YOOBA

Decentralized blockchain-based e-commerce system

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1 Origin

The appearance of the Internet has caused a drastic change in people’s lives.People's lives are getting richer and more convenient.Using the Internet to meet daily needs has become the habit of most people. Nowadays, clothes, furniture, snacks, books, games, cars, rooms, etc. almost all physical objects or virtual objects can be obtained on the Internet, and even many services can only be obtained through the Internet.There are numerous sites, large and small, and the services provided are all-inclusive.Also,there have been some problems and contradictions in the development process.

As a consumer, users need to register on multiple different websites, provide different levels of personal information, and need to remember multiple accounts and passwords. The service experience and quality provided by different service providers are not the same.The protection awareness and measures of user information from different service providers are also very different.User data may leak in one place and cause multiple leaks.The user's data is leaked or the user's data is used for what purpose. In these situations, the user has little control or even no knowledge.

As service providers, due to data competition, resource competition, and user competition, data oligarchs and resource oligarchs have

gradually emerged.These oligarchs have absorbed more and more scope just like tornados and gradually formed industry leaders and rule makers. They make it difficult for newcomers to enter or expand.And ultimately affect the user's service experience and service diversity.

Yooba is a solution to the above problems. Yooba is committed to allowing all consumers to conduct global consumption security, privacy, freedom, and convenience , through one account; and is committed to establishing a global, decentralized, transparent, fair, and dynamic business platform. Of course this is an experiment. It may be successful or it may fail.

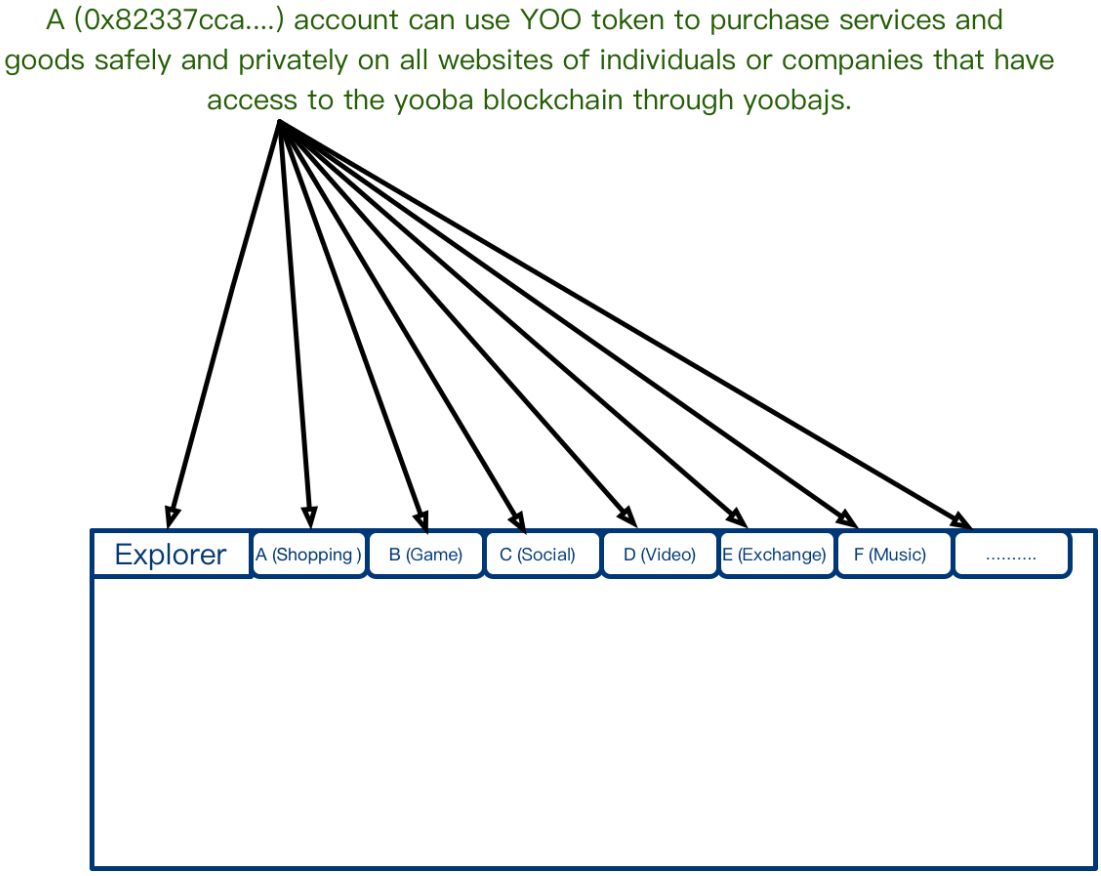
2 . Yooba usage scene

Yooba is a blockchain system for shopping only. Although she can apply in all aspects, Yooba's research, development and maintenance only focus on commercial scenarios and future related to goods and services. The following is a brief list of some of the application cases.

2.1 Share/sell/discover goods and services anytime, anywhere

Any user or company can upload their own products (including regular merchandise, artwork, second-hand items, etc.) or services

(including virtual products such as knowledge and music) through the App or pc wallet. Some main websites can collect and classify the products or services they are interested in through yooba to form various types of service websites. Users only need one Yooba account, and once they log in (browser plug-in login), they will be able to access all websites that access Yooba services. As shown below



2.2 Supermarket platform

A principal or platform with a strong reputation can establish a large platform or a large supermarket on Yooba, and choose his trusted or controlled small company or individual on Yooba to pull into his shop.

They established a virtual organizational relationship through Yooba. In this way, various complicated forms of business organization can be formed.

2.3 Supply chain

From small toys to large cars, all of their components can be found in Yooba. Anyone can choose the most cost-effective component they need on Yooba in a fair and transparent manner. Yooba has a complete record of supply and demand in the supply chain. And their trading history.

2.4 Insurance

Different business scenarios have different risks and different security policies. Insurance is a basic service in Yooba (accessed by different service providers) and it is also a big business.

2.5 Storage, artificial intelligence, etc.

Yooba's large number of commodity data, transaction data, etc. have put forward higher demands and broader prospects for storage, big data analysis, and artificial intelligence. Any company entity or individual can fairly acquire Yooba products, public transaction records, users, stores and other visible data to develop their own businesses and provide services on Yooba or elsewhere.

3 Yooba Design idea

3.1 Nature

Yooba's essence is a blockchain. Her goal is to allow all consumers to conduct global consumption security, privacy, freedom, and convenience , through one account; to establish a global, decentralized, transparent, fair, and dynamic business platform. So its design, community development, and application promotion will all focus on this goal.

3.2 Demand

- High performance: tens or even millions of transactions per second to meet the global user shopping experience
- Low latency: Confirmation speed in seconds, improving trading experience
- Big Storage: Huge storage space for rich goods and services
- High scalability: Different transaction processes and rules required for various commodity trading scenarios, free access to third-party services, and networks. Meet various business models
- Decentralization: The conflicts of interests among sellers, service providers, and commercial entities are obvious. They

need fair and transparent mechanisms to maintain, and there is no middleman control.

- Security, Privacy: Great Protection of User Privacy and Property Security

3.3 Blockchain introduction

Blockchain originated from Bitcoin, and its decentralized, distributed, demediated, non-reformable, and programmable features have great power of subversion for all walks of life. The core of the blockchain is decentralization. Multiple peer nodes jointly maintain and develop this public ledger. It is difficult or impossible for any node or middleman to control an open, well-operated blockchain network based on its own interests.

Blockchain is great, and its emergence has its inevitability. Fairness, justice, freedom, and individuality are often pursued by people as faith or ideal in the long river of humanity. Blockchain decentralization, irreversibility, DAO and other characteristics reflect these characteristics to a certain extent, and satisfy most people's internal needs.

3.4 Yooba key part

Yooba does not plan to implement its own blockchain system from scratch. Of course, doing so also has its advantages, but our resources

such as manpower and material resources are limited. We chose to stand on the shoulders of giants. We chose Ethereum, which has a relatively mature technology and application in the current blockchain world (and thanks to Ethereum for their efforts and contributions to the world of blockchain). Yooba will transform it to meet its own needs and goals. Of course, we do not intend to live in the shadow of Ethereum for a long time. We do not want the development of Yooba to be limited to the development of Ethereum (after all, our goals are different). Yooba will step by step improve or even replace the core components of Ethereum, as long as it does not adapt to the development of Yooba, we will do so, of course, we will do our best to ensure Yooba's compatibility. Yooba will gradually form its own complete technical system, in order to maximize support for its own development scene.

3.4.1 Account system

Yooba is for shopping and for business. According to its application scenario, there are four types of accounts on Yooba:Account，PrivateAccount,Store，Contract。

Account

Account is a basic type of account for Yooba. Most consumer's account type is Account. Account can perform normal transactions, create smart contracts, vote, upload goods/services, downline goods/services, buy/sell goods/services. Account is like Ethereum's

Account has limited privacy.

PrivateAccount

PrivateAccount draws on Zcash's two address patterns. Zero-knowledge proofs (zk-snarks) are used to implement hidden transaction information. Yooba will make partial modifications to enable authorized accounts to view relevant authorized transaction information. For example, when users use PrivateAccount to purchase products, they can choose insurance service providers and logistics service providers. Merchants can view the information that they are authorized to view. In this way, other people cannot get their transaction details (can't decrypt) from the blockchain. This protects the user's spending habits, capital flow, possession of assets and other private information. PrivateAccount can not create Contract, can not upload, downline products and services.

Contract

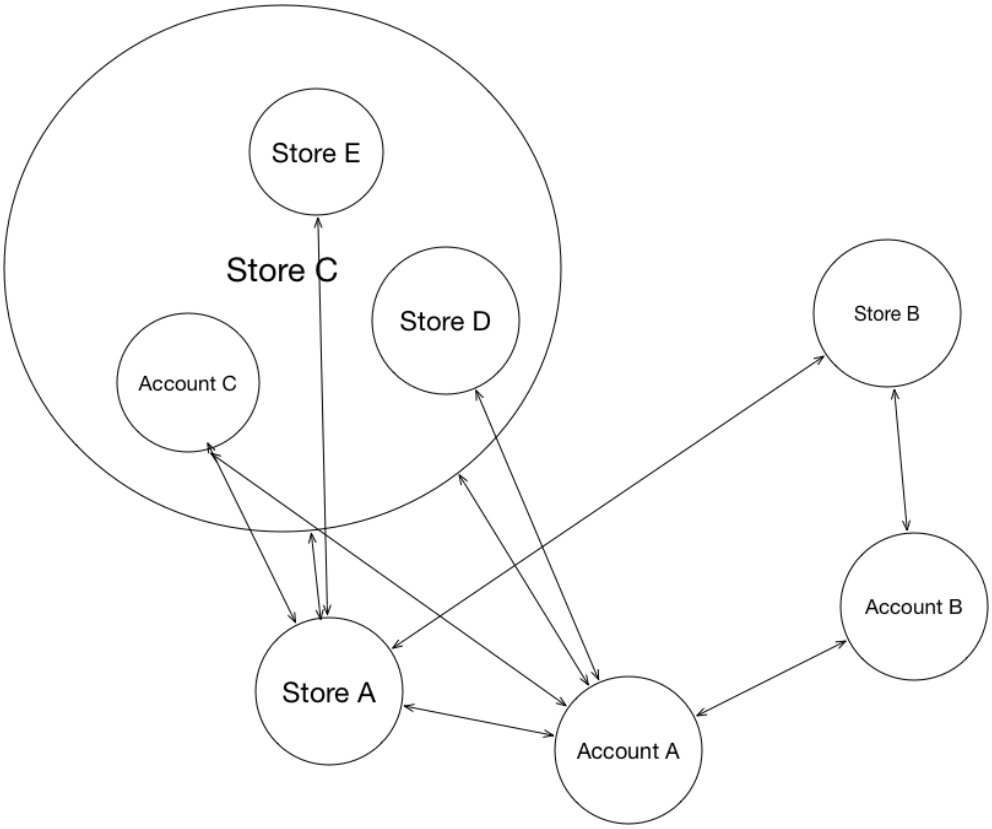
Contract is a smart contract. Smart contracts are a collection of codes that accomplish a specific function. It can run on each node's virtual machine. Since the language for writing Contract is Turing complete, Contract can implement a very large number of unique applications and functions, as long as the imagination is rich enough. At Ethereum, Contract is widely used in the issuance of tokens. Of course,

the smart contract in Yooba is not mainly used for this, it can be used as a pre-condition or post-condition of the transaction to ensure the smooth progress of the transaction. It can also be bought and sold in the form of goods as a carrier for a wide range of virtual products. Such as coins, limited-time products (image products, knowledge products), insurance, instant services and so on.

Store

Stores are everywhere in real life. In Yooba, the location of the Store is equally important. Account is like an individual in life. Store is like a real shop, a company, etc. The reason why the Store and Account are separated is that the meaning of the Store in Yooba is much different from that of the Account, and in the follow-up upgrade of Yooba, the Store often brings new features to meet the continuous development and improvement of the system.

In addition to the basic functions of the Account, the Store can be nested within each other. Just like real big supermarkets have many suppliers of goods. In Yooba, Store is included in other Stores to form a large Store. Let's talk about why we design such a feature!



We all know that the role of trust in trading is very important. Normally, the regular seller does not care who the buyer is. As long as the money is received, it will provide services or goods. The buyer often requires more knowledge of the goods and the seller to be able to hand over the money. Usually the buyer wants to protect privacy as much as possible, and the seller wants to promote its own brand as much as possible. The buyer's fundamental appeal is to hand over the money to buy a good product, and the lesser the person who knows his real name, gender, age, identity ID, phone number, what to buy, etc., the better. On Yooba users only need to enter the correct parameters into the product contract. Then according to the commodity price, transfer the corresponding token to Account/Store to obtain the corresponding

goods or services. The seller only knows someone bought his product, and where the product is sent or which account receives the product. Other information about buyers does not need to be known at all. So the seller is usually willing to inform their users of their information. However, buyers generally do not trust undisclosed individuals or unknown small groups. In the absence of third-party guarantees, users who are cautious are generally not going to buy their products. So even if there are a lot of personal Account uploaded products, it is still an adventure for ordinary users to buy their products. Because the user may have given the money, but could not receive the product and could not find the merchant (part of the information provided by the merchant is false). But there are always some users willing to buy their products. Such as business acquaintances, after confirming their identity through the line, willing to trade with the city offline users, users willing to risk rare products. We hope that a wider range of users can enjoy Yooba's services. Yooba offers Store account types to provide better services and attract a wider range of users and businesses as much as possible.

Assume a very well-known brand, create a Store account through the Yooba client, and upload their own product. Then on its own official website (trusted place), it accesses the Yooba service through Yoobajs, logs in to its Yooba Store account, and can display the products in its Store account on its official website (of course, the display page needs to

be customized), so that users can use Yoo token to buy their products very confident because their official website is trustworthy. This way to promote, users can log in to the browser Yooba plug-in, browse where (game site, music site, video site, shopping site, etc.) to use the token to buy on the line, do not need to log in other exposed privacy account, Buy more convenient and faster.

Let's assume another scenario. Another well-known shopping site wants to add more products and build a big platform. These large platform-type stores can also allow many local trusted individuals and small stores to join. These large stores can have their own authentication mechanisms for small stores within their own platforms. They have the responsibility and obligation to screen their service providers to protect the interests of users. Because the external users see a large store, they will be charged according to the contract a fee for the merchant within the platform. In addition, these large stores can introduce service providers such as insurance to increase their credibility.

These large-scale service providers, insurance, logistics, and contracts represent certain trust agencies. In this way, in a decentralized system, through various credible links, relatively reliable stores, trusted service providers, and trusted steps, etc., step by step to enhance transaction credibility, to better serve users. And these relative reliable

points are not the only points in the relative domain, so they will not lead to a regional centering. And each point is in a competitive relationship that helps provide better service.

3.4.2 DPOS

Yooba is born for shopping. This transaction includes not only transactions between tokens, but also transactions of various physical and virtual goods. This puts high demands on the processing capabilities of the system and requires very low confirmation delays and very low transaction costs. Yooba chose DPOS, a consensus algorithm that satisfies these requirements (does not rule out subsequent updates to better algorithms). All accounts with YOO token have a proportional vote for selecting which trusted nodes to use as the accounting nodes. Compared to POS, the DPOS reduces the possibility of users with large voting rights directly involved in evildoing. It also decentralizes and reduces their rights and makes the entire system more decentralized.

3.4.3 Storage

When Yooba develops to a certain stage, it will become a world-class shopping platform and trading platform. Many of the information, including pictures, product descriptions, and exchange information during the transaction, are current or personally related, and the amount

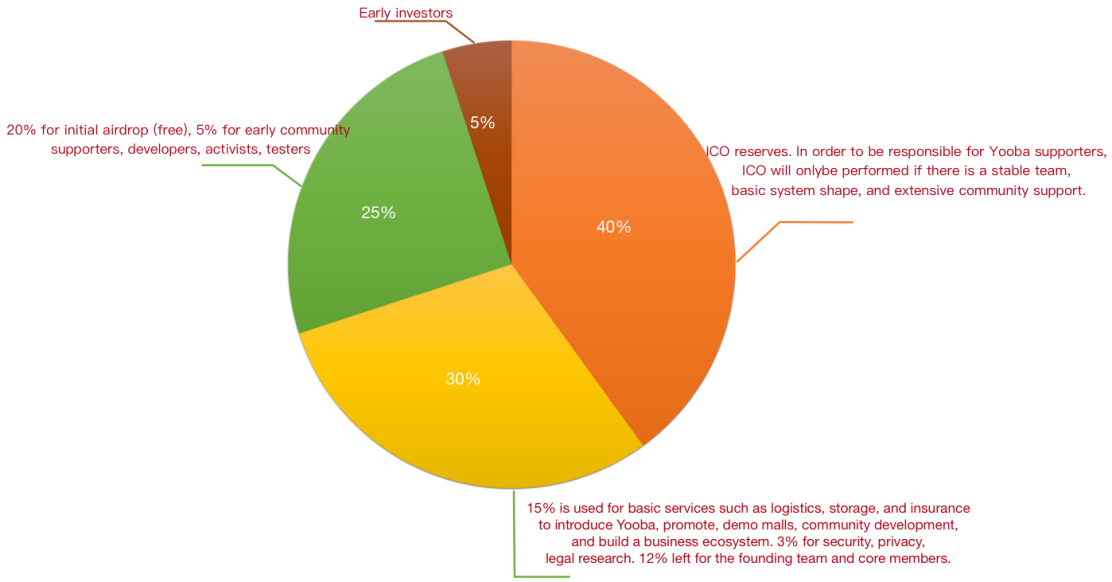
of data is enormous. This data should not be permanently stored or stored on the global blockchain. But where should so much information be stored? Where can we not only ensure the security of product information, but also ensure that the data will be found when needed? Here we look at the swarm of ethereum. Swarm is an excellent distributed storage solution. It uses a small percentage of the space (or cloud space) on which the swarm node occupies the nodes on each node for storage. All these small spaces make up a huge space. But swarm has its limitations. The appearance and disappearance of swarm nodes are frequent changes. Within a short period of time, there may be thousands of old nodes disappearing and tens of thousands of new nodes appearing, and frequent data updates and migrations will occur. In addition swarm is not suitable for storing large data, swarm will split the data or file into chunk storage, and each chunk can store up to 4104 bytes of data. Swarm is mainly used to store contract code and blockchain data. Due to the large amount of data related to commodity information in Yooba, and the relatively large volume of individual files, it is not appropriate to do frequent migrations, and then consider the need for decentralization. We will design a distributed data management interface. The actual storage space under the management interface is provided by each storage service provider. All storage service providers use a unified charging rule. Yooba will keep at least 5 copies of each data for users or stores. Do our

best to protect the user's data. The actual cost of the service provider is determined by the space and time actually used by the user's data. The user pays the service provider in the form of Yooba token (YOO). Users can save costs by going offline at any time.

4 Token distribution

The symbol for Yooba token is YOO.YOO is the basic currency used for trading in Yooba. The total supply is 10 billion.

The following figure is its distribution chart.



Explanation:

- The green part is 25% early issued, and 20% of them are airdropped and randomly distributed free of charge to the Ethereum Account with more than 0.01ETH (priority) (thanks to Ethereum).The amount of airdrop is 2 billion, and about 200,000

addresses can get 10,000 Yoo. It will be distributed before December 31, 2018, and the specific information will be distributed on the official website or Yooba social media. The other 5% was used for initial incentives for Yooba development, promotion, testing, and community enthusiasts.

- 40% for ICO reservation. Yooba is responsible for the majority of supporters and does not perform ICO in the early stages of the project. We know that Yooba has a lot of challenges. We don't do ICO when the team is unstable, the project is not formed, and the community does not support it. The reason why the ICO's token is to be reserved is because if the project is to be widely applied in practice, it needs to overcome many challenges and requires continuous capital investment. Yooba was initially energized by founding teams and community supporters. When the project is basically formed, the team grows, and the community supports, ICO will be carried out to raise more money to develop Yooba. This 40% token will only be used for ICO and will not be used for other purposes. If the project is not progressing well, we will never be ICO, and those tokens will lie there forever.
- 5% for early investors.
- 30% is reserved for the community, ecological construction, founding team, scientific research, etc. Of these, 15% is left for

ecological construction and community. 3% is reserved for research projects such as security, privacy, and law. 12% is left to the founding team and core developers.

- Inflation rate: 0.5% to 5%. The specific mechanism will be given later.

5 Notice

This white paper is currently version 1.0. There are still many technical details, DAO organization methods, etc. are not described in the text. Future content will be updated on the official website blog (https://www.yooba.org) and github (https://github.com/yooba-team). This white paper will also be constantly updated.