide and the users can eat safe food.

Zhang Chen, CTO of Jingdong Group, said as a leader in self-run B2C E-Commerce, Jingdong Mall has an inescapable responsibility to adhere to building high-quality shopping ecosystem and technology will become an important support for Jingdong’s high-quality shopping.

2.6.3 IBM Assists Wal-Mart

Wal-Mart ensures the safety of pork supply chain. China is a country of high pork consumption. Its pork consumption accounts for more than half of pork consumption in the world. As the largest retailer, the first step of Wal-Mart’s global blockchain program is to ensure the security of pork supply chain of Chinese market.

This project uses IBM’s blockchain technology based on Hyperledger, subordinate open-source software of Linux Foundation, to timely record product information, including farm source details, batch number, factory and processing data, date of expiry, storage temperature and transport details, and information of each process in safe blockchain database.

Through implementation of the project, Wal-Mart can check place of origin of the pork it sells and the process of each intermediate transaction from time to time, to ensure all the commodities are verified.
2.6.4 Three Different Points from TAC to Three Blockchain Businesses

Ant Financial and Jingdong serve their own platforms and are only open to merchants within their platforms at present. IBM’s system is systematic and integrated customized service directly provided for large-sized customers. However, cloud platform of Traceability is open and win-win ecology of developers. It provides distributed communication nodes and perfect blockchain open platform at the bottom, provides the environment and interface for developers to quickly conduct development of blockchain applications and serves global brand customers and millions of small and medium-sized worldwide enterprise customers through Developers’ Community which becomes stronger and stronger. In addition, TAC develops consumers through researching and developing DAPP “Thousand Star City”, grants rewards through behavior mining, and stimulate the consumer’s activation and participation through computing power. The accumulation of the consumers may improve the brand enterprise’s interactive marketing and e-commerce sales and further attract more brand enterprise in. It is one difference point between the traceability chain from other several blockchain traceability businesses.
III. Fields Covered in Traceability and Anti-counterfeiting Business and Development Plan

3.1 Traceability and Anti-counterfeiting Business Field

Traceability and anti-counterfeiting business is widely applied in various social fields. Please see following figure for detailed situations:

![Figure 1 Application Situation](image)

3.1.1. Food Safety

Food is the first necessity of the people. The food safety has rose to a major national strategy during the 13th Five-Year Plan period. With the implementation of the most strict Food Safety Law of the People's Republic of China, various measures have been taken across the country in relation to food safety. Among which, the construction of food traceability system is an essential item in food safety work. As a result, the market prospect of food safety traceability platform is considerable, and the industry will usher in great opportunities. The establishment of the food safety traceability platform ensures that the whole process of the food from the field to the dining table can be traceable, and the circulation of the fake and inferior products is restrained to a large extent, and meanwhile, the digital dynamic tracking and monitoring system is also established during the whole process of foods production for the consumers.

Today, the establishment of the traceability chain project is an innovation by the founder team for themselves. The whole process traceability system, the dynamic tracking and monitoring system and the block chain technology are combined to utilize the distributed storage of the data on the chain, and the characteristic of non-duplication and alternation, the platform can construct a
commodity full life cycle tracking and tracing system for enterprises from the raw materials to the terminal consumers. The detailed information of each procedure during commodity production is recorded in real time to ensure the controllable source; the flow direction of the commodity is comprehensively tracked, the commodity circulation details are realized, and the defective products are recalled directionally, thus achieving the traceable disposition of the products. When prevent and eliminate food safety hazard thoroughly, the fake and inferior products are eradicated from the source, the data basis is provided for later consumers, thus strengthening the reputation of the enterprise and the consumer's purchase confidence.

The traceability chain team has reached the cooperative intention with the wild blueberry enterprise in Greater Khingan Mountains and Jiaozuo Wenxian Yam, which has solved the problems of traceability and anti-counterfeit of blueberry and yam through the landing of the traceability chain platform. Additionally, with the attention of the market on block chain, it docks the merchants with the mobile marketing and mobile E-commerce developers, In 2018, the block chain blueberry and the block chain yam market full media propaganda and marketing will be promoted, thus making the technology truly serve the market.

3.1.2. Medicine and Health Products

The medicine industry is more specific than other industries, first of all, the audience is different from the common consumption group, mostly old and weak patients; secondly, the product is more professional, and common consumer does not have the discrimination ability. In contrast, fake and inferior medicine and health-care products have flowed into the market, which caused great harm to consumers, and the identification of counterfeit and inferior products is more difficult. Cao Guying, the national famous drug inspection and discrimination expert, said in an interview that "a considerable amount of fake drugs are made by professionals, and they are deceptive. A large proportion of them has no effect, which can't cure the diseases and won't cause death of people. There are also some drugs that illegally add hormones, chemical (western medicine) ingredients to immediately reflect the 'effect', such as health care products that claim 'therapeutic effect and reducing blood sugar'". Which means, the patient and the families are difficult to identify through their ability once the drug has launched into the circulation market, regardless of whether the advertisement, trademark or a curative effect are to be viewed.

The whole process tracing of the traceability chain ensures that the quality of the medical and health-care products is ensured, and the dynamic tracking and monitoring system can solve the problem of incorrect storage and impersonating replacement during the transportation and circulation processes, and the control on the circulation details of medicines makes it easier to achieve the emergency treatment and directional recall. At the same time, it also provides the references for the governmental administrations to strengthen the means of law enforcement and strengthen the market supervision, thus creating an orderly medical and health care products market which is free from worry for merchants and reliable to doctors and patients.
The traceability chain team has reached cooperative intention with a domestic well-known medical enterprise to generate a sub-chain for the enterprise through the traceability chain to provide the full life cycle tracing and anti-counterfeiting and consumer interactive services for hundreds of medicines of the enterprise. In addition, the TAC team also negotiated with one national medicine group and started making relevant feasible research reports on using blockchain technology to upgrade and reform the all-life circle traceability and supplychain of Chinese traditional medicine.

3.1.3. Maternal and Child Products

From milk powder to vitamin balance, from cradle to chewing gum, the parents are always tread as if on thin ice. From a family as the minimum to an industry and society as the maximum, all parents hope to be able to bring the best food and supplies to the baby. However, fake and inferior products always cling to the demand and "profit". The quality problem of domestic milk powder in previous years made the consumers experience a carry-over of fear, and the good and bad overseas purchasing mixed together, and it was more difficult for the parents to choose. When shopping receipts have become the assistant tool of fake goods to enjoy the trust, what more can people believe?

The traceability chain and the traceability anti-counterfeit platform introduces traceability from raw materials to every procedure of production and circulation, and the distributed storage technology ensures that all the data cannot be changed and covered, the producer can monitor the production and circulation procedures through the platform at any time, the consumers may realize the source of raw materials, flowing direction of products through the platform. With the mobile APP, the consumers may even realize where the cows that produce baby's milk powder eat the grass, and where the cotton for producing the clothing of mother is adopted, combining the control of the whole production and circulation process. Traceability chain makes the parents free of worry, makes baby healthy and returns the market to the merchants.

The traceability chain has signed a memorandum of cooperation with an innovative brand enterprise of maternal and child products, and will provide traceability and anti-counterfeiting solutions for the company's products after the traceability chain has been officially launched.

3.1.4. Cigarette and Wine

Cigarette and wine are not the necessaries of life, but it is an irreplaceable hard demand. It has been for a long time for the demands on cigarette and wine, with the development of society, the increasing of people's living pressure and the fermentation of the unique wine culture in China, the demand of the market on tobacco products has never been attenuated. And the brand products of the cigarette and wine have marked prices, which can obtain the universal value certification in the sales circulation range, and can even be circularly used as the circulating medium. Therefore, on the one hand, on the one hand, the anti-counterfeiting of the cigarette and wine has been paid great attention by the producer and seller, and in the aspect of anti-counterfeiting technology, it
is absolutely walking in front of other daily commodities; on the other hand, the production and sale of the fake cigarette and wine industry has always been "keeping pace with the times", "following the tide", and presenting the situation that "no prairie fire can destroy the grass, it shoots up again with the spring breeze blows".

There are more than a dozen anti-counterfeiting marks for some brands of cigarette and wine, however, on the one hand, consumers have different purchases for purchasing and have limited identification ability; on the other hand, the means of making and selling fake products are different, and the effective, long-term and systematic anti-counterfeiting identification system has not been established at all times. In this case, synchronization monitoring system can trace the source and realize the two-way tracing to show its capabilities. From the raw material supply to the production and circulation, where the raw materials are supplied for which batch of products, where the finished products are sold, and which batch of product shall not be sold in which area, from the tobacco growers to the manufacturer, from the manufacturer to the distributor, from the distributor to the retailer, from the retailer to the consumer, all the procedures in the production and circulation are traceable bidirectionally. The distributed ledger ensures that the data is authentic and reliable, and it is absolutely impossible to tamper with the fake and inferior products.

The traceability chain team is making relevant layout in the field of cigarette and wine, and has docked with several medium-sized cigarette enterprises and liquor plants, and is striving to reach cooperative intention in the second quarter of 2018, thus pushing the traceability chain to land in the field of cigarette and wine.

3.1.5. Luxury and Cosmetic

With the development of social economy, people's consumption level is also upgrading accordingly. More and more people have the increasing demands on consuming famous brand luxury goods and cosmetics. It's human nature to love beauty, and various luxuries with the combination of beauty, grace, nature and practicality are attractive for many people. However, luxury goods are named as "luxury", besides the high quality, the price is of course expensive. For a variety of reasons, the price of domestic luxury fully demonstrates the so-called "identity recognition" function, and has successfully made many buyers stop at the counter. Take the Estee Lauder "Small Brown Bottle" Eye Cream as the example, its CIF price is RMB175, the import duty rate is 10%, the consumption tax rate is 30%, plus the cost during import process, the import dutiable price is RMB274.5, which is nearly RMB100 higher than the CIF price. In the domestic circulation process, 5% of business tax, 17% of VAT and urban maintenance and construction tax will be paid, plus the advertising fee, the final retail price of its direct operating store and Sephora exclusive counter is about RMB540. And this price has successfully promoted the demand-hungry consumers to transfer to overseas online shopping.

For most domestic consumers, the overseas shopping website and the shopping store of Taobao and JD for products of overseas products have been a complex mood of love and hate. Not
extinguished demands and inaccessible pit --- consumers need high-grade goods of relatively reasonable cost performance, the online dealers and overseas shopping are providing such supply and service, which would have been a win-win, but the operators were driven by interests and consumers lacked discrimination. The lack of transparency in the process of commodity purchase and circulation leads to this "operational space", which is what traceability chain is devoted to and capable of filling.

3.1.6. Publishing and IP Derivatives

With the rise of knowledge economy, intellectual property has become the core element of market competitiveness. Driven by interest, the cultural industry has become a serious area of copyright piracy. The publishing industry in early years, the Internet creation and the IP derivatives industry in recent years have suffered heavy losses under the infringement of copyright. Before, it occurred in the vendition meeting that the reader fans asked for signature with the copy of pirated work, which made the author in an awkward position; while it has become a phenomenon that the works resources such as online novels, games, music, videos and pictures which have been disseminated and downloaded freely, in this situation, people can't realize that this is abnormal and improper. However, this disorder not only hits the author's creative enthusiasm, increases the operating cost of the operation agent, causes huge losses for relevant creators and institutions, but also impedes the formation of the ordered market in relevant fields. If the users and audiences are accustomed to free use, it's hard to accept payment, and the so-called free is often the most expensive. The good work requires the author to devote a lot of time and energy to his creation. Without benign interaction and reasonable return, what it damages is the author's creative passion and creative ability, which can lead to the final absence of good works.

When it is difficult to find a work worthy of watching after searching the whole network, we are paying the price for poor copyright protection when choosing a hot movie but suffering from the bizarre plot, the strange transition, artificial dialogue and a rough production.

The traceability chain project has made brave attempt for the protection of intellectual property, which is not only the grasp of the utilization trend of the block chain technology, but also the positive response to the market demand of the society and market demands on the protection of intellectual property. The technical application of traceability chain in copyright protection can not only promote the consumers to realize the whole creation and publishing process of the commodity but also provide real evidence for the creation party and the publishing party to maintain legal rights, and reduce the evidence cost in the process of maintaining rights to the maximum extent. Monitoring from the source to the end, from the process to the details, copyright infringement won't find the place to hide.

3.1.7. Art Collection

Art collection combines ornamental value and investment value. With the enhancement of people’s artistic levels, rapid spread of auction prices of artworks and media’s promotion of
treasure evaluation programs and activities, more and more people are eager to enter the artwork market. The biggest difference between artwork market and other markets lies in the default requirement of the field for people’s connoisseurship and aesthetic standards, which not only naturally enhances the admittance requirements of art collection market, but also regards losses arising from authentication faults as “tuition fees for entry”. Such industrial status and more and more new members undoubtedly make speculative counterfeiters see an opportunity that can be made use of.

The choice of artworks may vary from collector to collector due to their different aesthetic orientations. However, no one will choose forged and fake artworks. Art collection is not only a commercial activity, but also a kind of heritage and protection of culture. We cannot leave any operation space for counterfeiters because of the so-called “industry characteristics” or any other reasons. Eliminating the false and retaining the true is the issue that Traceability tries to achieve. From creation to completion to auction to collection and circulation, records are kept for every step of change to an artwork. Each circulation can be verified by untamperable data.

3.2 Development Plan

At the beginning, Yuansu Platform was founded to prevent and completely eradicate potential food safety hazards, ensure the whole-process traceability of food from field to table and completely eliminate gorged and fake food. Next, we will make overall arrangements in fields of food, drug, baby and maternal products, alcohol and tobacco, luxury goods, cosmetics, publication, IP copyright and art collection, provide whole-process data for merchants and consumers and provide basis for government departments strengthen their means of law enforcement and intensify their efforts in market supervision. Electronic commerce, automobile parts, building materials and governmental affairs processing and auxiliary query will be the journey for the next step. On the road of extract something of worth from a miscellany and eliminating the false and retaining the true, Traceability will trace to the sources all the way and restore a genuine and authentic market environment.

IV. Technical Architecture

The technical architecture of the traceability chain consists of three parts: bottom chain, platform layer, and application layer of the traceability. Please see following figure for further details:
TAC: Traceability Chain Token, digital license of the bottom layer of the entire system, is not only the fuel for information exchange of the basic links, but also a voucher for value transfer of the entire ecosystem.

DPOA: Blockchain certificate of various rights and interests of assets, such as the right to use assets and ownership of assets.

**Shared host cloud plan uses a file data storage solution based on IPFS Protocol**

IPFS is based on content storage, rather than file names. It uses content addressing instead of traditional addressing based on IPs and domain names. Users needn’t to care about the locations of servers or consider the names and paths for file storage. IPFS is based on the only encrypted HASH value calculated according to its content. The same content will have an only HASH value. HASH value directly reflects the content of the file. When IPFS is requested for a file HASH, it may use DHT to find the node where the file is located, retrieve the file and verify the file data.

IPFS is the infrastructure of general purpose, the underlying storage is based on P2P storage technology, and there is no storage limitation. It can perfectly match with blockchain, the system can use IPFS to process quantity data, store content on IPFS network, then store corresponding HASH into blockchain and print timestamp. In this way, storing data by IPFS and completing data pricing, right confirming and right transferring through blockchain can give full play to data value.

**Subchain management**

One of the main functions of the traceability main chain is the subchain management, traceability subchain can be created by authorized account at any time after the main chain runs. The creator can custom-make the detail functions of subchain and specific information of
subchain token according to application requirements. These custom-made information forms data structure of subchain, and releases information of creating this subchain in the main chain by the means of invoking smart contract of main chain. This kind of release needs to deduct a certain TAC (including creation charge and service charge), thereby it can be recorded in the block of current period by accounting node.

At this point, the information of the subchain is recorded in the main chain, and then the subchain will be regarded as an independent blockchain, which records the corresponding transaction records and related data of all kinds of business logic in the subchain (pictures, audio and video data will be stored in the cloud host of IPFS).

Because the TAC transaction is only recorded in the main chain, the operation of main chain is independent of the subchain. The nodes running on the main chain only need to save the main chain data, and only do the consensus and verification of the TAC transaction block. TAC, a flexible subchain creation mechanism, determines that the subchain is tailorable, the state of the subchain has no influence on the completeness and security of the main chain functions; besides recording the description information of the subchain, the related data of other subchains will not have an effect on the main chain.

4.1 Platform Frame

4.1.1. Basic blockchain operation-interface:

Adopt distributed cloud deployment, to increase the stability and handling capacity of the interface;

- Support invoking by rpc;
- Support json data format;
4.1.2 Smart contract:

At present, the contract layer of the traceability chain has been fully developed, and a cloud platform for the decentration of traceability chain has been built. To make it easier for developers, we complete the verification of traceability anti-counterfeiting code, the inquiry of logistics code based on the contract, all of which are smart contracts. The location of traceability chain is in the public commercial application platform, so the traceability chain will take different ways to public chain (main chain) ecological integration and promote the formation with other smart contract platforms. The traceability chain will recruit and stimulate the third-party team (Technology Development Company), build more actual and practical landing application projects based on the traceability chain, the front-end audiences will be ordinary consumers, and then it will accumulate and precipitate large numbers of fans for the brand enterprises traceability chain and subchain.

4.1.3. Various subchains

Functional characteristics of subchain

When the subchain is created, it can realize the customization of general function through invoking the bottom interface of the traceability chain, which can make the subchain support all the functional characteristics of main chain, also can restrict or not provide certain functional characteristics according to application scenarios of the subchain, thus the functional characteristics consistent with application scenarios demand of specific subchain can be quickly custom-made.

Functional characteristics supporting customization include subchain token transactions, transactions of subchain token and main chain token, cross-subchain token transactions, subchain business transaction logic, pseudonym (Aliases), voting system, account control, instant message, data storage, etc.

Subchain token transactions

Through customization, subchain can support the subchain protogenetic token transactions, transactions of subchain token and main chain token, and cross-subchain token transactions. When the cross-currency transactions are conducted, the token holder puts forward transaction request, the transaction request information contains the types of transaction (buying and selling), domestic currency type, target currency type, transaction price, and the number of transaction, traceability chain agreement will make a match and complete matching buying and selling by means of decentration, and the generating transaction record will be recorded in two crossing chains, compared with the traditional trading center, it has the advantages of publicity, fairness, reliability and traceability.

4.2 Consensus Mechanism DPOS

The node consensus at the bottom of the traceability chain uses the DPOS algorithm, and all blockchains are essentially deterministic state machine driven by transactions. Consensus
mechanism is a process to agree on determining the order of transactions and filtering invalid transactions. Many different consensus algorithms can produce the transaction sequencing with same effect, but DPOS has run reliably on many blockchains for many years, which is proved to be a strong, safe and effective consensus mechanism.

Like all consensus algorithms, the maximum damage possibly caused by block producer is review. The validity of all blocks must follow the deterministic open source state machine logic.

DPOS algorithm summary

The DPOS algorithm can be divided into two parts: how to select a group of block producers and scheduling block production. The selection process should ensure that the interest holder has the ultimate control of the situation, because when the network is running abnormally, the loss of the interest holder is the greatest. Since the selection process itself has little influence on how to reach consensus actually, this article will focus on introducing how to reach a consensus after the block producer is selected.

In order to better explain this algorithm, it is assumed that there are 3 block producers, A, B and C. Because reaching a consensus requires 2/3+1 majority to make a ruling of all situation, in this simplified model, the producer C is assumed to be the role of breaking the deadlock. In reality, there are 21 or more block producers. Similar workload proves that the general rule is the longest chain wins. At any time, when an honest node sees a longer valid chain, it will switch from the current bifurcation to this longer valid chain.

The certificate of entrusted rights and interests (DPOS) is strong in any case where we can think of natural network fracture, even when most producers are cheating.

Unlike some other consensus algorithms, DPOS also can continue to function when most producers are unqualified. In this way, the community can vote to replace the unqualified producers until the 100% participation rate is restored. In my cognitive domain, no other renewal algorithm can remain strong under such high intensity and variable failure conditions.

In the final analysis, the reason why DPOS has such powerful security comes from the algorithms of its selected block producers and verification node quality. The approval of voting process can ensure that one person cannot choose alone and assign any producer even he has 50% valid voting right. The design of DPOS is aimed at optimizing the mechanism that the honest nodes of the strong network connections 100% to participate in the consensus. This allows DPOS to confirm the transaction within the average 1.5 seconds and with 99.9% determinacy, and simultaneously degrade in an elegant and detectable way, recovering from degradation to normal is just a piece of cake.

4.3 Application Layer

In the early stage, the traceability chain provides a general application protocol at the bottom, to develop different landing projects, and fastest make the blockchain benefit the masses.
For most people, the goal of using and developing blockchain is not to recreate a set of blockchains by themselves, only wishes to develop their own applications based on the existing blockchain bottom or technical framework.

TAC is a blockchain application program that provides the next generation of platform, allowing the development and distribution of blockchain application program based on the traceability chain. TAC provides an easy-to-use interface and a full-featured ecosystem. Through TAC, developers can build, publish, distribute and achieve aims by the application program in the supply system allowed to use custom-made blockchain, smart contract, cloud storage and computational node.

TAC provides standardized program module and makes development template aiming at different business scenarios.

### 4.4 Framework Advantage

**Available to Coexist with Traditional Central Data System**

Can realize the second-time business development without revising existing centralization system and realize the coexistence, natural switch or overall migration of the new businesses and original businesses. Under the actual background that the blockchain lands, how to realize much friendly upgrading and switch is the key.

**Visual Intelligent Contract Generation Template**

TAC provides open intelligent contract template, open industrial contract template and intelligent contract generator for operators, which greatly lowers the intelligent contract making threshold and flexibility ratio and may enable more developers to join in the tractability chain ecology.

**Available to Mix with Mainstream Technology Frame Together**

TAC application and development can be compatible with all mainstream technology frames at present, adapt to original technology frames of the industries and save the migration cost.

**Qualified for Million-level Daily Processing**
TAC technology test result shows that its daily event processing capacity has reached million level and may satisfy the enterprise long-term business development. We also continue the technology reform and upgrading to unceasingly promote the processing capacity.

**Automation of the System Running and Maintenance**
The node privation arrangement may realize the node running and maintenance automation, second-level start of the services on the chain and enhance the efficiency and save manpower.

**Perfect Developer Support**
TAC development kits are connected to API. The developers authenticated in the community may conveniently use various functions and sources on the chain and smoothly develop asset wallet, browser, and various apps such as traceability, anti-counterfeiting, supply chain finance and big data marketing.

The cross-chain services of TAC represent an interaction mechanism completed by the initiator and requester without any third-party involvement, whereby the data transmission and sharing among platforms, platform services and users’ asset transaction are completely independent of the centralized platform to resolve such problems as data isolation on information island and difficult circulation, thus remarkably reducing the transaction costs.

The smart contract initiated based on TAC enables cross-chain test with Ethereum. The next step will be cross-chain interfacing with AION, Taiyi Clud, Ant NEO and Nebulas NAS to secure the leadership in the technical support services for future global commodity digitalization chaining.

V. The Ecology of Traceability Chain

The ecology contains: network node, cloud platform, technology developer, manufacturing enterprise, consumer
5.1 Network Node (Shared Hosting)

- Network node supporting the public chain of traceability chain obtains service exchange or token award through cloud services of shared hosting;
- Each enterprise customer’s server host resources or leased cloud host resources are shared to realize distributed distribution;
- Enterprise customer’s related big data content will be distributed on thousands of shared hosts, and its own host will also be responsible for the contents of other enterprise customers. These data contents are encrypted to ensure data security.

5.2 Unified Cloud Platform

The platform for the core of the traceability chain, provides a convenient development environment and bottom interface support for the developers, including the APP inspection end of the mobile phone and the landing of the WeChat mini apps

- Subchain management system: subchain generation, operation and maintenance
- Developer information and development project schedule management system
- The commodity sole identify information management system
- Consumer information management system
- Enterprise information management system
- Label management system: bar code, two-dimensional bar code, three-dimensional bar code, RFID
- Mobile marketing public platform interface group
- Mobile e-commerce public platform interface group
Absorbed In Creating Global Biggest Traceability Public Chain

Mobile phone checks the APP interface group
Secondary development middleware of the WeChat mini apps

One Code for One Commodity, Functional Structure Chart of the Traceability Anti-counterfeiting System

5.3 DAPP Developers

DAPP developers are enterprises or individuals who have been engaged in traceability anti-counterfeiting business in the past or are interested in expanding the traceability anti-counterfeiting business and technology of the blockchain. Through the traceability chain, the developers can easily conduct the blockchain formation of the traceability anti-counterfeiting application, and use the latest technology to serve brand enterprise, thus seizing the early advantage of the market.

The collection of the application development enterprises and individuals of the traceability anti-counterfeiting business, the establishment of traceability chain schools and developer clubs and training and road show for the global tour.

5.4 Brand Enterprises

The enterprises in the traceability chain ecology have the following characteristics
1. They have a rigid demand for the traceability and anti-counterfeiting of commodities
2. They dare to explore new technologies and new marketing models
3. The consumers of the enterprises have extensive demand for the quality and authenticity of the enterprise’s commodities.
Expansion of enterprise customers
1. Developers carry out expansion
2. Traceability chain sets up the connection platform
3. The traceability chain is to establish cooperative relations with various related government departments, institutions, organizations and associations, deliver speeches for relevant enterprises and guide enterprises to use traceability platform of the blockchain.

Earnings of enterprises
1. The full digitization and traceability of the production, circulation and sales of the products of enterprises can be realized
2. Consumers can easily check the traceability and anti-counterfeiting of the enterprises’ commodities, which can improve the brand credibility of enterprises
3. The host of the enterprise can join the shared host cloud and the rich support force can earn the token, which can reduce the network cost of the enterprise
4. Enterprises can conduct marketing interaction and commodity exchange on the APP of the traceability chain, so as to increase fans, promote brand and increase sales
5. Enterprises from various industries that take the lead in using the blockchain will gain more attention from the market and media publicity to realize the corner overtaking

5.5 Consumers
In the ecology of traceability chain, the consumer (user) is an important component. The commodity buyer of the production enterprise can use the service of the platform through traceability anti-counterfeit authentication; obtain TAC through anti-counterfeit authentication and marketing interaction or by using APP to scan and use TAC to exchange the commodities provided by the merchants.
Through the improvement of consumers’ use of APP, the traceability chain can carry out more ecological service functions on the APP.

VI. Summary of Traceability Chain/TAC

In order to meet the needs of good ecological operation and commercial application, the Traceability Chain Coin is issued as the token of the system; TAC Token is called TAC for short.

6.1 Introduction to TAC

TAC is the token of traceability chain with a total amount of 1 billion, which will never be additionally issued; in the traceability chain ecology, it is indispensable and is the carrier of value delivery, which circulates between platforms, developers, enterprises, service institutions and consumers to make the whole ecology healthier and have more development motivation.

TAC is constituted via ERC20 protocol of ETH and is 1 billion in total;

6.2 Acquiring Way of TAC

Users: the users may obtain token awards by buying commodities. They can participate in marketing activities, scan and obtain the token awards after the anti-counterfeit authentication, or they can obtain the tokens through the community activities organized by the platform.

Enterprises: the promotion items are exchanged for tokens, and the rich support force of the shared host cloud is exchanged for tokens.

Developers: they obtain tokens by providing the enterprises with intelligent contract and application development or by participating in the developer activities organized by the platform.

6.3 Use of TAC

1. It is needed to pay or burn TAC when developing on the traceability chain, certifying application and using the service of the chain (such as the miner fees transferred on the chain); TAC is the only Token used for the application operation on the chain.

2. With the increasing number of customers and consumers who have cooperated with the traceability chain and the increasing trading volume in the chain, the traceability chain can receive more commission. The team will regularly take part of the commission TAC or part of the earnings to repurchase TAC and destroy it according to the price of the secondary market at that time.

3. TAC can be used as a vote when a witness is elected.

Specific to the token acquisition and expenditure of three participants, namely, enterprise, developer and consumer
<table>
<thead>
<tr>
<th>Participants</th>
<th>TAC Acquisition</th>
<th>TAC Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>Cloud host sharing</td>
<td>Running fuel consumption of enterprise subchain</td>
</tr>
<tr>
<td></td>
<td>Sensor information sharing</td>
<td>Obtain technical services</td>
</tr>
<tr>
<td></td>
<td>Exchange of commodities and promotional items</td>
<td>Cloud host resource consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sensor information acquisition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obtain a detailed data portrait of the consumers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reward consumers according to the consumer loyalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the big data reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conduct a transaction in the Exchange</td>
</tr>
<tr>
<td>Developer</td>
<td>Provide technical services for enterprises</td>
<td>Apply for the payment interface of the traceability chain</td>
</tr>
<tr>
<td></td>
<td>Provide application for the users</td>
<td>Buy commodities</td>
</tr>
<tr>
<td></td>
<td>Develop the modules for other developers to buy</td>
<td>Buy relevant virtual services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exchange transaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conduct a transaction in the Exchange</td>
</tr>
<tr>
<td>Consumer</td>
<td>Scan the code for the mining reward</td>
<td>Exchange promotion items</td>
</tr>
<tr>
<td></td>
<td>Mining reward in the DAPP</td>
<td>Purchase commodities</td>
</tr>
<tr>
<td></td>
<td>User identity authentication</td>
<td>Consume virtual service</td>
</tr>
<tr>
<td></td>
<td>Filling of the users’ detailed information</td>
<td>Conduct a transaction in the Exchange</td>
</tr>
<tr>
<td></td>
<td>Participate in marketing activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate in activities of the traceability chain</td>
<td></td>
</tr>
</tbody>
</table>

**The operation of tokens is divided into four layers**

1. The bottom layer of the blockchain, creation and operation of the application
2. The support layer of the application, modules and interface of the technology invocation platform
3. Shared hardware, sharing of resources such as cloud host and sensor
4. Application layer, the circulation of tokens in the DAPP associated with the interaction between the consumer and the enterprise

Through the operation of TAC tokens, we hope to organically connect the developers and brand...
enterprises, make frequent interactions between them and build an interactive community of high-quality commodities in the era of consumption upgrading in DAPP.

1) The consumer is real-name
2) The consumer information is detailed
3) Users form circles in the community and are associated with the attachment to a specific category of commodities
4) To have abundant introduction and evaluation on the commodities of quality
5) To have wonderful brand promotion activities
6) To have trustworthy high quality commodities to buy
7) Brand enterprises can know more about their customers here, and understand consumers’ cognition and expectation of the brand
8) Brand enterprises can build their own loyalty membership system through more abundant user big data
9) Sell good commodities to the right people for a good price; all this, trust is the foundation.

VII. Historic Experience and Development Plan of Traceability Chain

7.1 Team Experience

➢ In 2004, Created the earliest internet project “Tianxia Net” in China and provide mobile social game services.
➢ In 2007, Tianxia Net obtains two-round millions of investment and the website users have exceeded ten million.
➢ In 2009, the overseas listing company DENA merges “Tianxia Net”.
➢ In 2010, Smart-Snapshot Co., Ltd. was established, and launched the first Chinese QR code recognition APP ”Snapshot QR Code” in China.
➢ In 2012, the users of Snapshot QR Code exceeded 10 million people, and company received the first round of financing.
➢ In 2013, Smart-Snapshot promoted the mobile marketing and anti-counterfeiting traceability platform development, which served nearly one hundred enterprise customers.
➢ In 2014, the users of mobile phone APP reached dozens of millions, and the company won the strategic investment.
➢ In December 2015, Smart-snapshot Internet-of-things successfully listed in the new Agency Share Transfer System.

7.2 Development Plan

➢ In July 2017, the founder team began planning the traceability chain business based on block chain technology.
➢ In August 2017, the basic technical framework and business framework of the traceability chain were completed
➢ In September 2017, the protocol layer and platform layer development of traceability chain started up
➢ In January 2018, Traceability Chain White Paper Version 1.0 was published and got online on official website
➢ In March 2018, the traceability chain platform partner recruitment conference will be convened
➢ In May 2018, the traceability chain 1.0 was launched, inside major chain and DAPP.
➢ In June 2018, TAC will be dealt in online exchange and the major net and ETH trans-chain intelligent contract are online.
➢ In July 2018, the traceability chain partner conference will be held, and the company will sign contract with at least 5 technical service companies and 3 industrial associations
➢ In August 2018, enter into the markets in South Korea and Japan; upload English, South Korean and Japanese App and sign with local partners.
➢ In December 2018, the annual ecological conference of the traceability chain will be convened, the company signed contract with 10 technical service companies and 6 industrial associations; 10 applications will be landed, 1-2 foreign applications, covering 1-2 significant industries
➢ In January 2019, the traceability chain version 2.0 will be published, which will provide more development modules, and the company will launch into the European and American markets
➢ In June 2019, the traceability partner conference will be convened, and the company will sign contract with 30 technical service companies covering the main provinces in China, 20 applications will be landed, with more than 10 overseas partners.

VIII. Traceability Chain Foundation and Organization Framework

8.1 Foundation

In order to realize the development, construction and governance transparency mechanism of the traceability chain, boost and advance the smooth implementation and carrying-out of the traceability chain, and promote the safe and harmonious development of the open-source ecologic society, Traceability Chain has built Traceability Chain Foundation (herein after referred to as the “Foundation” for short) in Singapore. It is approved by ACRA and accepts juridical regulation of Singapore. The Foundation will manage the general affairs and authorized affairs of the open-source community project through the established governance structure.

Through the data framework of the blockchain, the Foundation may realize blockchain form of the flows such as raw material procurement, production, warehouse-in,
warehouse-out, distributed logistics, store, shelf checking, sales, user’s purchase, user’s evaluation, and after-sale service, reach win-win benefits of the interested parties such as the user, store, partner, the third party and government, guarantee the effectiveness, sustainability and safety of the project management, facilitate the development and promotion of the traceability and anti-counterfeiting blockchain technology. By combining the traceability and anti-counterfeiting blockchain technology and more situations and a series of measures such as credit awards, marketing stimulation, e-commerce and sensor awards, it may realize the generation, donation and transaction functions, etc. of TAC currency and build the ecosystem of the traceability and anti-counterfeiting blockchain.

8.2 Organization Framework

In order to rationally and high-efficiently use the fund and resources of the Foundation under the public and transparent principles, boost the fast development of the traceability chain, and realize the landing of the industries, situations and applications that combine the traceability chain, the Foundation is composed by the product staff, development staff, market staff, marketing staff and function department. The organization framework includes decision-making committee, product design center, technology research and development center, market promotion center, running and marketing management center, finance and human resources management center. The detailed organization framework figure is as below:

Figure 5 Organization Framework of the Foundation

- Decision-making Committee

The decision-making committee is the highest decision-making organization of TAC and bears the final decision-making function. The employees in decision-making committee have no post seniority difference and shall be responsible for reviewing and approving the strategic plan, annual plan and budget of the Foundation and voting for the significant ecological issues of the TAC on behalf of the Foundation. The members of the first decision-making committee are elected by the founding team and investors of the TAC.
The decision-making committee sets chief executive officer who is elected by the decision-making committee by voting and is responsible for the decision-making committee.

The detailed duties and responsibilities of the chief executive officer: take charge of implementing relevant decisions and rules of the decision-making committee; manage daily running and marketing and complete the ordered various indexes; and regularly report the implementation conditions to the decision-making committee. The chief executive officer mobilizes the departments such as product design, technology research and development, market promotion, running and marketing, finance and human resources in charge of the establishment, research and development, running and marketing and maintenance affairs, etc. of relevant products of the TAC.

**Product Design Center**

The product design center is divided into product section and design section. The product staff shall take charge of exploring the possibility of combining the traceability chain and relevant industries, fields and situations and applications, building sustainable detailed development strategy, carrying out market survey, making product model, mastering project development schedule, and guaranteeing the case landing and implementation; the design staff shall complete UI design and the design of other images, etc.

**Technology Research and Development Center**

The technology research and development center is composed by the core development staff in charge of the technology development, development and review at open terminal, open source code management, source code revision, development, test, online, review and system maintenance of relevant and derivative products, etc. at bottom layer.

The product staff and the research and development research will keep continual concern on industrial dynamics, know the hot topics in commodity, communicate with the participants in the community, hold technology communication meeting irregularly, know the technical development trend and boost the common development of both parties.

**Market Promotion Center**

The market promotion center is responsible for the technology promotion, promotion of the core products and derivative products, partner exploration, service supply, media contact and cooperation, advertisement publicity, design of user interaction, survey, determination and signing of new added promotion channels of TAC and making publicity plan according to the requirements of the partners and users.

**Running and Marketing Management Center**

On the basis of the products designed and developed by the product staff and research and design staff, the running and management center serves the community and project and carries out running and marketing, publicity and promotion for TAC project and products.
The running and marketing staff shall be responsible for the product running and marketing, positively exploring new users, and combining TAC, terminal users, and partners closely so as to create the traceability and anti-counterfeiting blockchain with the fastest and widest landing.

The product staff, research and development staff, market staff, running and marketing staff will have close cooperation and, according to the actual conditions, convene people from relevant departments to hold establishment and project tracing meeting and communicate the project progress and necessity to provide better traceability and anti-counterfeiting blockchain service for the partners and users.

Finance and Human Resources Management Center

It shall be responsible for handling relevant affairs of the Foundation such as finance, human resources, legal issues and administration. The financial staff shall be mainly responsible for the application and review of the fund financed for the project, payment and review of daily running and marketing expenses, cost control and risk management and control, etc.; human resources shall be responsible for managing the attendance and salary of relevant staff; legal affairs department shall be responsible for drafting and reviewing various documents and avoiding various possible legal risks; the administration shall be responsible for relevant daily administrative matters.
IX. Team and Consultants

The Founder: Wang Pengfei

Chairman of Smart-Snapshot Internet-of-Things, EDP of School of Economics and Management, Tsinghua University. Mr. Wang Pengfei, an early pioneer in the field of mobile Internet in China, is also a well-known continuous entrepreneur in the Internet circle. He won the 26th Session "Beijing May-4th Medal" in 2012, and 2009 "Shanghai IT Top Ten Youth" in 2009.

In 2004, Wang Pengfei founded China's largest mobile phone sociality and game website --- tx.com.cn in Shanghai. After getting two rounds of venture investment of USD funds, in 2009, tx.com.cn was merged by the overseas listed company.

In March 2010, Wang Pengfei went to Beijing for starting a new undertaking, and finally locked the QR code technology service in the field of Internet of Things as the direction of the start-up, established Beijing Smart-Snapshot Information Technology Co., Ltd., promoted the first Chinese QR code identification software with independent intellectual property --- "Snapshot QR Code", which was also an important milestone in the development of China's QR code industry. In 2014, Smart-Snapshot consolidated with Beijing Cloud Database Information Technology Co., Ltd. and established the Beijing Chengpin Snapshot Internet of Things Technology Co., Ltd., Mr. Wang Pengfei worked as the chairman, and Snapshot Internet of Things listed in the New Agency Share Transfer System.

Mr. Wang Pengfei founded the "Jidang New Agency Share Transfer System Club" in 2015, which attracted hundreds of chairman, investment fund partners, securities, law firms, accountant firms and media as well as the experts of New Agency Share Transfer System, and held several conferences with thousands of people in Beijing and Shanghai respectively, which collected wide public relation and resources in various industries and the investment financial field.

Mr. Wang Pengfei also served as the director of Automatic Identification Manufacture Association of China, vice-chairman of China Anti-Infringement and Anti-Counterfeit Innovation Strategic Alliance, and the director of Beijing Youth Chamber of Commerce.
**Development: Yang Huagang**

Master, graduated from Shanghai Jiao Tong University, major in Management, intermediate professional title.

General Manager of Shanghai RF Information, with 15 years of consulting and implementation experience in the field of enterprise informatization, he has served well-known enterprises such as ORACLE China and UFIDA Software. In 2011, he involved in the traceability industry, with several patents and software copyrights, combining the technologies such as RFID, barcode and sensor, he possesses successful cases in industries such as manufacturing, furnishing, food and accessories. He has provided informationization services for enterprises including Shanghai Tobacco, Fujian Expressway, Fujian Cement, Guanfu Modern Household Wares, Dongfeng Motor, Haitian Flavouring and Food, CRRC and Shanghai Baoye Group etc.

**Brand: Wang Xiao Ying**

Before entering into traceability, I was devoted in work relevant to brand, public relation and product marketing. She has once run press and served many kinds of media platforms for dozens of years such as Tecent Finance Center, Phoenix Finance Center, Sohu Finance Center, and Family Business.

**Business: Tang Zhengguang**

Has 18-year internet business experience and graduated from Dalian University of Foreign Language; devoted in Chinese mobile internet field for business and market development; has successively worked for Intel Eplise, Shanghai Zhouxin and Huawei; entered into digital token field in 2014 and has successively been devoted to mining field and traditional investment business; now works as global business partner of the traceability.
Capital: Yu Guohua

With 13 years of working experience, till 2008, specialized in investment banking business such as listing of enterprises, merging and reorganization of listed companies, value management of listed companies in Western Securities, Great Wall Securities and China International Capital Corporation Limited with rich experience in operation of domestic and foreign enterprises listing, capital operation and value management of listed companies. In recent ten years, Mr. Yu Guohua has participated in the listing arrangement of many enterprises, the merger and reorganization and value management of listed companies.

Prior to the work in the securities company, Mr. Yu was engaged in a financial audit in the listed company SANY Heavy Industry (60031, SH).

Overseas Development: TONY

Mr. Chen began his business and investment in Beijing 15 years ago. TT Capital Management which is under his management is the first investor of d.cn. After investing, the company received the investment from Qiming vc and Softbank. He is also the developer of "One Chinese a Day". The APP ranks first in the paid education APP of Amazon's APP Store. Mr. Chen has been the visiting teachers in Tsinghua University to share his industry experience. He graduated from UC Berkeley as bachelor and Stanford as master.

Mr. Chen is responsible for the expansion of the US market of Traceability Chain and the investor relations with Silicon Valley.
Consultant  Wang Binsheng
 Consultant of Blockchain Joint Development Organization, angel investor, blockchain idea disseminator

Kevin Yu
 Co-founder and Chief Technology Officer of Socedo and Uptown Treehouse

In 2012, Kevin established the enterprise consultant company Uptown Treehouse in Los Angeles to provide marketing planning on social media platform for well-known enterprises such as Microsoft, Uniqlo, Nike, Guess and Western Union. In 2014, he created Socedo facing big data companies. The company becomes located in top-class enterprise incubator Techstars over the America.

Kevin graduated from Guanghua School of Management, Peking University and obtained the Master of Management and the Master of Engineering in University of Maryland, Kevin actively participated in the construction of the Seattle area and the Chinese entrepreneurship community, he is also serving as the advisor of USA Founder Institute and the consultant of China Entrepreneur Network (CEN).

Consultant: Troy Ren
CAS Investment Management, Vice President

Bachelor of Statistics of Bucknell University and Master of Management of the Fuqua School of Management of Duke University; once created internet company and achieved financing during school time; once worked as analyst of the wealth management department of Goldman Sachs; supported global mutual fund platform of over 90 billion dollars of Goldman Sachs; mainly focused on blockchain, digital
Consultant: Shawn Sha  
Co-Founder of Bit Viva Fund in Canada  
Co-founder of Coiex.io Exchange  
Secretary-General of China-ASEAN Blockchain Industrial Cooperation Committee (Preparation)  
Master of Finance of Cardiff University  
Master of MBA of Lancaster University  
Joined in establishing many quantitative hedge funds inside and outside China; once worked as partners of Shanghai Liangdian Investment, Goldenwise Capital and Hongshi Capita; fieldworker who participated in blockchain investment early in North America; joined in the investment and incubation of star projects in North America such as SKRUMBLE, AION and STK; has rich experience in developing and incubating overseas blockchain projects, development of quantitative transaction strategy and development of arbitrage strategy.

Consultant: Dr. Eric Wang  
Chief Risk Controller of YOUBI, co-founder of MATRIXON, co-founder of BB INDEX; Doctor of Computer Science of University of Waterloo; many years of quantitative financial experience; positive blockchain investor and participator; has once worked for many famous financial organizations such as RBC Bank, BMO Bank, AON BENFIELD, Teachers’ Pension Fund of Ain and Canadian Pension Fund.

Mr. Chen Caigen
Founder of "Chen Caigen Channel", partner of Weiyou Capital

Mr. Zheng Rongyao
Product supervisor of former OKCoin, director of OKLink Division.
Graduated from Institute of Automation, Chinese Academy of Sciences, joined OKCoin in 2014, took charge of product management of OKCoin, possess the experience and resources in digital currency transaction platform. In 2016, OK Company established the OKLink Division to explore the application of block chain in cross-border payment, and Zheng Rongyao was the director of the Division, and was responsible for managing OKLink business. With several years of experience in block chain and digital asset, Zheng Rongyao has deep understanding on block chain technology and application scenarios.

Brand: Tang Haiyan
20 years of experience in Internet with rich experience in products, technology and business.
In 2004, served in China's biggest download service provider "Thunder", and worked as the executive editor of Thunder Online.
In 2006, served as the Supervisor of Strategic Cooperation Department and New Product Department of the biggest health vertical gate website in China "www.39.net";
In 2009, joined NetDragon Websoft Inc., worked as the General Manager of 91 Mobile Phone Assistant, and took charge of business and channel of South China Region;
In 2013, established the Candy Network, and obtained the angel investment from the founder of Tencent Zeng Liqing.
Absorbed In Creating Global Biggest Traceability Public Chain

Professor Li Ya

Postdoctor in Economics and Postdoctor in Business Administration of Nankai University, Gold Medal Professor of Business School of Nankai University, Director of Modern Management Institute of Nankai University, invited senior researcher of Private Economy Research Institute of Peking University, financial review expert of CCTV2, expert in enterprise investment, financing and governance, and expert in Internet transformation. He served as the director of the One Belt and One Road Financial Industry Research Institute, expert of Binhai International Equity Exchange, researcher of World New Economy Institute, senior consultant of Tianjin Market Economy Research Promotion Association, and the long-term management consultant of several Internet enterprises. Li Ya is mainly engaged in the teaching and research of Internet strategy, private enterprise management, corporate governance, capital operation and enterprise transformation, and is focusing on the Internet industry, health industry, education industry and financial industry.

Consultant: Wang Zishang

Author of Cloud Management 2.0; Founder of TokenSky; Founding CEO of TOPM; Member of Confidence Blockchain Union of CAICT; AIIA Member, TFC Secretary-General.

Has works Cloud Management 2.0 and Cloud Management: Organization and Management Reform in Internet+ Times; won the first “Good Craftsman” title of Posts and Telecom Press; won titles of “Top10 Technology Women Entrepreneurs” and “She’s Entrepreneurship Teacher” from China Women Development Foundation in 2017; China Technology Management Outstanding Person in 2017; founded SP Forum in 2002, which later upgraded to TOP Net and TOPM; landed in Innovation Layer of National Equities Exchange and Quotations in 2016; TOPM includes following businesses in blockchain field: Tokensky Meeting, blockchain game union, hundreds of media procurement platform, i-link blockchain training college.
Consultant: Mr. Pan Yuefei

Once worked as chief editor of Sohu Technology, co-founder of wemedia, chief supervisor of global content of Cheetah Mobile, and COO of Duanqu.com; once honored with 2013 Chinese Top10 Self-Media and 2016 Outstanding Contribution Award in Self-media Industry; once compiled three books, namely Online (included into 2016 Top10 Books of Nanfang Metropolis Daily), Ultimate Secret for WeChat, and Bonus of Self Media; planed and edited 9 commercial and financial works such as Overturn Finance: The Chance Tide for Internet Finance; once held multiple investment and merger cases in TMT field. Now he works as the founder of Kunchi Media Technology Co., Ltd. and the major product is Zn Finance. Zn Finance is called as “a commercial and financial media with the strongest growing power in China”.

Dean Zhu Wei
Founder and Director of Beijing Dayue Law Firm
Graduated from China University of Political Science and Law

Chairman Wang Tong
First one in China's network planning

X. Risk Assessment and Legal Affairs

10.1 Risk Assessment
As a kind of new investment mode, digital asset investment has different risks. Therefore, the investors shall carry out further operations before cautiously evaluating the investment risks and self capacity for bearing and defending the risks.

- **Policy Risk**
  
  Since that the state regulation on blockchain project and digital asset exchange form is not clear, the participants may suffer loss due to certain policy reason.

- **Supervision Risk**
  
  At present, the digital asset transaction has certain uncertainty. Since there lacks effective regulation in digital asset transaction field, the digital asset tokens may rise and drop sharply. If the individual participant lacks experience, after entering into the market, he may not bear the asset shock and psychological pressure from the constant uncertainty. It cannot be denied that in the foreseeable future, there will be regulation rules issued to rule and specify the blockchain and electronic token field. If the regulation subject carries out specific management in the field, the tokens bought in exchange period may be influenced, including but not limited to the fluctuation or limitation in the aspect of price and easy sale.

- **Market Risk**
  
  In the digital currency transaction market, if the overall value of the digital asset market is over-estimated, the investment risk may enlarge and the participant’s expectation on the exchange project may be excessively higher. The excessively high expectation cannot come true.

- **Competition Risk**
  
  As the information technology and mobile internet develop, the digital asset with “bit currency” as representative emerges gradually. Various decentralized applications will appear successively and the industrial competition will become fiercer and fiercer. However, as other application platforms appear and expand constantly, the community will face continual running pressure and certain market competition risk.

- **Tokens Sale Market Risk**
  
  Since the token sale market environment is close to the overall trend of the digital asset market, if the market is depressed overall, or influenced by other uncontrolled factors, then it may lead to that even if the token has good prospect, the price is still underestimated for long time.

- **Hacker or Theft Risk**
Hacker or other organizations or states may try to break the traceability chain platform in any ways, including but not limited to a series of attacks such as refusing service attack, Sybil attack, smurfing and malicious software attack.

- **Risk from Losing Private Key**
  The logging-in voucher of TAC owner shall keep cautiously. If lost, the TAC may be lost. The best and safest logging-in voucher storage form is that the holder keeps the private key in one or several places and it’s better not save in public computer. After the held TAC is withdrawn into own digital wallet, the unique form included in the operating address is the holder’s private key (namely secret key or wallet password). The user shall be responsible for protecting the relevant private key self for signing and proving the circulation of the asset ownership. The user understands and accepts that if his private key document or password are lost or stolen separately, the obtained TAC relevant to the user’s account (address) cannot be recovered and will be lost forever.

- **The Holder’s Voucher-related Risk**
  If any third party obtains the holder’s logging-in voucher or private key, the party may directly control the holder’s TAC. In order to minimize the risk, the holder shall protect the electronic equipment against the unverified access request from visiting the content in the equipment so that personal private key and digital asset are stolen.

- **Risk that the Application or Product Fail to Reach the Self Expectation or the Holder’s Expectation**
  The traceability chain platform is present at iterative development stage. Any TAC self or holder may have excessively higher expectation on the aim or imagination of the function or form of the traceability chain platform or TAC (including the participant’s behavior). Any wrong analysis or the a design change may lead to such situation.

- **Uninsured Loss Risk**
  Dislike bank account or the account of other financial organization, there is usually not insurance protection by storing in the account on the traceability chain platform or relevant blockchain network. For the losses under any situation, no public individual organization will underwrite for your losses.

- **Systematic Risk**
  Although some of the neglected critical defects in software on the traceability chain platform or the risks caused due to large-scale fault of global network infrastructure will be weakened greatly as the time goes on, for instance, repair the bug and break the computer bottleneck, other
risks cannot be foreseen. For instance, the political factor or natural disasters that may lead to partial or global internet interruption.

- **Bug Risk or Risk from Accelerated Development of Password Cryptology**
  The speedy development of cryptology or the scientific and technical development such as the development of quantum computer may bring the breakdown risk to traceability platform, which may lead to the loss of TAC.

- **Other Risk**
  The cryptology-based digital token is a kind of brand-new and untested technology. Except the risks mentioned in the white paper, there are still some risks that the founding team does not mention or has not foreseen. In addition, other risks may appear suddenly or appear in the combination way of multiple risks.

### 10.2 Supplemental Introduction

Unless the situation clearly specified herein, the company will not make any statement or guarantee for TAC in the white paper. Each participant shall decide to obtain any TAC according to own information obtained from traceability chain platform, TAC and the disclosure in the text.

### Disclaimer

The Foundation disclaims hereby: not to bear any liabilities for following situations.

1. Use of the income from TAC sale;
2. Terminate TAC sale in advance for any excuses;
3. Any person circulates or speculates TAC;
4. Fail to timely and completely disclose any information on developing traceability chain platform;
5. Any fault, breakdown, roll-back or forced separation of the source code on traceability chain platform;
6. Any application procedure, intelligent contract or other procedure on traceability chain platform;
7. List or quit TAC in any encrypted digital asset conversion;
8. Delay or rearrange the development of traceability chain platform, which leads to a failure in reaching any expected milestone;
9. Any TAC sale participant discloses, loses or destroys his/her private key to TAC wallet;
10. Traceability chain platform or TAC cannot reach any specific purpose or is not suitable for any specific use purpose;
11. Traceability chain platform development fails or quits, which leads to a failure in delivering subscribed TAC to the holder;
12. Anyone joins in TAC sale in breach of any anti-money laundering, anti-terrorist financing or other regulatory requirements in any juridical region;

13. TAC is divided by any government, quasi-government, right organization or public organization or considered as certain currency, securities, commercial notes, transferable notes, investment or other situations that may be forbidden, controlled or limited by certain laws;

14. Any person joins in activities in breach of any statement, guarantee, obligation, contract or other rules, which causes defeat and failure in indexing the payment or getting relevant purchasing TAC;

15. Any risk factors disclosed in the plan and any damages relevant to the risk factor; losses, claims, liabilities, cost and other negative influences.

10.3 Legal Affairs

- Legal Affairs
  Traceability Chain Foundation is founded in Singapore. If there is any affair necessary to seek legal opinions, please confirm according to local lawyer.

- Exceptions
  The document shall be only used to transfer information and shall not constitute relevant opinions on buying or selling digital assets. Any similar proposal or advices will be carried out under any trustable clause and feasibly applied laws. Above information or analysis shall not constitute investment decision or detailed advice.

  The document shall not constitute any investment advice, investment intention or investment instigation about digital assets.

  The document shall not constitute or understand the supply of any sale behavior or any behavior of inviting to buy and sell digital assets of any forms nor contract or commitment of any forms. TAC shall not bear any direct or indirect losses caused by involving in TAC project, including but not limited to:

  1. Reliability of all information provided in the document
  2. Any error, negligence or inaccurate information generated hereby.
  3. Or any behaviors caused hereby

  In addition, the users who fail to use the TAC correctly, if they lose the private key to the wallet, they may lose all rights of the TAC and even lose their TAC. TAC is not a kind of ownership or control right. The ownership of TAC does not refer to the ownership of relevant staff of the decentralization platform of Traceability Chain. TAC does not authorize the right of participating, controlling or making decision of the decentralization platform of Traceability Platform to any individual.

  Traceability Chain Foundation aims at changing for non-profit organization. What’s the users on Traceability Chain obtain is the use right of the application on Traceability Chain platform. The holder shall understand that, in legal scope, Traceability Chain does not make any clear or
hided guarantee and TAC is bought “according to status quo”. In addition, the holder shall understand that Traceability Chain will not refund under all circumstances.

**Exemption**

The company failure in demanding or compulsorily asking TAC sale participants to obey any clauses strictly or performing the rights of the agreement shall not be explained as the abandonment of the company rights or any rights for depending any such clauses. The Foundation’s any clear abandonment of any ruled conditions or requirements of the plan shall not constitute the abandonment of the future obligation of obeying the ruled conditions or regulations.

**Judicial Jurisdiction**

The TAC sale is initiated in many places worldwide and irrelevant to any specific juridical district. The buyer may be from any district beyond China, America, and Singapore.

**Title**

The titles used herein shall be only used for reference and shall not be considered while interpreting or interpreting the plan.

**Power of Interpretation**

Traceability Chain Foundation reserves the final power of interpreting the plan.

**XI. Version Change Record**

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