



ETA

ET ECOLOGICAL CHAIN

DISTRIBUTED APPLICATION BLOCKCHAIN OPERATING SYSTEM

WHITE PAPER

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Abstract

“ET ecological chain” is a new type of commercial distributed block chain operating system. The performance of distributed application system is improved by changing the existing block chain architecture. ET Ecological Chain is the first public chain project focused on the convenience and expansive of business application of block chain in the world. It is a decentralized application program based on block chain network, which dedicated to provide powerful and simple block chain operating system for all industries.”

Technically, the ET Ecological Chain solves the problems of low application performance, poor security, high development difficulty and excessive reliance on handling fees of the existing block chain. It achieves the performance extension in distributed application. ET Ecological Chain has a strong development team. It began to study the commercial application of block chain as early as 2015. By finding out the existing block chain problems and taking solving the problems as the premise, it designs and extends the basic common chain system of block chain application in the commercial field.

From the point of view of governance, through the establishment of ET Ecological Chain foundation, it devotes to the development and construction of ET ecological chain, community promotion, and promotes the steady development of ET ecological society. In order to ensure the sustainability of the ET ecological chain, the effectiveness of the internal management of the foundation and the integrity of the management of the assets, it will help to manage the general and special issues of the community projects through the establishment of a good foundation governance structure and from code management, financial management



and public relations.

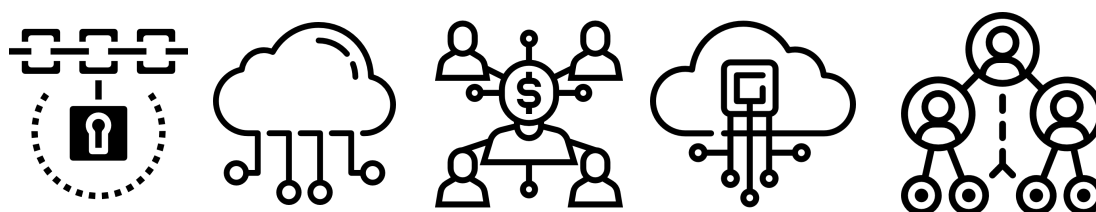
From the perspective of application, the ETecological chain can be used to construct the infrastructure of block chain of public commercial district in the future, so long as it conforms to the basic rules of the facility. With more and more interrelated block chain applications, the construction of sub-chain ET Ecological Chain will build a prosperous new world. ET Ecological Chain will also become the infrastructure of this new world.

ET ecological chain, to create a new business ecology.



Background

Soon after Bitcoin was released, many visionary people realized that the technology behind Bitcoin had greater potential, not just as a cornerstone of e-money. In fact, within a few years of the development of Bitcoin, a number of decentralized applications have been created, all based on open-book block chain technology, which is officially used in Bitcoin. These decentralized apps include: **Bitmessage, Bitshares, Peerplays, Golem, and Steem/Steemit.**



One of the challenges for investors and developers in this new blockchain economy system is that they need to build a new block-chain application from scratch, which is difficult and complex. The most difficult part of this is the security of the network and its reliance on a large number of hash power and/or the widespread distribution of network tokens if we use the traditional workload proof (POW) and the rights proof (POS) consensus mechanism. For small business owners or start-up companies, this is a relatively high entry barrier. For a small start-up company, it is impossible to independently build a widely distributed, computationally powerful computer network to secure its applications.

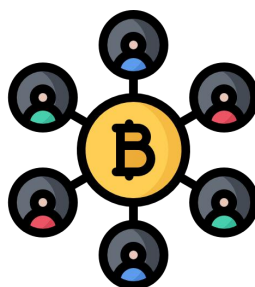
Of course, other consensus mechanisms, such as the authorized Equity Certification Mechanism (DPOS), can be used with relatively few processors without having to worry about network security. But their developers need to worry about other things, such as the widespread distribution of Internet tokens, the development of encryption and block-chain technologies to interact with their applications. It's like if every computer game designer runs a game, not only does he have to build a computer from scratch, but he also has to build an operating system for the game. If that were the case, there wouldn't be so many games right now. In order to solve

this problem, intelligent contract platform came into being, the most successful is the Ethernet. You can regard Ethernet as a decentralized platform for developing and running decentralized applications (DAPP) where users can safely run their DAPPs. At present, the market value is close to \$300 million, which proves the value of intelligent contract platform, but there are still many problems in the block chain.



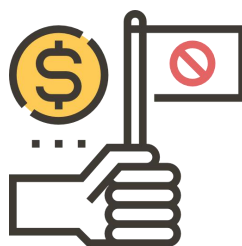
1.1 The demands of blockchain application

A | Support billions of users



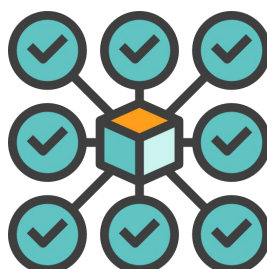
When the block chain needs to support the industry 's applications , it is important to consider supporting millions of users online at the same time. In some cases, a platform that can handle an extremely large user is essential, unless the user group reaches an extremely large order otherwise the application is necessary.

B | Free use



The block-chain infrastructure should be used free of charge by a large number of users in order to help the blockchain technology gain wider application and developers and enterprises can formulate more effective strategies.

C | Application expansibility and self-repairing ability



The block chain foundation should provide users with the flexibility to add new features so that enterprises can add new functions according to their own needs and achieve individuation and adaptability. At the same time, the software needs to

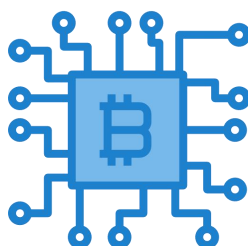
ensure robustness when problems can be quickly found and instant fixes.

D | Low delay property



The user experience is the most important. At present the user can wait patiently no more than 3 seconds, so it is very important for the user to receive reliable feedback in a short period of time. High latency hampers users and makes applications built on a block chain less competitive than existing non-block-chain applications.

E | Concurrent performance



Large scalable applications need to allocate workload to multiple CPUs and computers. For example, chain trading, there will be a lot of transaction information at the same time. This information needs to be allocated to more CPU and computer to improve efficiency.

1.2 Vision of ET Ecological Chain

1.2.1 Building the Business Application Foundation of Block chain

At present, there is still a big gap between the underlying public chain and the real large-scale commercial applications. It is mainly shown in the slow transfer speed of block network, high cost, poor concurrent processing ability, poor stability, data storage and security defects. These are the problems that the bottom public chain

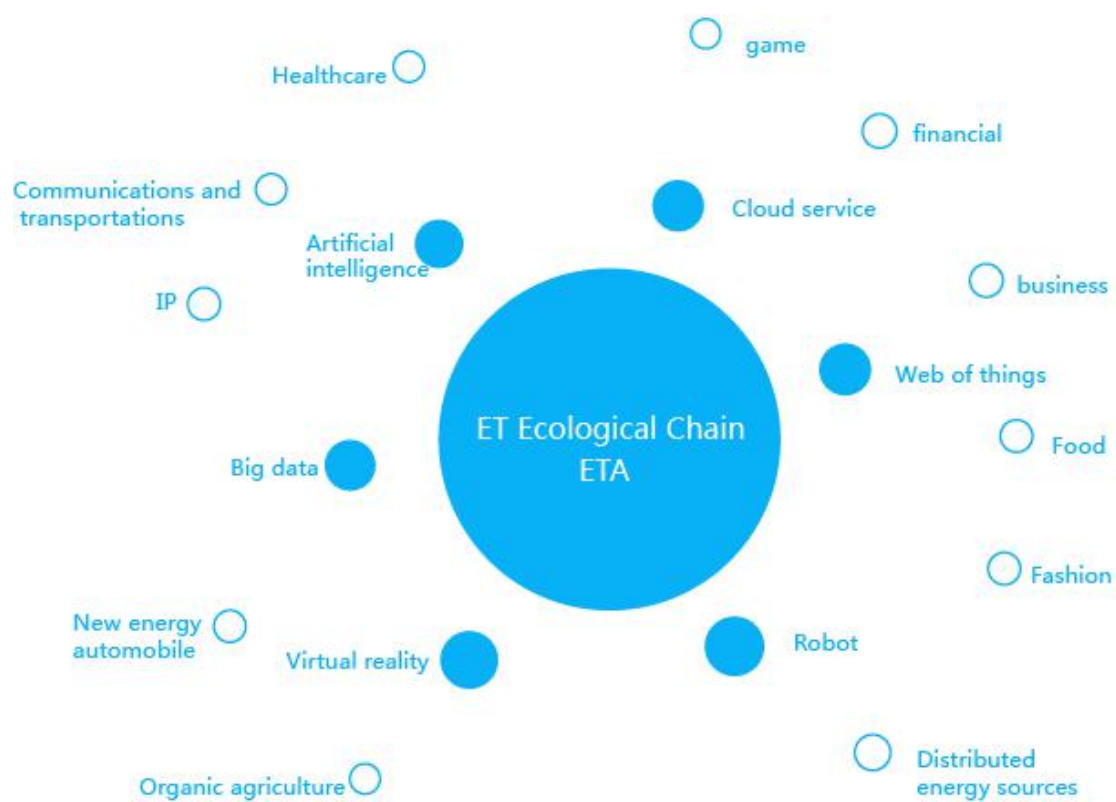
needs to solve. The commercial application is just a word, if these problems cannot be solved. ET Ecological Chain will provide perfect solution and give commercial block chain system higher performance. For example, by setting a threshold, it is possible to specify that the intelligent contract is executed only on a small number of nodes, which greatly saves the overall network computing power. It can also specify a small number of nodes to transmit and store the main data. This makes it possible for big data analysis and artificial intelligence operations to be applied in the block chain, thus helping industries to integrate with the block chain.

As a business application block chain foundation, the ET ecology chain is designed to create intelligent business distributed block chain operation ecology. With the help of the new block chain architecture and technology, the concurrent transaction performance and data processing ability are improved, providing intelligent and personalized services for global enterprises.

1.2.2 Application Area

ET Ecological Chain can combine artificial intelligence, big data, virtual reality, robot, Internet of things, cloud service and other new technologies to promote landing applications in health care, transportation and IPP, new energy vehicles, organic agriculture, distributed energy, fashion, food, business, finance, and games.





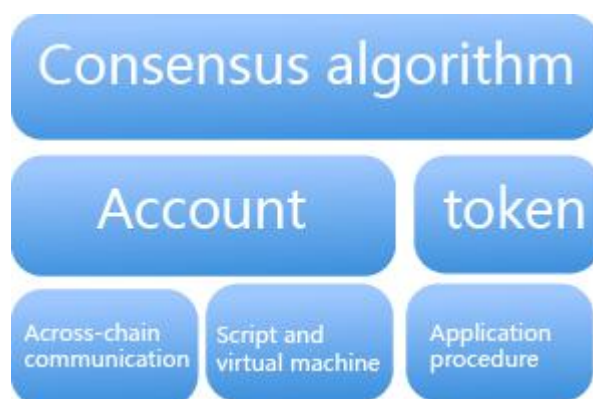
Technology Realization

2.1 Overview of ET Ecological Chain

ET Ecological Chain will build block chain technology infrastructure based on public chain for individual and enterprise users. Through the ET Ecological Chain technology platform, it can release new chains, digital assets IOT, other block chain applications and can be integrated with traditional centralized system.

2.2 Platform architecture

2.2.1 Architecture diagram

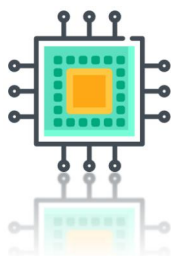


The improvement of ET Ecological Chain to the existing common chain is mainly in the parallel execution of consensus algorithm, account, application program, script virtual machine and cross-chain communication protocol.

2.3 Technical detail

2.3.1 Consensus and transaction confirmation

A | Consensus

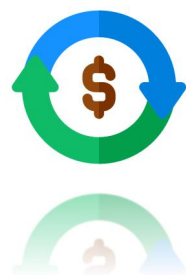


The ET Ecological Chain uses the only decentralized consensus algorithm which can satisfy the performance requirements of the application on the block chain. And the witness mechanism (witness) is used to solve the centralization problem in the commission equity certification (DPOs) algorithm. A total of N witnesses have signed the blocks, and these witnesses are generated by voting by the main body using the block chain network. DPoS is more democratic than other systems because of the use of a decentralized voting mechanism. DPoS does not completely remove the requirement of trust, and the trusted agents who sign blocks on behalf of the whole network ensure that the behavior is correct and unbiased under the protection mechanism. In addition, each signed block has a proof that the previous block was signed by a trusted node. DPoS eliminates the amount of time a transaction needs to wait for a certain number of blocks to be verified by a trusted node.

The DPoS algorithm will greatly improve the transaction speed by reducing the requirement of confirmation. By trusting a small number of integrity nodes, unnecessary steps in the block signature process can be removed.

The DPoS system remains centralized, but this centralization is controlled because each client has the ability to determine which nodes can be trusted. DPoS makes the block-chain network retain some key advantages of the centralization system, at the same time, it can ensure a certain degree of decentralization. Through fair elections, the system makes it possible for everyone to be a client representing the vast majority of users.

B | Transaction confirmation



Typically 100% of the DPOS block chain will involve block producers. An average of 1.5 seconds from the start of a broadcast can be considered 99.9% confirmed.

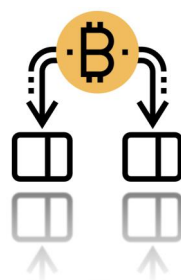
In some exceptional cases, software appears bug, network congestion, or a malicious block producer creates two or more forks. To ensure that a transaction is absolutely irreversible, one node may choose to wait for 15 of the 21 block producers to give a confirmation.

Based on the usual ET ecosystem software configuration, it typically takes an average of 45 seconds. By default, all nodes will consider the block irreversible when 15 out of 21 producers confirm it. And no matter what the length will not switch to the fork without this block.

Within 9 seconds of the bifurcation, a node can warn the user that they are most likely in the bifurcate. After losing two blocks in a row, there is a 95% probability that a node is in a bifurcation. After losing 3 blocks in a row, there is a 99% probability of confirmation. Robust prediction models can be constructed through node loss, recent participation ratios and other parameters, which can quickly warn operators of problems.

The response to the warning depends entirely on the nature of the business transaction, but the simplest is to wait for 15 / 21 confirmation until the warning disappears.

C | Transaction of equity certificate



ET ecology chain software requires each transaction to contain the HASH value of the last block. The HASH value has two purposes: to prevent transactions that do not contain block references from being replayed when the bifurcation occurs; and to inform the network that the corresponding users and their shares are currently on a specific bifurcation.

As time goes on, all users directly confirm the block chain, which is difficult to fake in this chain, because the fake chain can not move the transaction from the legal chain at all.

2.3.2 Account

A | Register

In a decentralized scenario, application developers will pay for the cost of registering new users without having to create new accounts for a user who has already registered with another application. In the whole block chain ecology, users can establish only one account.

B | Message processing and delivery

Information can be transmitted through structured messages between accounts. In the ET ecosystem, each user has its own private database for private message processing.

C | Messages with mandatory delays

To ensure the security of the user's information, the application developers can automatically set the time delay based on the needs of the industry and the user, that is, the time when a message is added to the block.

D | Retrieve the key

In the ET ecological chain, the user will retrieve the key through other users who frequently interact with them through sending message. It means the stolen key can be found and recovered within 30 days in contact with the missing key user , or with the help of a " close account " set by the user , thereby preventing the hacker from attacking .

E | Account frozen

The application developer has the authority to freeze the account of the developed application user, for example, when the application itself is found to have a huge vulnerability.

2.3.3 Token

In the et ecological chain, tokens have three main functions: bandwidth and log storage (hard disk); computing and computing reserve (CPU); state storage (RAM). Both instantaneous and long-term components consume bandwidth and computation. The block chain system maintains logs of all messages that will be downloaded and stored by all the full nodes. Through log information, the state of all applications can be rebuilt.

The application scenario can be explained as:

- Payment by the recipient: the customer buys a specific product from the business and the revenue these products will be used to cover the business costs and avoid the customer paying directly for the use of the block chain. It will not limit or prevent companies from determining monetization strategies for their products.
- Authorization capability: if a block chain is developed using an ET ecosystem system and the token is held by a bearer, he may not need to consume all or part of the available bandwidth immediately. Such a holder may choose to grant or lease the unused bandwidth to others.

- Separate transaction costs from token value: if the application owner holds a corresponding number of tokens, the application can continue to run in a fixed state and bandwidth usage. Developers and users are not affected by price fluctuations in the token market and therefore do not depend on prices.
- Block Award: each time a block is generated, the system rewards the block generator with a new token. The system may be configured to limit the maximum incentive for a chunk generator such that the total annual growth of tokens does not exceed 5 % .
- Community Welfare applications: users can select 3 community welfare applications, also known as smart contracts. The smart contracts will receive tokens based on the percentage of votes each app receives from the token holder, and the elected application or smart contract can be replaced by the newly elected application or the smart contract of the token holder.

2.3.4 Cross-chain communication

The ET Ecological Chain is designed to be cross-block chain communication - friendly, meaning that cross-chain interaction (payment, transaction, transfer, messaging) can be supported, which includes both the sub-chain and the side chain. Dapp developers can not only develop their own Dapp applications on the main chain in the traditional way, but also start separate side chains (both public and private) to run their own Dapps according to their needs. These side chains can also exchange information through the cross-chain mechanism and the main chain.

2.3.5 Script and virtual machine

The specific implementation of scripting language and virtual machines is separate from the design of ET ecology chain technology. The ET ecosystem operating system will first act as a platform for transmitting authenticated information between accounts. Any development language or virtual machine can be integrated into the ET Ecological Chain through API with proper and sufficient

sandboxes.

All messages sent between accounts are defined by a pattern of block-chain consensus states that allow seamless transformation of messages between binary and JSON formats. Messages sent between accounts and accounts are sent in binary ways, making them more efficient and operational. However, binary is incomprehensible to the majority, so the ET Ecological Chain support data can be converted to JSON format string, easy for users to read.

Database state is defined in a similar schema, which ensures that all applications store data in one format, with JSON' s human readability and efficient storage and ease of operation in binary formats.

In order to maximize parallel operations, to minimize computing tasks (to regenerate application state from the program log). The ET ecology chain operating system divides the verification logic into three parts:

- 1. The confirmation message is consistent internally**
- 2. Make sure all preconditions are valid**
- 3. Modify application state.**

Verifying the internal consistency of messages is read-only and does not require access to block chain state, which means that it can maximize parallel operation. Verify that preconditions, such as requirements balancing, are also read-only, so you can also benefit from parallel operations. Write access is required only to modify application state, and each application needs to be processed sequentially.

Authentication is a read-only process that verifies whether a message can be applied, and the application is actually doing it. Real-time computing requires execution. But once a transaction is included in a block chain, authentication is no longer required.

The purpose of ET ecology chain operating system software is to support multiple virtual machines and to add new virtual machines as required over time.

2.3.6 Application program

The deterministic and concurrent execution of applications in the ET ecology chain. There are uncertainties in the execution of parallel programs because of synchronization, competition and interference between individuals, that is, the program may get different results in the same input multiple times. Uncertainty brings challenges to the development, debugging, testing, fault tolerance, and security of parallel programs, which seriously reduces the reliability of parallel programs and hinders the development of parallel programs. Deterministic parallel technology controls synchronization, competition and interference among instances of parallel programs, so that the execution results of programs only depend on input. Deterministic parallel technology can fundamentally solve many problems existing in parallel programs. It improves the reliability of parallel programs and brings new opportunities to the development of parallel programs.

Block chain consensus depends on deterministic (reproducible) behavior.

1. It means that all parallel programs can not be "uncertain", such as mutex or lock is uncertain, can not be used.
2. Without a lock, you need ways to ensure that all accounts can only read and write their own private database.
3. Therefore, each account must process messages in a sequential manner. The parallelism of the ET Ecological Chain is at the account level.

only on the messages passed to them

3. The schedule chart, I understand it as the sequence of messages. This order is determined after the block is generated, but is uncertain in the process of production, and is decided by the block producer according to the parallel algorithm.

When the script generates a new message, it will not sent immediately but will be scheduled for the next cycle. Because the receiver may actively modify its own state in another thread.

The ET ecology chain delivers the message to a separate thread

1. Judge the possibility of parallelism
2. The status of each account depends

Application of ET ecological chain

Through the technical analysis of ET Ecological Chain above, we can find

that ET Ecological Chain is very friendly to application developers. For businesses operating on the ET ecological chain, the DAPP is based on a base chain that does not have hard forks. Companies can update their DAPP completely according to their own development needs without worrying about splitting the foundation of a business empire that is hard to build. This is the premise for businesses to choose the basic public choosing the public chain.

In the ET ecological chain, the distributed applications built on the ET Ecological Chain can not only guide the flow among users, but also provide each other with block-chain related services. This is previously impossible to achieve on the underlying block chain platform.

For the whole network attacks, such as block chain network common DOS attacks ET Ecological Chain is immune. The owner of the ET Ecological Chain token gives the user proportionate network bandwidth, which naturally forms channel isolation. Attackers can only consume network resources in the channel, but these attacks never disrupt or disrupt the entire network.

The attack against a specific DAPP contains a mechanism for freezing and handling destructive or frozen applications in the ET ecology chain. For example, if an Dao attack occurs on an ET ecological chain, it can be frozen, processed, or updated without interfering with other applications.

For merchants: this means running DAPP on the ET Ecological Chain is free. Businesses only need to purchase ET ecology chain to enjoy bandwidth, computing power and storage space. But buying tokens should be seen as an investment in assets and not as an expense because it can be sold at any time. As a result, business operating costs are greatly reduced.

For consumers: this means that applications on the block chain can be used directly without going through a cumbersome e-money purchase process.



The blockchain technology gives ordinary people a sense of horror, easily associated with computer geeks, complex blockchain technology, wallet security and coin theft, sharp fluctuations in buying and coin prices, network congestion and delays in ICO scams, and money laundering. However, the ET Ecological Chain allows us to assume that the user may not feel that we are using the original centralized Internet or the decentralized ET Ecological Chain network, and that the user may have used the blockchain technology without knowing it.

In other words, there will be no threshold for the user to use block chain technology. Users can use the advanced block chain system at zero cost and enjoy the advanced services brought by the block chain technology. This allows more people to use, rapidly accumulating a large scale of users. Based on the above advantages, we make the following assumptions about the application of ET ecological chain:



Industry applications

3.1 E-commerce industry

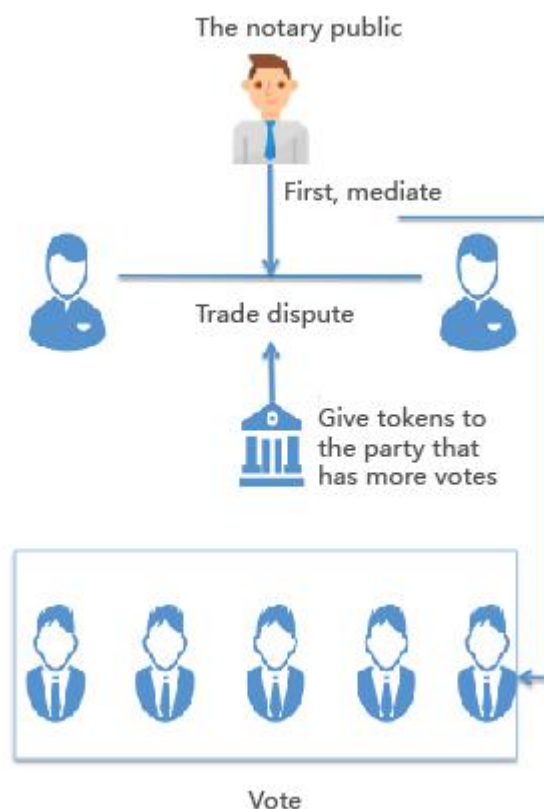


In the ET Ecological Chain, the e-commerce industry can generate own DAPP, which can fully guarantee the quality of products and services by the block chain technology, especially the products can be traced back on the block chain. It also supports multiple forms of transaction, such as, B2B, B2C, C2C, B2B2C and etc.

The ET Ecological Chain makes the e-commerce industry can provide service for many users at the same time. Meanwhile, the e-commerce industry has to face the problem that billions of users are online at the time.

Second, the ET Ecological Chain allows developers develop the performance according to own requirements in which the e-commerce industry can combine with the web of things. Buyers can search the products on the platform and obtain the information of product like production, package, express, sale and etc on the block chain. Every information contains the digital signature and time stamp of participants. Users can compare the quality and cost performance of products and then decide to buy. And buyers and sellers can evaluate each other after purchase succeeded.

The ET Ecological Chain also can help solve the dispute in the e-commerce industry. If the dispute occurs in the transaction, both parties can pay same ETA as the deposit and ask the notary public to mediate. After the mediation succeeded, the winner can take the deposit back and the loser' s ETA will be rewards for the notary public.



3.2 Credit reference system



The credit reference system can combine with the block chain. In the integration of block chain and credit system, the decentralized system records the behavior information of users on and physical information of goods on the chain, and broadcasts on the network. In the application of traceability of block chain, it cannot realize comprehensive and effective anti-fake if only taking the good as object. For example, in the purchases and sales of goods, it's hard to collect the credible physical information and features of goods in different time and space so it is difficult to truly anti-counterfeit, especially the disposable consumable. In the practical application, some people may counterfeit and sell fake products with high

price by the blindly trust of the public to the block chain.

The essence of various social life, economic behaviors, anti-fake, traceability, life service and etc is the participation of people and the relations between people and people. So tracing both people and object at the same time can realize effective anti-fake. After added the information of people in the credit reference system of block chain, everyone' s behaviors will the sources of the credit evaluation data. And these data will be visualized to represent the credible degree of users in which improve the disadvantages of the decentralized system.

The ET Ecological Chain lowers the threshold to apply the block chain technology to the credit reference system. In the integration of credit investigation and block chain, the developers can focus on the construction of the credit mechanism and the application of high credit instead of spending time on the design of underlying technology, which is beneficial to the society in forming the good atmosphere of integrity.

3.3 Tourism industry



There are many problems and pain points in the development of tourism market around the world, including the price monopoly of online giants, the high charge of intermediary service, the decrease of product quality in the tourism market, the tourism resource destruction, the lower integrity degree of the tourism market and etc. For example, in the online travel booking service, the middleman collects over half of transaction fees and the merchants that actually provide the service just receive a little profit. The unbalance among resources, services and return greatly affects the healthy development of the tourism industry. The tourism enterprises

can combine with the block chain and redefine the transparent, happy, worry-free, integrity and green ecological tourism by the block chain technology to rebuild the public order and good custom of the tourism service providers and customers.

The ET Ecological Chain can support the tourism industry developing in the aspects as follow:

1. Service and identity registration system

The contents and clauses of the service will be listed in the system. Users need to finish the KYC (Know Your Customer) verification of the contract and the information of users will be encrypted and stored. Only the authorized service providers can access to users' information, basing on the service and compliance requirements.

2. Payment channel and transaction system

Customers can purchase the service by any legal tender or provided digital currency. According to the requirements of service providers and users, the payment and transaction system provide services of payment and settlement by legal tender or digital currency. The system will lock the money up until the service finished and unlock the money after the transaction was confirmed by both sides.

3. Credit and evaluation system

After the transaction finished, both sides can evaluate and comment the service, which will be stored in the nodes of block chain. The grade and comments of each participant in the ecosystem constitute the foundation of the overall credit eco-system. The influence of participant's credit will embody in the economic behaviors of the ecosystem. The comment system can be used to build the industry white list and black list in the future, providing the industry permitting and reference the control system with intelligent contract.

4. Dispute resolution system

For the dispute occurred in the process of service (such as, complaint due to the low quality of tourism product, the travel does not correspond to the description of the product), the system will make judgment by the ecological committee or the automatically constructed dispute resolution committee. The party raised the

dispute shall provide a certain tokens as the rewards to resolve the dispute. The right to vote of the committee is decided by the number of members' tokens and their credit ratings.

5. Innovation and incentive system

In the innovation and incentive system, customers can pose the most concerned problems, or the problems they faced, the most difficult problems they have experienced in their travel. The providers of the products and travelling facilities in the block chain improve and upgrade the products

basing on these problems. Customers also can vote the products and the product that receives more votes will be recommended to each users on the platform. And if the final votes exceed a certain proportion or quantity in the voting, the system will return the token used in voting and provide additional rewards of tokens. The innovation and incentive system will motivate users participating in the innovation of product and also stimulate merchants to unceasingly update the products and improve the quality of service.

Governance mechanism

4.1 Establishment and management principles of the foundation

The team will set the foundations of the ET Ecological Chain (use "the foundation" for short) in the foreign countries. It is the newly registered non-profit entity and aims at providing financial support for the development, construction and promotion of the ET Ecological Chain. Make the ET Ecological Chain serve for more industries, as the infrastructure of block chain and promote the healthy development of the ET Ecological Chain ecosystem.

The team of the ET Ecological Chain will entrust the third party that has credibility effect to set the new foundation entity in which maintains the implementation of the plan and day-to-day operation of the entity. After the establishment of the foundation, our team will select eligible members of community taking the post in the foundation to participate in the management and decision-making, realizing the development goals of the foundation.

Considering the sustainability of the ET Ecological Chain platform, the effectiveness and advancement of the technology, the availability of the management, and the efficiency of the operation, the foundation follows the management principles as follow:

1) Integration of the distributed structure and the centralized management

The distributed structure improves the fairness of the management of the foundation but it is inefficiency. The centralized management helps make concentrated and effective decision. So combine the fairness of the distributed structure and the efficiency of the centralized management, set the strategic decision committee and empower the committee with the highest decision-making right and centralized discussion right to the big issues, ensuring the fairness of the community and the effective operation.

2) Serving business by the technology

The team of the ET Ecological Chain

adheres to the principle that the technology serves business. The technology is inevitable to weed out if it does not apply to the practical business. It is the long term policy to continuously improve the efficiency and lower the cost in the various commercial scenarios. Over the past 2 years, the team of the ET Ecological Chain was promoting the application of the block chain technology to the commerce and landing many projects. The foundation will always follow the principle that “the very beginning mind itself is the most accomplished mind of true enlightenment” and concentrate on landing more commercial scenarios. The foundation is non-profit, which helps make the ET Ecological Chain broader cooperation.

3) Autonomy and supervision

The foundation will set the consultants of auditing, financial, law and etc, and conduct regular and irregular information disclosure by report or news. The foundation also will open the contact information of main management personnel, welcoming the contact and supervision of all parties.

Moreover, the foundation will set the channel of supervision and report. Community participants can participate in the management, supervise the operation and inform the problem, important crisis, cheat, fraud and etc. in the operation of the foundation. The foundation will set the unified report channel and ensure the information protection of informer.

4.2 Structure of the foundation

The foundation of the ET Ecological Chain combines the professional committees with the functional departments to cope with the daily work and special events.

Integrating the practical operation and management, the foundation sets the committee and some functional units, which respectively are the strategic decision committee, the technology research and development unit, the commercial application unit, the business operation unit, the general management unit and the risk management unit.





Strategic decision committee



The strategic decision committee is the highest decision-making body of the foundation of the ET Ecological Chain. It aims to plan and discuss the important decisions in the development of the community of the ET Ecological Chain. It includes but not limits to: adjust and modify the structure of the foundation; revise and deliberate the constitution of the foundation; decide the appointment and alternate of the secretary general of the foundation; appoint and dismiss the principals of various functional units; decide the direction of the strategic technology development and business operation; make the emergency decision and crisis management decision.

The strategic decision committee is constituted by voting and it has 7 members. The voted and appointed core person will represent the foundation of the ET Ecological Chain to make important decisions. In the term of office, they shall

accept the credit investigation and open the salary of the foundation. The big issues of the foundation will be decided by the named voting of the strategic decision committee. Every member has one vote and the chairman has two votes. The decision will be passed if it acquires more than half votes of all members.

Technology research and development unit



The technology research and development unit is responsible for the technical management of the ET Ecological Chain, the research and development of the ET Ecological Chain, the maintenance of technical community and etc. In view of the planned direction and the guidance of the strategic executive committee, conduct research and development of technology, determine the direction of technology research and development, study the underlying technology, and develop the patent technology and etc. The detailed works include code management, code development, code modification, code test, code review, code coming online, issue remediation and etc.

The maintenance of technical community includes the community developer education, the path communication of the ET Ecological Chain technology, the technical examination of recruiting community developer, the code reviews of community developer, accepting the technical proposal of the community, maintaining the community and constructing good atmosphere of community technology.

In addition, the technology research and development unit will regularly collect the dynamic condition and hot points of the community and industry, interact with the participants and hold irregular technical interchange meetings. The above structures and regulations of the foundation will be adjusted and determined

according to the different laws of various countries.

Commercial application unit



The commercial application unit is responsible for the landing of the application scenario after the ET Ecological Chain came online. Popularize the landing project in accordance with the different application scenarios of various cooperates, including the responsibility investigation of co-chain assets, the compliance audit of co-chain assets, transaction management and information disclosure.

Business operation unit



The business operation unit is responsible for the daily business operation management, market promotion, public relations management and etc. The day-to-day business operation will make the goals of business operation and conduct the promotion of business, providing service for more enterprises and individuals, promoting the landing of the ET Ecological Chain platform in all walks of life.

The public relations management is responsible for the promotion and publicity of the ET Ecological Chain technology, the community crisis public relations and social responsibilities, focusing on providing service for the community. If the incidents that affect the reputation of the foundation occur, the business operation unit will issue the feedback authorized by the strategic decision committee, as the unified

channel.

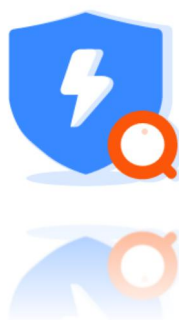
General management unit



The general management unit includes the posts of administrative, financial, human resource and etc. The administrative management posts are responsible for the related document drawing, meeting arrangement and etc. The financial management posts are responsible for the usage and check of Token raised by ICO, the salary administration of workers in the foundation, the check of daily operation cost and etc.

The human resource management posts are responsible for the recruitment, the formulation of salary and welfare, the arrangement of learning and training and the performance assessment of workers in the foundation. Advanced talents are the footstone of the development of the ET Ecological Chain. The foundation will make rational human resource plan, recruitment procedure and review procedure to ensure attracting more excellent talents. Except the technology developers, the foundation also will employ the well-know technical expert advisor and the decision committee will discuss and decide the related situation of employment and salary pay off as well as sign the formal contract. Besides, to promote workers better developing ability, the human resource management will integrate the best practice of enterprise management and conduct annual performance assessment.

Risk management unit



To realize more transparent and effective operation, the foundation of ET Ecological Chain sets the specific unit for the risk management, conducting related law affairs management, compliance management and audit management. The foundation also employs the independent third party lawyer and auditing firm participating in the regular audit and casual inspection.

Team introduction



CEO: Daniel Lee



Co-founder & General Partner of Bramo Block Capital

Fintech engineer

Master of computer of NUS

Data research fellow of "Time and Space lab" of UCL

Research fellow of European Blockchain Partnership

CTO: Vladimir Kovalevskiy



The former Chief Technology Officer of GemVault. 10 years experience in programming

5 years experience in team management.

Was a core Team member of Onlinepay.com, a financial E-wallet solution company

COO: Joseph Mekuria



Joseph Mekula (Joemek)

ETA Chief Operating Officer

DAPP developer, early participant in the blockchain.

EOS Dapp: The development of Everpedia, Uchain, Tokenpocket.

Ethiopia's highest institution: Master of Electronic Information Engineering,

University of Addis Ababa

Proficiency in Java, C++, Html5, CSS, etc.

3 years of database development experience

CMO: Christian Smith,



Business Developer, Information Architect, Social Media Specialist, Consultant,

Crypto-Investor and Blockchain Analyst.

Nottingham University in the U.K

Business Development Manager at a major company in Sydney

Conducting negotiations with both the Australian Prime Minister and the Prime

Minister of China.

Engaged with Blockchain technology since

Issue program

The ET Ecological Chain provides the digital asset but it does not mean that the holders have the ownership to the ET Ecological Chain and the dividend rights of the ET Ecological Chain project or other rights and interests. The foundation cannot guarantee the increase of the value of token, earnings, or buy-back.

To meet the requirements of practical operation and facilitate the unit conversion, the total amount of design is 2 billion ETA.

The tokens publicly sold will be used to the development, operation and promotion of the platform and the extension of technical team of the ET Ecological Chain.

Program	Proportion	Number	Details
The founding team	10%	200,000,000	Rewards for the founding team and the development team that contribute to the technology and business resource of the ET Ecological Chain; Locked position for a year.
The foundation	10%	200,000,000	Use for the management of the foundation; Locked position for a year.
Community incentive	10%	200,000,000	Maintain the development of the technical team and the community of the ET Ecological Chain
Mining	70%	1,400,000,000	Rewards for mining
Total	100%	2,000,000,000	

Distribution stage	Time	Details
Stage 1: Private placement		


Stage 2: Public placement		
Stage 3: Public placement		
Listed exchange		

Disclaimer

The ET Ecological Chain is a public and non-profit system. In the future, both the internal rewards mechanism and operation maintenance of the system will apply the virtual digital asset (virtual product) but not currency. The digital token generated by the system can be taken as the rewards maintaining the system. However, it also needs a certain amount of virtual digital assets like bitcoin to realize the exchange of resources between the system and other systems or other social subjects. Hereby, the asset acquired in the ICO of ET Ecological Chain is the virtual digital asset, such as, bitcoin.

Token is the virtual reward mechanism ran by the system but not the monetary return. So purchasing token is not a kind of investment. The holders of token do not have the ownership of the ET Ecological Chain or the application of the ET Ecological Chain. Token will not enable holders the right to participate in or control the decision of the ET Ecological Chain or the application of the ET Ecological Chain. One who holds tokens can participate in the usage scenario of the platform of the ET Ecological Chain but cannot sell tokens off. The value goal of token mechanism is to create the application value of platform and usage scenario of the ET Ecological Chain, and provide the scarce experience of virtual product, instead of the monetary value or commercial value. We cannot guarantee the token will certainly increase in value because the perceived value of it may decrease in some cases. In consideration of the unpredictable circumstances, the goals listed in the white book may change. Our team will try our best to realize the goals in this white book but the organizations and individuals shall be at your own risk.

The white book is only used to convey information about the project instead of providing any investment advice, investment invent or abetting investment. The white book does not constitute and understand any acts of purchase and sell, any acts of inviting to purchase and sell, any form of security behaviors, or any formal contract or commitment.



To purchase the ICO of ET Ecological Chain, please carefully read the white book of ET Ecological Chain, fully understanding the technical features of ET Ecological Chain and the characteristics of risk return of ICO. Participating in the project means that you understand and accept the risks of the project, and you are willing to undertake all corresponding results and consequences.




Risk Warning

To purchase the ICO of ET Ecological Chain, please carefully read the white book of ET Ecological Chain, fully understanding the technical features of ET Ecological Chain and the characteristics of risk return of ICO. The project of ET Ecological Chain will not return the exchanged digital currency or withdraw cash no on condition. Our team will properly use the digital currency raised in ICO and regularly announce the disclosure according to the contents of white book. While our team will work hard with accountability and fulfill the obligations of the management of the foundation, there are still some risks for purchasers, including policy risk, economic cycle, liquidity risk, information security risk, fluctuation of token and etc. For this reason, purchaser shall fully consider the risk tolerance of yourself, judge rationally and decide prudently.

Appendix-Terminology

1. Bitcoin: It is a kind of encrypted digital currencies, developed by an incognito of Satoshi Nakamoto in 2009 with OSS.
2. ETH: Ethereum is the public platform of block chain with the function of intelligent contract.
3. Token: Token is the digital currency except Bitcoin.
4. Public chain: It is the block chain that anyone can send transaction in any place and the transaction can be effectively confirmed, and anyone can participate in the process of consensus.
5. DAPP: DAPP refers to the Decentralized Application. It means that the applications are decentralized or distributed.

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