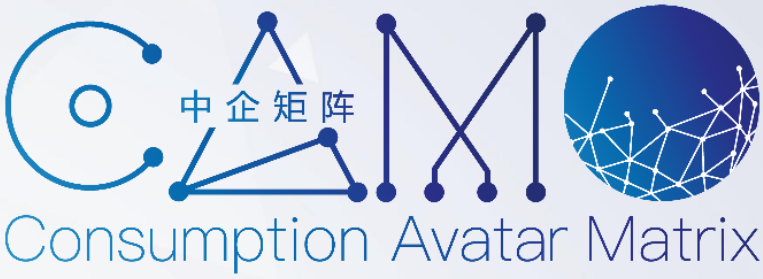


Consumption Avatar Matrix (CAM)

White paper

V1.8

Catalogue

Abstract

This paper mainly introduces the system architecture, core functions, characteristics and advantages of the system, and typical application cases of the blockchain of Consumption Avatar Matrix. Consumption Avatar Matrix is dedicated to building blockchain solutions for the business ecological environment with deep integration of Chinese enterprises. Consumption Avatar Matrix has made a number of technological breakthroughs and innovations, and has formed unique features and advantages in performance, extensibility, security and operation and maintenance. Consumption Avatar Matrix has been applied in many fields, including digital assets, trade finance, equity bonds, supply chain traceability, credit co-levy system, publicity and notarization, sharing of Internet of things, data security, etc. It has accumulated a large number of business application cases in various industries for a long time, and is committed to building blockchain solutions for the business ecological environment with deep integration of Chinese enterprises.

1.Philosophy Background

1.1. The History of the Blockchain

The birth of blockchain marks the beginning of the construction of a truly trusted Internet of the human. By combing the rise and development of blockchain, we can found that the interesting thing about blockchain is that it can establish reliable trust between points in the network, so that the value transfer process can remove the interference of intermediaries. It can not only expose information but also protect privacy, and not only make joint decisions but also protect individual rights. This mechanism improves the efficiency of value interaction and reduces the cost.

1.2. The Current Situation of Blockchain

The blockchain is an efficient digital accounting technology with distributed data storage, point-to-point transmission, consensus mechanism and encryption algorithm. Among them, the consensus mechanism is a mathematical algorithm for building trust and acquiring rights and interests (realizing the benefits and purposes of storing data) between different nodes (providing storage services) in the blockchain network, ensuring the stability and orderly development of the network.

Blockchain technology is considered to be a subversive innovation in computing models after after computing mode after mainframe, personal

computers and Internet. It is likely to cause a new technological innovation and industrial transformation all over the world. The United Nations, the International Monetary Fund, and the United States, Britain, Japan and other countries attach great importance to the development of blockchain, and actively explore and promote the application of blockchain. The Chinese government has also included the blockchain technology in the National Information Planning (13th five-year plan) in December 2016.

At present, the application of block chain has been extended to many fields, such as finance, energy, artificial intelligence, agriculture, entertainment IP, big data and so on.

1.3. The Core Technology of Blockchain

Blockchain technology is not a single technology, but a comprehensive technical system based on the research results of many aspects. We believe that there are three essential core technologies: consensus mechanism、cryptography principle 、distributed data storage and intelligent contractand.

- **Consensus Mechanism**

Consensus refers to the process of reaching a consensus on certain data, behavior or process through multi node interactions under preset rules. Consensus mechanism refers to the algorithms, protocols and rules that define

the consensus process. The consensus mechanism of the blockchain has the characteristics of "the minority is subordinate to the majority" and "everyone is equal". "The minority is subordinate to the majority" does not completely refer to the number of nodes, but also the computing power, the number of shares or other characteristics that the computer can compare. "Everyone is equal" is that when nodes satisfy conditions, all nodes have the right to give priority to the results of consensus, and after directly recognized by other nodes, and finally may become the final consensus result.

- **The Principle of Cryptology**

In the block chain, the communication of information is based on the asymmetric digital encryption technology of public key and private key to realize mutual trust between the two parties. In the process of concrete realization, the process of decrypting the information with one of the public and private key pair can only be solved by another key. And once one of the secret keys is made public (that is, the public key), another private key (that is, the private key) cannot be calculated according to the public key.

- **Distributed Storage**

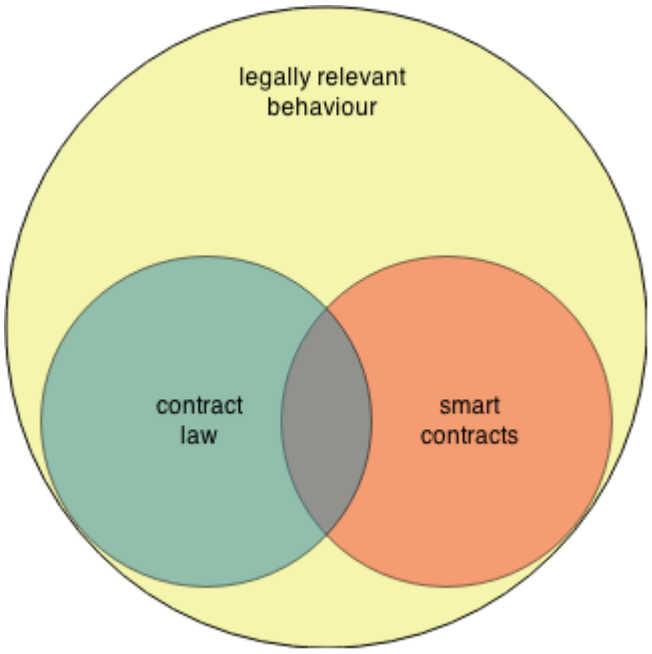
The distributed storage nodes in the blockchain all have independent and complete data storage. Different from the traditional distributed storage, the uniqueness of the distributed storage of blockchain is mainly embodied in two aspects: first, every node in the blockchain stores the complete data according to the blockchain structure. The traditional distributed storage usually divides

the data into several parts according to certain rules and stores them. Second, the storage of each node in the blockchain is independent and equal. It relies on the consensus mechanism to ensure the consistency of storage, while the traditional distributed storage usually synchronize data to other backup nodes through the central node.

- **Intelligent Contract**

An intelligent contract is a protocol that automatically perform the task that needs to be done by manually in order to complete the task. For example, a contract that can automatically calculate the amount of the party to be paid and arranges the contract to pay the amount of the amount. Intelligent contracts will reduce manual intervention in the execution of the protocol.

The term intelligent contract can be traced back to at least 1995, raised by Nick Szabo, a prolific, cross - domain legal scholar. In several articles published on his website, he mentioned the idea of intelligent contracts. His definition is as follows: "an intelligent contract is a set of promises defined in digital form, including agreements that a contractual participant can perform on these promises."



Picture 1.3 The relationship between intelligent contract and law

1.4. Development Trend of Blockchain Technology: Rapid Expansion of Application Area

The bitcoin appeared in 2009 and circulated since then. The total market value of bitcoin has exceeded $300 billion, which has become a successful application of blockchain technology in the field of digital money. Etheric fang introduced intelligent contract, applies complex contract rules to blockchains in code way, triggers execution automatically when meeting agreed conditions, and opens wider fields for the application of blockchains. The object that the blockchain need to carry is extended from the electronic money transaction record in bitcoin era to any application scenario that requires higher trust, safety and persistence other than financial applications, such as asset registration, voting, management and Internet of things.

As an important part of the distributed realization of blockchain, the

consensus mechanism has experienced full development, and the following main consensus mechanisms have been produced:

POW: Proof of Work, that is, the amount of Work to prove the consensus mechanism, also called mining mechanism. Bitcoin first adopts the POW mechanism to lead the generation of Block, by continuously trying to calculate the Block Hash value corresponding to each Block account, so as to meet the specific conditions, namely taking N zeros as the leading.This will increase the difficulty of generating Block, greatly reducing the risk of rapidly generating longer malicious branches to replace the correct branch chain, but at the same time, it also causes a great deal of waste of mineral processing resources.

POS: Proof of Stake, that is, the equity proof consensus mechanism. This is an upgraded consensus mechanism of POW, which controls the length of mining time according to the number of tokens and the time of holding tokens. It can effectively reduce mining time, but it still does not avoid the problem of the waste of mining machine resources.

DPOS : Delegated Proof of Stake, that is consensus mechanism for the proof of rights and interests. Its principle is that the tokens select a certain number of nodes by voting to complete the verification and accounting work for them. This consensus mechanism can greatly reduce the number of nodes involved in accounting and verification to achieve rapid consensus verification. But this mechanism also needs to rely on the existence of the token, so that some applications that do not require the existence of tokens are restricted.

PBFT: Practical Byzantine Fault Tolerance, that is practical Byzantine fault tolerant algorithm consensus mechanism. It is a conformance algorithm for message passing that achieves consistency through three phases, and determine the final block. If there are 3f+1 nodes, this algorithm mechanism determines that the existence of f error nodes can be tolerated and the consistency results are not affected. This mechanism can be separated from the existence of the currency. The consensus node is composed of the participants and the regulators, and the 2 to 5 second sharing delay can also meet the commercial requirements.

All kinds of consensus mechanisms have their own consideration and significance in their respective business scenarios and technical means. They have different aspects of improvement and upgrading, but also have different disadvantages. There seems to be no optimal consensus mechanism. To achieve the application of all kinds of consensus mechanisms, we can choose the appropriate consensus mechanism according to the specific application scenarios and optimize the application of block chains, which is the best way to get through more applications.

1.5. Distributed Commercial Ecological Environment

CAM starts from the smallest elements of business (people, things, money), digitize each element, and then establish a universal link. Through different smart contracts to establish various collaborative activities that map real

business, Provide the relevant value stream tools and systems that match it, and then evolve a new business model based on this collaborative model, and gradually build a new distributed industrial cluster running on the blockchain.

1) to digitize the target and and it is general digitization, this digital result can be accepted and used by all participants in the technology;

2) establish a relational connection between different data objects through intelligent contracts.

3) Use the abstract intelligent contract and the corresponding authority to carry out the combined modeling and customization of multi-layer intelligent contracts to map different business activities in the real business world.

4) the new digital assets (CAM Token (CAM)) provide the support of high speed value transmission;

5) And then develop a new business model that is credible and interconnected.

6) Different business models are integrated into each other to build a distributed business ecology.

Through this method, the upstream and downstream enterprises, users, government resources and information can be integrated to the maximum extent. Allow the coordination and cooperation between all parties achieve real digital, systematic operation, and the corresponding value flow is implemented synchronously. So that the cost of the industry and even the whole society is reduced, and the efficiency is improved. Resources can be optimally deployed

by distributed optimization, which is bound to bring about the birth of various new business models. The 3.0 era of blockchain will subvert all our present cognition, and we will enter a new era, an era that no longer has the crisis of trust.

2.The management mode of Consumption Avatar Matrix

2. 1. Economic Model

There are two native tokens in CAM, CAM and GAS.

CAM is the management token, which is used for the management of CAM network, and the total amount is 200 million. The right of management includes voting for the election of the bookkeeper, the change of CAM network parameters and so on. The minimum unit of CAM is 1, and it can not be divided again.

GAS is a fuel token, with a maximum total amount of 200 million, which is used to achieve resource control over the use of CAM networks. The CAM network charges the operation and storage of the currency transfer and the intelligent contract, thus realizing the economic incentives to the bookkeeper and preventing the abuse of the resources. The minimum unit of GAS is 0.00000001.

In the creation block of the CAM network, 200 million copies of the CAM have

been generated, and the GAS has not been generated, and the number is zero. 200 million copies of GAS corresponding to 200 million CAM will be gradually generated into the address of the CAM managed token over a period of about 22 years through a decaying algorithm. When CAM manages the tokens to the new address, the GAS will also be generated at the new address.

The CAM network will set a threshold by voting to exempt the GAS for a certain amount of transfer transactions and intelligent contract running stores to improve the use of the experience. When a large number of garbage transactions occur, CamID can be used to prioritize transactions and intelligent contracts with qualified identity. Transactions and intelligent contracts without qualified digital identity can be prioritize by paying GAS.

2.2. Distribution Mechanism

2.2.1. The Distribution of CAM

1) The first part: 102 million (51% of total amount) is distributed to the community, and put on the market through private placement and open sales. The distribution shall according to the sequence and proportion, mainly to provide resources and financial support for the development, including development, market, legal affairs, code security audit, finance, third party audit and so on.

2) The second part: 98 million (49% of the total amount) is managed by the

CAM Council to support the long-term development, operation, maintenance and ecological development of the CAM network. This part of the CAM is in the lock period, the end of the lock period is not earlier than the second anniversary of CAM network, and will be gradually lifted by the annual rate of 20%. Use as follows:

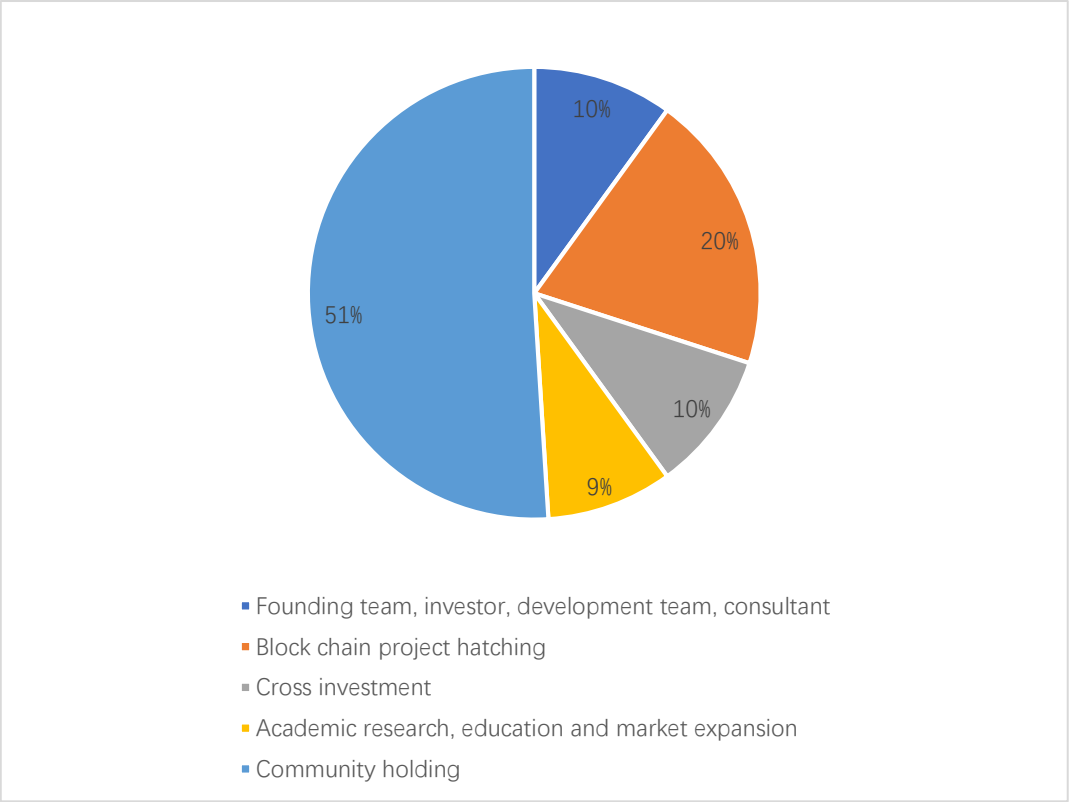
a) 20 million (10% of the total amount) for groups that have made key contributions to the development of CAM, such as the founding team, the earliest quality enterprises, and the development team;

b) 40 million (20% of the total amount) for the development of a continuous quality landing enterprise, the ecological construction of CAM of blockchain of Association of Fujian Province, the application of the key resources enterprises of the Fujian provincial chamber of Commerce and the replacement of digital assets, the hatching of the blockchain project of the new technology incubating center on both sides of the Taiwan Straits;

c) 20 million (10% of the total amount) for other high quality projects on the cross investment CAM public chain, the obtained token belong to the CAM Council and is used only for the CAM project;

d) 18 million (9% of total amount) is used to support the training costs of CAM related academic research, education and market expansion;

e) No more than 30 million copies of CAM are used annually in principle.



picture 2.2.1 Allocation scheme of CAM

2. 2. 2. The Distribution of GAS

GAS comes along with the generation of each new block. The initial total of GAS was zero at the beginning, and increase with the generation of the new block, untill about 22 years later, reaches the cap 200 million.The interval between each block of CAM is about 15 to 20 seconds, and the 2 million blocks are about 1 years.

In the first year (actually 0-200 million blocks), 16 GAS are generated for each block;

In the second year (actually 200-400 million blocks), each block newly generated 12 GAS; And so on, decrease by 1 GAS per year, and decrease to eighth years to each block to generate 2 new GAS; From then on, 2 GAS will be

generated in each block until 4400th blocks in about 22 years, and the total GAS will reach 200 million. Then the GAS will stop generated along with the new block.

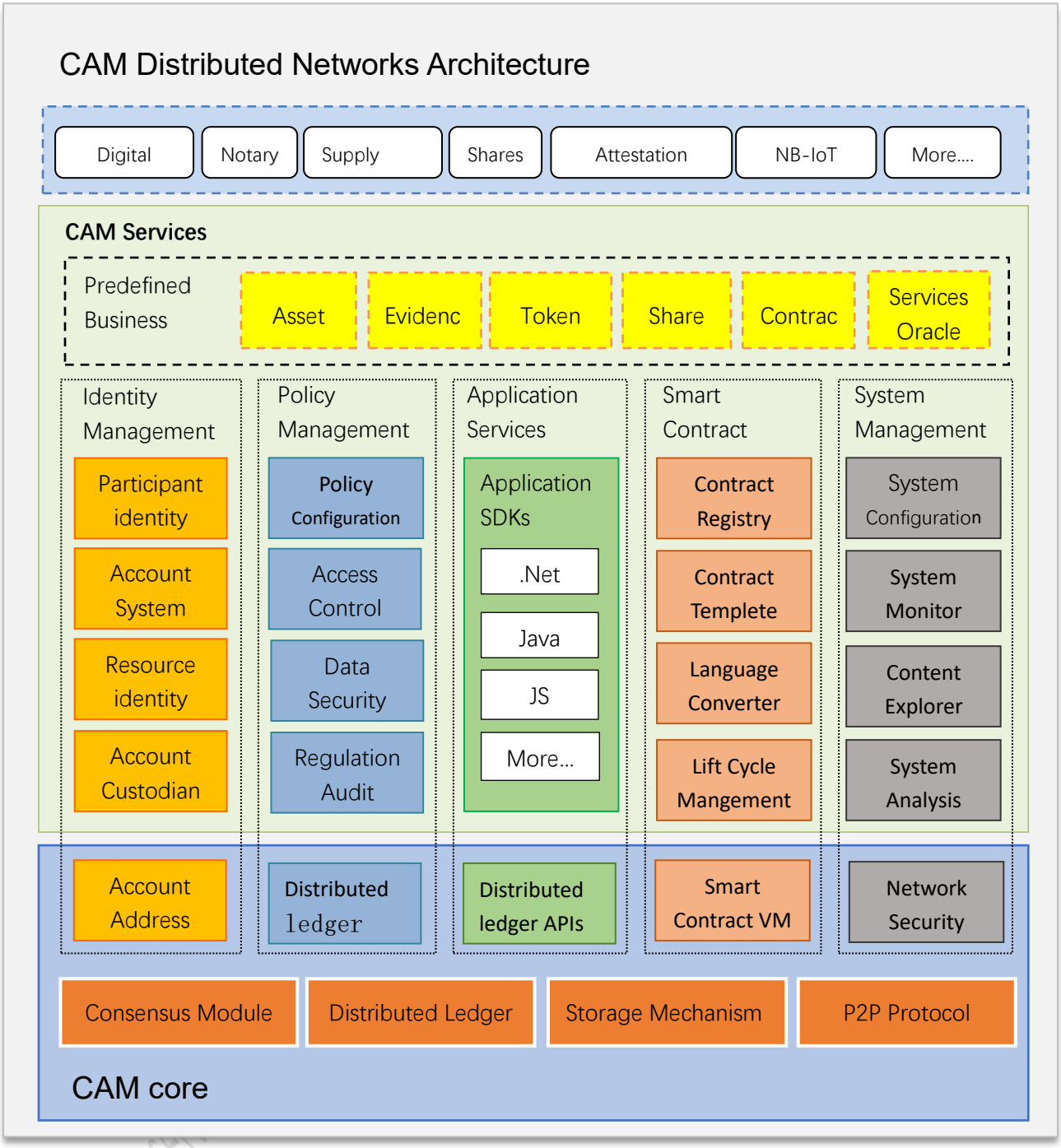
According to such a distribution curve, 16% of the GAS will be created in first years, and 52% of the GAS will be created in the first 4 years, and 80% of the first 12 years will be created. These GAS are recorded on the CAM address according to the proportion held by CAM. The GAS holder can initiate a claim transaction at any time to claim the GAS to the address of the CAM .

3.The Overall Architecture of Blockchain of CAM

The framework of Consumption Avatar Matrix is based on the application requirements, standardized abstraction of each technical architecture layer, and allow each layer have an independent universality. And the modules of each layer can be combined quickly and effectively, so that the standard unit modules are combined into thousands of different applications.

The overall architecture of the CAM blockchain scheme is divided into three levels: the underlying platform, the service layer and the application layer. The underlying platform provides the function of the blockchain base service. The service layer construction of high availability and scalable product application platform of the blockchain at the bottom of the platform, including sharing

books, attestation services, sharing economy, digital assets in multiple directions, integrated field based product function, help enterprises to quickly build the upper block chain scenario. The application layer to the end user to provide block chain applications credible, safe and fast, in the future will join the matrix industry partners to jointly explore the development direction of the industry chain blocks, and jointly promote the blockchain landing scenarios. The overall frame structure is as follows:



Picture 3 Blockchain infrastructur of Consumption Avatar Matrix

3. 1. Underlying Platform

Account center: the generation of Public private key, public key writing, private key signature and management; The mapping of the user information of the application layer and the blockchain address; Support the supervision

requirements of real name certification and audit.

P2P Networking： Peer-to-Peer protocol implements basic networking and communication. Each node maintains a list of neighbors to realize dynamic self-organizing network. And it can be used in conjunction with the existing safety protection facilities to ensure the security of the commercial network. Distributed Ledger and data storage: solve the problem of data format, data record and data storage, so as to ensure the safety and reliability of block data.

Distributed Ledger Service： The problem of data format, data record and data storage is solved, and the security of the block data is safe and reliable.

Consensus mechanism： consensus service is the core of block chain, and it is also the biggest difference between blockchain and traditional distributed system. It protects the strong consistency of the underlying data and is able to resist the impact of "malicious" bad people.

The full name of DBFT is Delegated Byzantine Fault Tolerant, it is a Byzantine fault tolerant consensus mechanism by proxy voting for large scale nodes to participate in the consensus. The holder of the CAM token (CAM) can elect the bookkeeper they support by voting.Then the selected bookkeeper groups through the BFT algorithm to reach a consensus and generate new blocks. Voting is carried out in real time in the CAM network rather than in a fixed term.

DBFT provides f = □(n - 1) / 3 □fault-tolerant ability for consensus system

composed of N nodes. This fault-tolerant ability includes both security and availability, which can resist general failures and Byzantine failures and can be applied to any network environment. DBFT has good finality, a confirmation is the final confirmation, the block can not be forked, and the transaction will not be revoked or rolled back. In the DBFT consensus mechanism of CAM, a block is generated every 15~20 seconds. The measured transaction throughput can reach about 1000tps, and the performance is excellent in the public chain. By proper optimization, it has the ability to reach 10000TPS and can support large-scale commercial applications.

DBFT combines digital identity technology to enable the bookkeeper can be a real name individual or institution. Thus made the irregular operation such as freezing, revocation, inheritance, retrieval and judicial decision possible, which is conducive to the registration and distribution of compliance financial assets in the CAM network.

3.2. Service Layer

Digital identity: in the public private key system of block chain technology, identity management is responsible: the generation of Public private key, public key writing, private key signature and management; The mapping of the user information of the application layer and the blockchain address; Support the supervision requirements of real name certification and audit.

Intelligent contract: be responsible for the registration and distribution

of the contract and the trigger and execution of the contract. After defining the contract logic in some programming language and distributing it to the blockchain, users can trigger the execution by user's signature or other events according to the logic of the contract terms, and finish the logic of contract, such as transaction settlement.

CAM has independent intelligent contract system: CAMContract.

The biggest feature of the CAMContract intelligent contract system is the seamless docking with the existing developer ecology. Developers do not need to learn new programming languages, they can use C#, C, C++, Java, Studio, Eclipse to develop, debug and compile intelligent contracts. The universal lightweight virtual machine of CAM has the advantages of high certainty, high concurrency, high scalability. The CAMContract intelligent contract system allows millions of developers around the world to develop intelligent contracts quickly.

Digital assets: digital assets are programmable assets that exist in the form of electronic data. The use of block chain technology to realize the digitalization of assets has the characteristics of decentralization, disintermedia, trust free, traceability, high transparency and so on. CAM supports multiple digital assets at the bottom, and users can register their own assets on the CAM, conduct free trade and circulation, and solve the mapping relationship with real assets through digital identity. The assets registered by the user through the compliance digital identity are protected by the law.

Consumption Avatar Matrix has two forms of digital assets: global assets and contractual assets.

Global assets can be recorded in system space, and can be recognized by all intelligent contracts and clients; The contractual assets are recorded in the private storage area of the intelligent contract, and the client that compatible with this intelligent contract can be identified. Contractual assets can be compatible with most clients by reference to some agreed standard.

Management strategy: the blockchain platform of Consumption Avatar Matrix provide policy management, not only can manage and maintain the configuration and security of the blockchain system itself, but also can manages access policies and privacy security for the storage data of blockchain.

Application services: provide SDK development kit for the developer community based on the blockchain technology of Consumption Avatar Matrix. At the same time provide API interface with different applications to fast docking scene development based on the blockchain of Consumption Avatar Matrix .

System management : configuration management services mainly provide configuration operations, which are configured for security, policy, authority, blockchain nodes, consensus algorithm parameters, system parameters. The configuration itself also acts as the transaction type of the block chain, which is determined by the joint vote of the nodes. Security measures for network security include IP control, special line, node authorization to access,

node trust list and so on.

3.3. Application Layer

In order to facilitate application layer understanding and docking, Asset, Record, Transaction and Contract are abstracted from the distributed account adaptation layer.

Asset: Supporting assets that are now digitized, and assets that can be backed by asset securitization and asset digitization in the future.

Record: It is necessary to use block chains to increase the authenticity and trust of information records, such as vouchers in the financial field, traceability information of the supply chain, and so on.

Transaction: An atom level operation that interacts with the bottom layer of the blockchain, an upper application can correspond to a transaction and can be done together by a set of transactions.

Contract: There are two types of contracts - standard covenant, programmable contracts. Standard covenant, it is mainly aimed at the relatively simple scene, the higher standard degree, and the high requirement of the execution efficiency. For example, Guadan asset swap transactions when the consistency of security, transaction and matchmaking. The standard combination can be directly linked to the chain by configuration generation, without programming, nor by virtual execution, so as to reduce the cost of the upper application and improve the efficiency of contract execution. In order to deal with complex

business logic users, in the matrix also supports user programming, and provides a rich component for the user according to the specific needs of, such as encryption module, privilege management module etc.. At the same time in the matrix for common scenarios such as assets, deposit certificates to provide the corresponding template, the user does not need to write the code from scratch, key parameters only need to change the template, with the characteristics of their business can establish contracts mature application.

4. Technical Features and Advantages

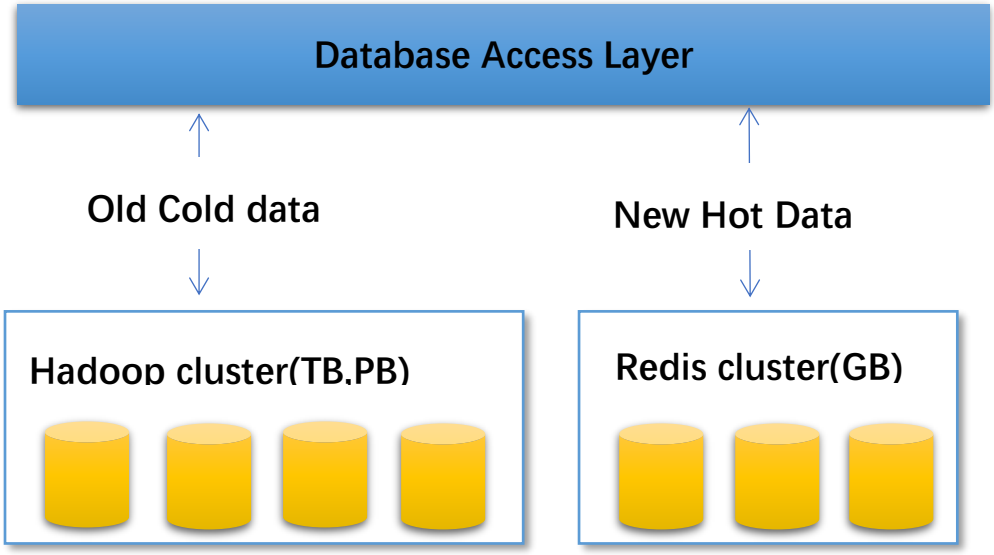
Through the analysis of a large number of data test of business models and application models, Consumption Avatar Matrix can achieve in terms of performance: second level transaction validation, mass data storage, high throughput, fast synchronization of node data; And can achieve in terms of extensibility: meet the strategy of structure of multi service block and the control of authority; At the same time, it provides a secure private key access service, as well as privacy protection scheme.

4. 1. Performance

4.1.1. Mass Storage

Consumption Avatar Matrix drawing on the mechanism of separating storage and table division storage of the cold and heat data in traditional financial system, and realizes the effective storage of massive data. Old

transaction data, inactive asset data and other information can be stored on the big data storage platform (such as Hadoop, which satisfies the data storage at PB level).



Picture 5-1 Mass data storage

4.1.2.Fast Transaction Confirmation

Consumption Avatar Matrix adopts the consensus algorithm of DBFT mechanism. The advantage of this approach is that professional bookkeepers can tolerate any type of error, and that each block has its ultimate nature and will not be split, which ensures that the consensus is completed that is the transaction is confirmed, and other aspects of the transaction confirmation process, such as signature algorithm and ledger storage, are optimized to realize the second-level confirmation transaction.

4.1.3.High Speed Access

It falls into three categories in actual application scenarios: first, access blockchain after the original system is reformed, second, use the blockchain to develop new requirements of the existing system, third, use blockchain in new systems and scenarios.

In order to speed up the application of the blockchain to the above three scenarios, Consumption Avatar Matrix in line with the principle that the business development work is as small as possible, as far as possible to meet the user's original development habits, convenient deployment, and the maintenance of the original security system, has done a lot of compatibility design in the way of business development of users, deployment, and security inheritance. Users in a variety of scenarios and with all kinds of development habits can dock with smart economic network of Consumption Avatar Matrix with a lower cost and faster speed.

4.2. Extensibility

The bockchain structure of Consumption Avatar Matrix can meet the needs of different business areas, improve the extensibility and maintenance efficiency of the system, and realize the cross-chain interoperability protocol: CAMX.

Cross - chain asset exchange protocol:

CAMX has extended on the existing double - chain atomic asset exchange protocol. It can allow multiple participants to exchange assets on different blockchains and ensure that all the steps in the entire transaction

process are successful or all failed. To do this, we need to create a contract account for each participant using the function of CAM contract. For other blockchains, if it is not compatible with the CAMContract, it can be compatible with CAMX as long as it provides simple smart contract function.

Cross-chain distributed transaction protocol:

Cross-chain distributed transactions refer to multiple steps of a transaction that are executed on different blockchains and ensure the consistency of the whole transaction. This is an extension of the cross-chain asset exchange, which extends the behavior of asset exchange into arbitrary behavior. In general, CAMX makes the part of the cross chain intelligence all completed, or all back to the state before it is executed. This gives a great imagination to cross - chain collaboration, and we are exploring more application scenarios for cross - chain intelligent contracts.

4.3. Safety

4.3.1. Secure Private Key Access

In order to facilitate users to use the blockchain product service, in addition to the traditional mechanism that generated and preserved at the end of client side, Consumption Avatar Matrix also provides two schemes, namely web hosting access and U-key hardware access. web hosting access, that is, the user name and password are mapped to private keys by a specific algorithm and stored on the server. The private key stored on the server side is encrypted data, and the private key can only be decrypted at the end of the user side. The

private key of the hardware is to meet the needs of the financial industry and the use of the Internet of things.

4.3.2. Privacy Protection of Multi-signatures

Data disclosure and privacy protection seem contradictory, Consumption Avatar Matrix solves this problem well by using Stealth Address scheme based on multi-signatures. After the use of private address, no one else knows the identity of the participant in the transaction except the direct participant of the transaction. The transaction data under the privacy address is still all open, but there is no analytical linkages between each transaction. Even if the same person sent you many transactions, the transactions will be scattered in many unrelated addresses. No one can find or prove that these addresses belong to you except yourself.

The Stealth Address scheme for bitcoin is proposal BIP63. Consumption Avatar Matrix extended on this basis, adds the features of multi-signatures and the query of private keys, and forms its own privacy address scheme, the details will be detailed in other text.

4.4. Operation and Maintenance

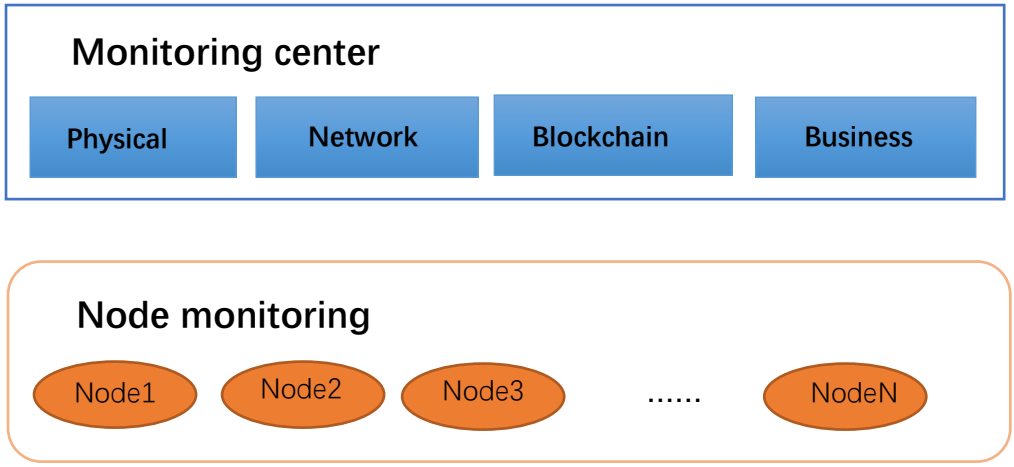
4.4.1. Full Platform Deployment

All the code of Consumption Avatar Matrix can be compiled across the platform, which can be run in Windows, Mac OS, Linux and Docker.

4.4.2. Visual Operation and Maintenance

Provide visual tools for the management of operation and maintenance.

Health monitoring platform of blockchain of Consumption Avatar Matrix provides multi-level monitoring: the physical layer (CPU, internal memory, disk, etc.), Network layer (time delay, broken line) and business layer (block generation, transaction verification); It also provides a complete system of alarm, log and message notification mechanism to facilitate the operation and maintenance of commercial systems. The system analysis provides a query interface for a large number of original data stored in distributed accounts to meet the various data analysis requirements of the application layer.

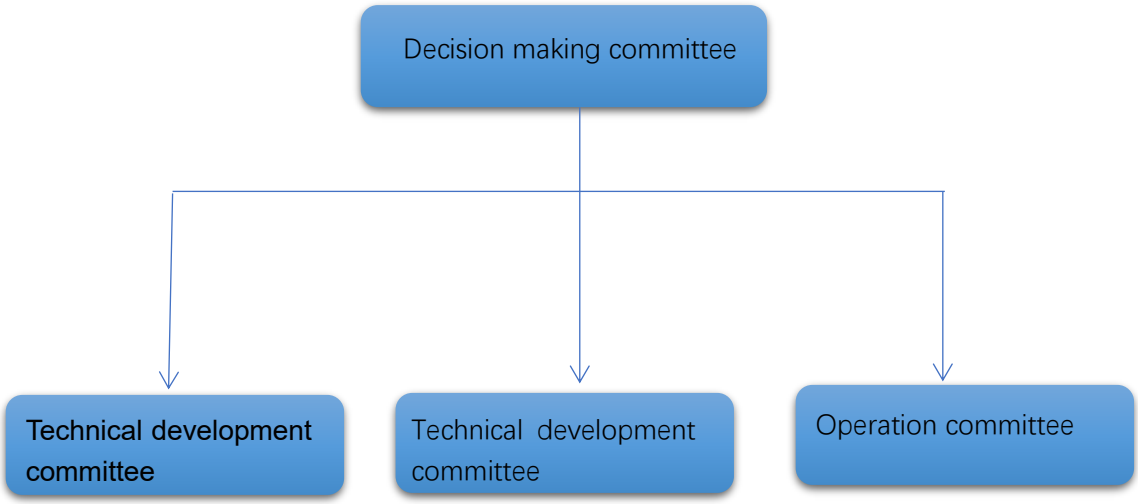


Picture 4.4.2 Visual operation

5.Governance Architecture and Management Philosophy

The foundation of the project was founded in 2017, known as the CAM Consumption Avatar Matrix foundation. The foundation is devoted to the development of the project of Consumption Avatar Matrix and its application

and promotion, and promote the development of application of early decentralization. 20% of the initial total of CAM will be used in some industry applications and start-ups, such as financial services, supply chains, the Internet of things, block chains and so on, including project strategic planning, project support, project promotion and substitution of tokens.The foundation will select the decentralized applications developed on the Consumption Avatar Matrix and provide incentives based on the actual number of users on the application.



Picture 5-1 The overall structure of the foundation

The overall structure of the foundation is shown in figure 5.1. The decision making committee consists of three sub departments, including the technology development committee, the finance and personnel management committee, and the project operation Committee, which are respectively responsible for the formulation, implementation and supervision of technology development strategy; The formulation, execution and supervision of the financial system; The overall operation of the project and the decision-making and implementation of

the market promotion. The members of the decision-making committee are changed every four years. The sub committee recommend two delegates, and project investment representatives, community representatives, representatives of Consumption Avatar Matrix all recommend one delegate, and formed the member of decision-making committee. The members of the subcommittees are elected every four years, members are generally have outstanding ability in the related industry. The foundation advocates transparent and efficient operation concept, and promotes the healthy development of the Consumption Avatar Matrix. The governance structure focuses on the effectiveness, sustainability and security of project management. The mission of the foundation is to promote the application of the blockchain into practice.

5.1. Board of Directors

5.1.1. Core team

KK Guo **Founder & CEO**

H264\265 video codec patent lab set up, "China enterprise newspaper" all media group vice president of science and technology; Deputy Secretary General China enterprise alliance Deputy Secretary General of poverty alleviation; Chinese Entrepreneurs Association; the emerging technology industry in Fujian province to promote the deputy director of the center; Honorary President of the Quanzhou chamber of Commerce。

Jason Lu **Co-Founder & CTO**

He has 10 years of experience in IT technology planning and management, and is responsible for technical system planning in several well-known companies. Long-term commitment to artificial intelligence and blockchain technology research and development. He has developed blockchain frameworks and commercial applications for a number of well-known large companies and startups. He has extensive experience in computer system design, product development, and project management.

Carl Lyen **Co-Founder & COO**

China's first batch of bitcoin miners, block chain technology foreign exchange full automatic trading first person; 7 years experience in encrypting digital currency investment, the first batch of digital assets investment private equity promoters in 2012.

Xiaohui Huang **CFO**

Xiamen City, the "double hundred" talent evaluation experts, Xiamen City Council by letter experts storehouse, Xiamen City Finance Office of small loan companies and financing Guarantee Corporation access to the audit experts, the Xiamen Municipal Science and Technology Bureau experts storehouse.

Kenvin Zheng **Chief Strategy Officer**

Xiamen University graduate, served as executive positions in Goldcommon group, continents group, group comprehensive group enterprise group as the

core members of the decision-making and decision-making departments in many large group company, has rich experience in modern management, and the actual operation of the industry experience, familiar with the process of internal system construction and enterprise operation management comprehensive management, group company, familiar with the project investment, capital operation and enterprise planning matters listed.

5.1.2. Angel Investment

Baifu Jing **Famous Angel investor**

Chairman of Carnival International Holding Co., Ltd. Chairman of Beijing hundred Shunda Real Estate Co., Ltd. Chairman of Beijing Aung Exhibition Industry Co., Ltd. The actual controller of the ST star Fujian Shida computer group chairman Forbes Chinese rich list ranked 165th. 2016 Hurun real estate rich list of 11 billion 500 million ranked thirty-eighth.

5.1.3.Strategic Consultant

Yanping Zhu **Strategic Advisor**

Taiwan, China, Ph.D. (graduated from Taiwan's successful university), director of the Taiwan cloud service association, dean of information management, chung hsing university.He was awarded the youth invention award of Taiwan ministry of education and the top ten information talent award in Taiwan.For many years, the application of block chain has been researched deeply, leading the block chain technology team development system to be

applied to the health big data and agricultural traceability project.

Chaozhi Wang Strategic Advisor

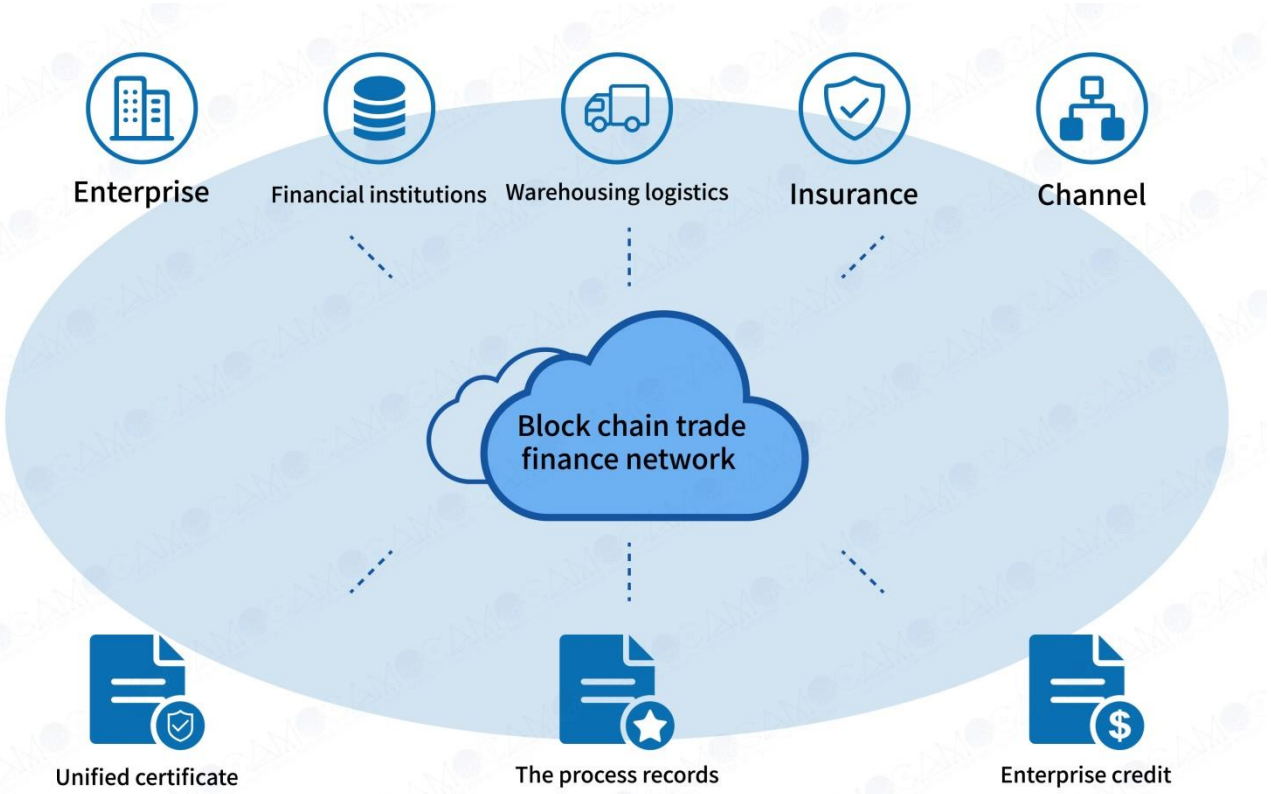
Senior scholars, famous sociology, pedagogy, psychology, marriage and love psychology experts, famous speech experts. The convener of the subject of "credit China China credit forum", Peking University. Chief consultant of World Assets Digital Cryptography Committee (UN), chairman of Macao Song Qingling foundation Asia Pacific and executive chairman of "credit China China credit" forum.

6.Multiple Application Scenarios of CAM

The following are the cases of several industry applications that CAM blockchain has started, including the issuance and circulation of digital assets, supply chain finance, private equity registration and transfer, supply chain traceability, publicity notarization, joint credit investigation.

6. 1. Digital assets

Compared with the traditional centralization system, the advantage of applying the block chain to the digital asset domain is that:once the asset is issued on a block chain, the subsequent circulation can no longer rely on the issuer's system,in circulation, assets are transferred from single center control to socialized communication,and any channel with resources may be a catalyst for the circulation of assets. Therefore, the block chain can greatly improve the efficiency of the circulation of digital assets, and truly achieve "multiparty distribution, free circulation".



Picture 6-1 Distribution and circulation of digital assets

As shown in Figure 6-1,in the network of distribution and circulation of digital assets, the block chain is used for asset registration, transaction confirmation, account reconciliation and liquidation.The digital asset network of the block chain includes the various upstream and downstream institutions, including asset issuers, asset traders, exchanges and circulation channels,and they can carry out their own business on the block chain according to their roles.

- Any digital assets can be registered and issued on the platform.All kinds of subjects (individuals and institutions) can register and issue their own digital assets on the platform. The realization of asset registration, that is publicized,which is beneficial to the tracking and inquiry of digital

assets, and can effectively reduce the problem of assets disputes.

- The core of the circulation of assets is the channel,and the block chain technology makes the circulation of assets from the original single center control into the social circulation.Any channel with resources can be a catalyst for the circulation of assets, promoting circulation and improving the efficiency of circulation.
- The basic characteristics of "transaction settlement" in block chain make real-time clearing possible, which greatly improves the efficiency of post transaction processing and realizes the real-time query function of asset circulation.
- Digital assets can be digitized assets, and can also be the entrance to asset securitization and asset digitization,and it maps real assets into the distribution and circulation of digital assets on the chain.

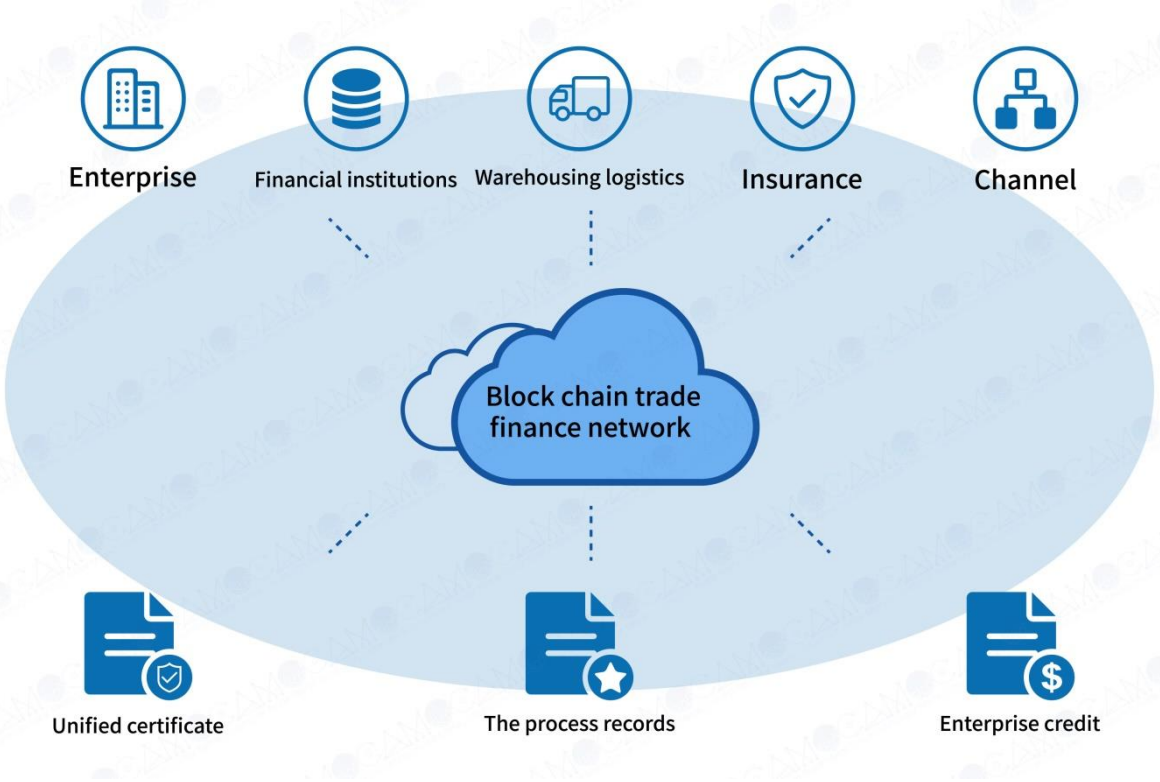
The CAM block chain is used used in sharing integration, cross-border transfers, game equipment, digital notes, coupons, equity registration & Crowd-funding, asset securitization and so on.

6.2. Trade finance / Supply Chain Finance

In the business chain of trade finance / supply chain finance, it is natural to participate and cooperate in many aspects.The application of block chains can upgrade separate separate single centers into a unified multi center with multiparty participation,and it will improve the efficiency of trust transfer, reduce the transaction cost and promote the benign ecological construction of trade

and finance.

In the field of trade and finance, information is scattered in the own system of the supply chain, and the circulation and financing links are repeated to verify the information, and the efficiency is low;limited by the information flow of each supply chain circle, the two-way selection of small and medium enterprises and financial institutions is limited;due to the lack of unified and reliable information system for small and medium-sized enterprises, the wind control of financial institutions is difficult, and all the cost of wind control is transferred to the financing enterprises. The block chain can encourage the participants of the supply chain to jointly create and maintain a unified voucher approved by each link, and ensure its true, effective and untampered;in addition to the sharing of documents, the project / contract execution process can also be recorded and tracked, reducing the difficulty of financial institutions' wind control, improving the feasibility of SME financing and reducing the cost of financing;dilute the inherent circle of the supply chain and expand the scope of the credential, and become the entrance to the securitization and digitalization of assets, and enhance the liquidity;the record and accumulation of block chain information is also the process of enterprise self credit,and based on these data, enterprises can carry out various financial services.



Picture 6-2 Block chain trade finance

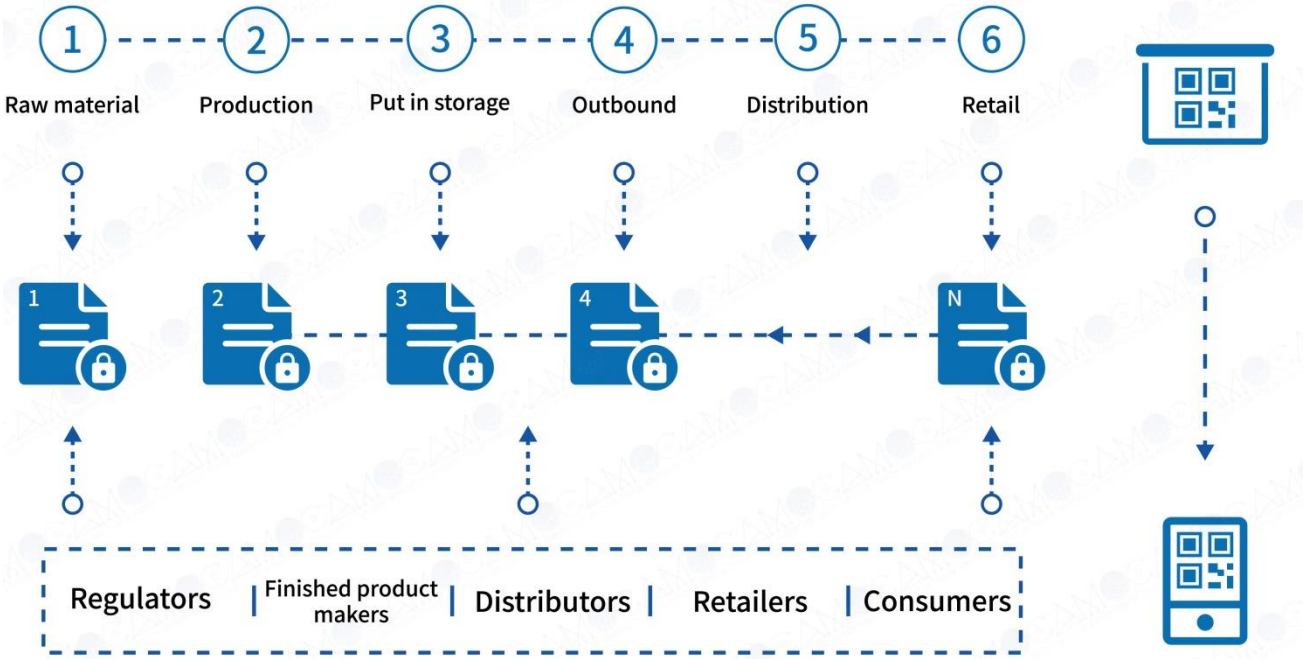
- Unified security certificate, authenticity only, greatly reducing the cost of verification ;
- Process visibility, enhance the transparency of the performance and improve the management ability of financing ;
- Data recording, promoting the credit investigation system, reducing the cost of risk control.

The CAM block chain is used in the financing of accounts receivable, prepaid and inventory financing, financial consumption, commodity trading etc。

6.3. Traceability of supply chain

The book of the block chain itself has not been tampered with,and all parties on the block chain participate in the maintenance of the book

information together to ensure the real-time, orderly and true non forgery of the data in the block chain.The application layer supports a variety of physical scavenging or coding input methods to trace the source of the goods,and eradicates the situation of the counterfeiting of the identity of the articles, and the imitating the circulation of the circulation.



Picture 6-3 Tracing the source of the supply chain of block chain

As shown in Figure 6-3,due to CAM blockchain's support for the characteristics of the supply chain, so that the static of each item (intrinsic) and dynamic (credit transfer, etc.) information can be in manufacturing companies, warehousing companies, logistics companies, distributors, retailers, various electricity providers, consumers and government regulators in sharing, consensus. The block chain platform can link the upstream and downstream

enterprises with the indirect relationship, while linking the ownership relationship and the upstream and downstream relations of the commodity supply chain.

- **Information records:**the key information of each item is recorded in the block chain in a clear or encrypted way, and the block chain properties that can not be tampered with are disclosed to prevent data forgery.
- **Information tracking:**commodity code information is the only encrypted string that identifies an item in the platform, also known as "one thing and one code".By using smart phone, portable or large radio frequency, sensor equipment, etc., we can automatically identify the commodity code of goods, transparent sharing process, and connect commodity ownership and transfer relationship.
  - **Multiparty participation:**based on the open, consensus, multi center network trust characteristics of block chain,enterprises can not only reliably grasp the situation of upstream and downstream enterprises, establish trading relations, track transactions, understand indirect links until the final consumers' status;at the same time, the intervention interface is provided, which is beneficial to the supervision of the government / market.
  - **The ultimate realization:**protection the value of quality goods and works;protection of circulation channels and final consumers;the value transfer and rebirth of the credibility.

In the matrix block chain is used in food, medicine, high-end consumer goods, art etc..

6.4. Joint credit investigation

Currently, credit is usually a single center mode,that is to say, a single institution endorses by its own data collection capabilities and credit, conduct wind control and credit information system development and maintenance, and provide paid credit service for other institutions and individual customers.

There are several obvious drawbacks in the single center credit investigation model:first, the cost of the single center maintenance data credit is too high, including the cost of the system construction and the cost of the data audit;secondly, the use of information services provided by the single center is limited, and only the organizations that have close cooperation and fully trust will be recognized.

Picture 6-4 The publicity and notarization of the block chain

With the penetration of block chain technology in various fields, the credit system of single center maintenance will be improved;the advantages of joint trust under the multi center system constructed by block chain lie in：

- **Reduce the cost of credit investigation:**on the basis of fully protecting the data privacy of all parties, joint credit investigation can achieve the establishment of cost sharing credit information system, reduce the cost of building and maintaining a single center system, thereby reducing the cost of the whole credit platform.
- **Expand the scope of the use of credit investigation services:**the input and accumulation of the credit investigation data are verified and maintained by the participants of the upper and lower reaches,the

credit investigation service produced in this way will greatly increase the scope of use.

- **Self credit for data:**with more and more participants, the ecology of joint credit investigation is becoming more and more perfect;the data of the enterprise and C end users are accumulating, and in fact, they are also completing their own self credit investigation process.
- **Data sharing, mutual benefit and win-win results:**in the bottom layer, the block chain provides the functions of data confirmation, non repudiable access records, low cost accounts clearing and so on;sharing of data in the same industry to achieve mutual benefit and mutual benefit.

6.5. Public notice and notarization

In the publicity of information, the public credibility of the public is the core.Because the data is completely controlled by the system manager, the lack of credibility is not effectively solved even in the data age. The untamperable and undeniable features of the block chain can improve the public credibility of the public, and create a new generation of information public service.

The demand for publicity has a long history,before information technology,post and tombstone lettering were widely used in the form of "publicity". The essence of publicity is to get the recognition and consensus of mass groups by publicized information, which is similar to the nature that no one can tamper with the consensus of block chain.The block chain technology is

an effective way to improve the credibility of the block:one is to let more people know and improve the difficulty of repudiation;the two is to use special medium to enhance the existence of physical credentials.

Picture 6-5 The publicity and notarization of the block chain

- The block chain is a good tool to solve the credibility.The reason why the block chain can improve its credibility is that it has the characteristics of untamperability and non repudiation.
- "Privacy protection" in public presentation.Due to the data itself can't be tampered with,therefore, in information publicity, whether it supports privacy protection and permission control, or support full public and authorized access, it will not reduce public credibility.

The matrix block chain is used in individual enterprise qualification,Credit record sharing and so on.

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