

Smart Supermarket

The world's first decentralized supermarket cloud system based on cashierless supermarket

White Paper

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1.0 Introduction

Smart Supermarket is the solution project focused on cashierless supermarket technology released by the Smart Supermarket Team belonging to Sherry Company. Smart Supermarket is also the name for cloud platform organized by Smart Supermarket project. Smart Supermarket aims at solving the problems, such as high human labor cost, low efficiency at shopping, etc., existing in traditional retail industry (online and offline business), to enhance the consumer experience. By adopting a new way of thinking and new technology, Smart Supermarket not only reduces the costs of traditional retail industry operation, but also directly build link between supermarket suppliers and customers. While the costs of running supermarket have been reduced, the customers' extra spending incurred in shopping is also lowered down. The Smart Supermarket cloud platform also includes functions, such as customer experience rating system, merchants rating system, merchants competition system, etc. Smart Supermarket Cloud Platform provides access to the merchant users' information with a fee.

In Smart Supermarket Cloud Platform, merchants are the users of the software on platform (Smart Supermarket owns cashierless supermarket developed by itself); and customers are the users of the commodities provided by merchants. And merchants linked up to Smart Supermarket Cloud Platform can share useful information. The platform would execute credit rating on each merchant user who has linked up to it. The credit rating results will be served as the recommendation basis for merchant users. The credit rating partly depends on the merchants' expense on software from platform and the SSPJ tokens possessed by merchants, because it is assumed that the more SSPJ tokens one merchant possesses, the more actively the merchant would upkeep the platform and the ecosystem derived from the platform. The expenses incurred on the platform will be charged in the form of SSPJ tokens and SSPJ tokens are the only bonus voucher. Every year, 10% of the annual income produced by Smart Supermarket will be distributed among the SSPJ token holders; SSPJ token is the also the voucher for the bonus. In addition, the SSPJ token holders are not liable for the possible operating risks in Smart Supermarket project.

Smart Supermarket is the technical adverser of cashierless supermarket, the solution provider, the proponent of new smart supermarket retail model, the planner of cashierless sspj

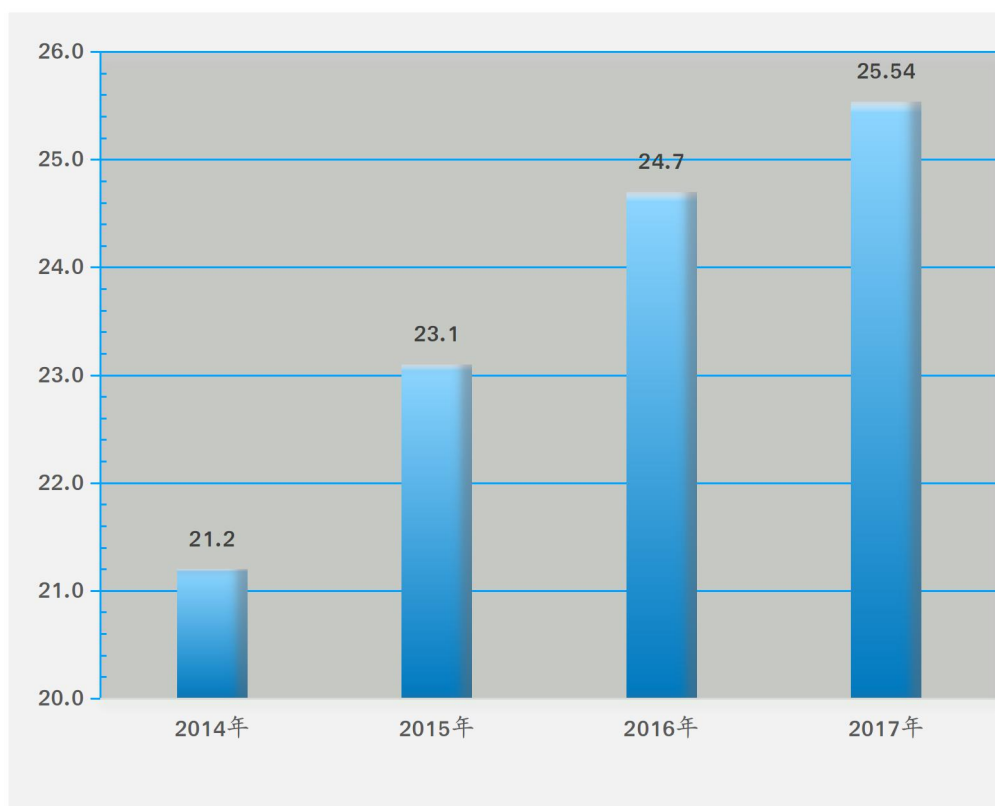


supermarket retail model, and the cashierless software manufacturer. The traditional retailers will either become the joined users of Smart Supermarket platform, or be overthrown by cashierless supermarket trend.

2.0 Analysis of Business and Market

2.1 Market Value of Retail Trade

The market value for the entire retail trade is enormous and has long been above the threshold of billion dollars. Nevertheless, due to the vicious competition of the traditional retail trade, waste of resources, and high costs, the growth of the traditional retail trade's market value is becoming slower and slower, and the condition of resource waste gets more severe.



2.2 The Current Condition of Traditional Retail Trade

Traditional retail trade includes: offline store direct sales (e.g. Wal-Mart Stores Inc., Costco Wholesale Corporation, etc.) and online retail sales (e.g. amazon.com, JD.com, etc.).

The traditional retail trade has many obvious defects: singular market mode, severe vicious competition, and low transparency of resources. The confidentiality of information between companies has created huge wastes of resources. Meanwhile, the resource locking has caused closed loops inside companies, making the construction of storage and the utilizing of geographical resources inappropriate. Thus the costs of commodities and logistic charges unreasonably high.

Without a professional dispatching system, the time latency between placing order and receiving commodities is high and so is the human labor cost.

2.3 The Exploration of Traditional Retail Trade Development

After the prosper boost by the end of 19th century, the traditional retail industry has entered the stage of saturation (or vicious competition).

Traditional retail trade is also gradually exploring for new retail trade solutions. These movements are only a small step made by traditional retail trade. To the entire retail trade market, the revolutionary effects are petit and could not solve the vicious competition from the root. Of course, there are cashierless supermarket ideas that have been come up with by some predecessors, but these ideas are not integrated with block chain, cloud computation, and other developed technologies, and produce a solution based on software services.

2.4 The Vista of New Cashierless Retail Trade

The cashierless supermarket can solve the problem of human labor to certain extent, but it has no help towards the vicious competition between companies.

2.5 The Market Size of Cashierless Supermarket

The purpose of cashierless supermarket is to seize the entire retail market, which would no doubt be a revolutionary movement to traditional retailers. Therefore, the cashierless supermarket's market share will not be lower than that of the traditional retail market, or even more.

2.6 The Potential Market Scale of Smart Supermarket

Smart Supermarket is the service application platform based on cashierless supermarket, which aims at promoting the development of cashierless supermarket. Smart Supermarket has retained the virtues of cashierless supermarket, solved the problem of information confidentiality between individual companies, and led this revolution ahead of the whole trade. We hope to acqu

ire half of the market share, or even attained monopolization of retail industry. Even if this expectation could not be met, the lowest prediction of 10% of the market share is also a giant number.

3.0 Description of Smart Supermarket Platform

3.1 Definition of Smart Supermarket

To solve the technical problems of cashierless supermarket, the team has introduced Smart Supermarket project, the world's first distributive application cloud platform based on cashierless supermarket. It aims to serve all cashierless supermarkets which linked up to the Smart Supermarket Cloud Platform (traditional supermarkets can linked up to Smart Supermarket Cloud Platform and customize the software services that to reduce human labor costs and logistics costs. In this way, they could transform into cashierless supermarket gradually). Smart Supermarket focuses on cashierless supermarket services and



applications (Smart Security System, Cargo Inspection System, Loss Prevention System based on machine vision and deep learning, Smart Shopping Cart System, Self-service Commodity Picking System, Commodity Recommendation System, Big Data Analysis System used to analyze customer information, Smart Supermarket Supply Chain System). All these applications in Smart Supermarket Project are of distributed application system. In early stage, Smart Supermarket Cloud platform would be common centralized system, and gradually, it will be transformed into distributed cloud platform to guarantee the stability of the system and be responsible for the merchant users' software customizing configuration and credit rating.

3.2 Smart Supermarket's Software Service Systems

All users of the Smart Supermarket service software systems are merchant linked up to Smart Supermarket (mostly cashierless supermarkets, also includes traditional supermarkets who are transforming into cashierless supermarkets). Merchant can customize software service by paying SSPJ tokens to Smart Supermarket Cloud Platform. Though the amount of SSPJ merchant consumed they will approach different levels in cashierless supermarket service mode.

1. Smart Security System

In managing a supermarket, incidents such as fire hazards and shoplifting must be taken into serious consideration. This is where the smart security system is needed, so as to reduce risks and loss to the lowest level. The smart security systems divided into unit based on cashierless supermarket are independent from each other. It will monitor the security condition of the supermarkets all the time. When accidents happen, the security function of the smart security system will be activated. Meanwhile, Smart Security System joined onto the Smart Supermarket Cloud Platform will upload the realtime data of supermarkets to the Data Collection



System on cloud platform. By analyzing the security information with big data technology, effective prevention measures will be provided.

2. Loss Prevention System

In traditional offline supermarkets, the annual income loss caused by shoplifting behaviors is about 10%-20% of the total income. Thus, the mode of that customers only need to scan the QR code instead of pulling out cash or credit cards to take their chosen commodities, and there are no cashiers to check bills or loss prevention stuff to monitor the customer. Just this stupid business mode can win huge amount of capital funding.

In cashierless supermarkets, there will be no employee theft for no human workers are needed. The loss prevention system would apply machine vision and deep learning technology to conduct effective analysis to determine whether there are commodities not scanned and decide if security system is needed to intervene.

3. Cargo Inspection System

Cargo inspection system is to automatically identify the demands of commodities, fetch commodities in storage, transporting, and sorting the shelves.

4. Smart Shopping Cart System

In cashierless supermarket, to enhance the customer experiences and to liberate customers from heavy tasks, the Smart Shopping Cart System is developed. It can also help the customers to save time and enjoy their shopping experience. The sensor system on the cart can detect if the commodities are put in or taken out of the shopping cart and perform an easy calculation on the due payment. The cart can also detect if the customers are to make a payment.



5. Big Data Analysis System

Inside the Big Data Analysis System, there are various smaller data analysis systems that have different purposes and all of them would be accessed to the Smart Supermarket platform, on which the Big Data Analysis System will realize information resources circulating and sharing with some fee.

6. Commodity Recommendation System

The Commodity recommendation system depends on the Big Data Analysis System on the Smart Supermarket platform. The Commodity Recommendation System will acquire useful user information from the Big Data Analysis System and recommend the user information to the Cargo Inspection System and online shopping platform. It is designed to improve the sales mode of cashierless supermarkets and commodity varieties, and also provide users with helpful online shopping advices.

7. Self-service Commodity Selection System

The Self-service Commodity Selection System is also depending on the Big Data Analysis System to provide with required information to help customers to select commodities. When the amount of users' information and data has reached a threshold, the users could activate the machine-shopping mode, by which the cashierless supermarket would pick commodities for the Smart Supply Chain System to directly send to counters or the house of customers, judging by the previous shopping history.

8. Smart Supply Chain System

The Smart Supply Chain System is based on the Smart Supermarket Cloud Platform. It can automatically acquire the position information. Combining with the Cargo Inspection System and the Self-service Commodity Selection System, the



Supply Chain System will calculate the route with lowest costs to the shelves and to the end of customers, And send commodity to destination.

3.3 Definition of SSPJ

SSPJ is the token published by the Smart Supermarket project, which is both currency and capital. SSPJ is the payment currency circulated between Smart Supermarket platform and merchant users who have linked up to Smart Supermarket Cloud Platform. It can also be circulated between customers and merchant users who have linked up to Smart Supermarket Cloud Platform. SSPJ is also a bonus voucher.

4.0 The Technical Properties of Smart Supermarket Platform

Comparison between Smart Supermarket and Traditional Retail Trade

Traditional Retail Trade	Smart Supermarket
Low transparency. Multiple layers of agents are needed. Costs are enhanced.	High transparency between merchants and customers. Smart Supermarket will promote the competition between merchant users and the inner competition will lower the fees paid by customers.
Competition from traditional retail blocks the development of retail trade.	Smart Supermarket System can effectively alleviate the vicious competition and promote the positive growth of retail trade.
The resources of retail trade is not sufficiently used and each merchants owns their private customer and production resources.	The merchant users joined can enjoy information and customer resources to certain extent, lowering the costs incurred by information communication and logistics costs.
The costs of logistics and human labor are high.	The need of hiring employees is eliminated and thus the costs of human labor are reduced. Because the Smart Supermarket has realized information sharing, thus the commodity costs and logistics costs will be reduced
Cannot customize software service.	Users can customize services and software easily

5.0 SSPJ Parameters

The SSPJ token is issued based on ERC20 Standard of Ethereum Block Chain. Total amount is 2,000,000,000 and no longer new SSPJ tokens. The tokens allocated to the Smart Supermarket Team will be frozen for six months, and 10% of the original quantity will be unfrozen in each season.

5.1 Common parameter

Symbol of token: SSPJ

Total released amount: 2,000,000,000 SSPJ

Total sold amount: 60% of the total released amount OR 1,200,000,000 SSPJ

Private sale: 120,000,000 SSPJ

Presale: 360,000,000 SSPJ

Public sale: 720,000,000 SSPJ

Accepted currency: ETH(Etherum)

5.2 Private Sale parameter

Private sale date: 2018 May 1st to 2018 May 15th

Private sale limit: 120,000,000 SSPJ

Private sale price: 1 ETH = 10,000 SSPJ (bonuses included)

Lowest limit of purchase: 100 ETH

Highest limit of purchase: 500 ETH

Bonuses: 100% of the price during official sale



5.3 Presale parameter

Presale date: 2018 May 16th to 2018 May 31st

Presale limit: 360,000,000 SSPJ

Presale price: 1 ETH = 7,000 SSPJ (bonuses included)

Lowest limit of purchase: 0.1 ETH

Highest limit of purchase: no limit

Bonuses: 40% of the price during official sale

5.4 Public Sale parameter

Public sale date: 2018 Jun 1st to 2018 Oct 31st

Public sale limit: 720,000,000 SSPJ

Public sale price: 1 SSPJ = 0.0002 ETH; 1 ETH = 5,000 SSPJ

Lowest limit of purchase: 0.01 ETH

Highest limit of purchase: no limit



5.5 The Bonuses System during public Sale

Bonuses	SSPJ amount
20%	7,000,000 SSPJ
15%	7,000,000 SSPJ
13%	7,000,000 SSPJ
11%	7,000,000 SSPJ
9%	7,000,000 SSPJ
7%	7,000,000 SSPJ
5%	7,000,000 SSPJ
3%	7,000,000 SSPJ
0	16,000,000 SSPJ

6.0 The Function and Distribution of Tokens

6.1 Functions of SSPJ

1. As an active currency circulated between merchant users linked up to Smart Supermarket Cloud Platform and Smart Supermarket cloud platform, SSPJ can be used to purchase all the applications on Smart Supermarket Cloud Platform.

2. As an active currency circulated between consumers and supermarkets linked up to Smart Supermarket Cloud Platform, SSPJ can be used to purchase all the commodities possessed by cashierless supermarket linked up to Smart Supermarket Cloud Platform.



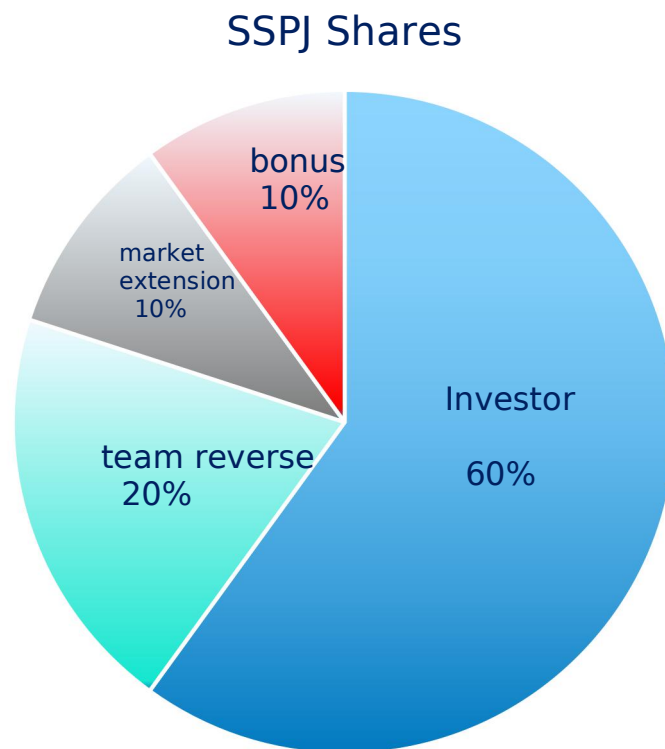
3. SSPJ is the bonus voucher on Smart Supermarket Cloud Platform. We will distribute 10% benefit produced from Smart Supermarket Cloud Platform according the road map to all SSPJ holders, and the number of SSPJ tokens is the voucher shares.

4. SSPJ can serve as a security-like investment products. The valuation of the entire market on Smart Supermarket cloud platform is 25,000,000,000,000 \$. If our project can seize 10% of this market share (considering that we are the predecessor of Smart Supermarket, the market share we are getting is far more than this), then our predicted market value is 2,500,000,000,000 \$. Therefore, except acquire 10% of the annual profit of Smart Supermarket Cloud Platform, the SSPJ tokens investors will get asset appreciation rate of 1000 times.

5. SSPJ can store value as currency. When the market experiences fluctuation, the investors can purchase SSPJ as investment products to avoid market risks and get appreciation.



6.2 Distribution of SSPJ



7.0 Road Map

7.1 2017 Mar—2017 Sep

Complete the Smart Security System of cashierless supermarket.

7.2 2017 Sep—2018 Feb

Complete the Loss Prevention System of cashierless supermarket.



7.3 2018 Mar—2018 Oct

Complete the Smart Shopping Cart System and Cargo Inspection System. Complete inner testing and release them.

7.4 2018 Apr—2018 Oct

Three phases of ICO of Smart Supermarket.

7.5 2018 Nov—2019 Apr

Complete Smart Supermarket Cloud Platform based on block chain technology, software code hub aimed to service for cashierless supermarket, and deploy projects completed during the earlier stage to the cloud platform. Finish the Docker integrated, and push the applications with integrated environment to the code hub.

7.6 2019 Apr—2021 May

Complete the Smart Supply Chain System.

7.7 2021 Jul—2025 Oct

Complete the Big Data Analysis System, Commodity Recommendation System (long time will be needed for the collection of data).

7.8 2025 Oct—2027 Oct

Maintain and perfect the project's software developed in prophase. update Smart Supermarket Cloud platform and software code hub.

7.9 2027 Oct—later

Maintain and update Smart Supermarket Cloud platform and software code hub. Lead the development of cashierless supermarket. Revolutionize the retail trade mode.



8.0 Team and Advisor

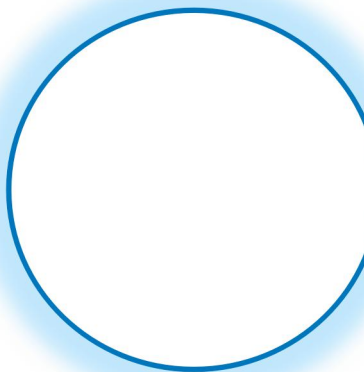
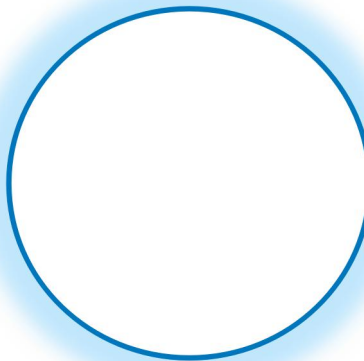
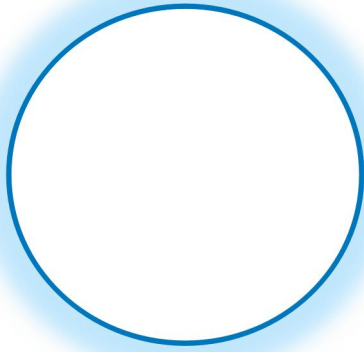
8.1 Team

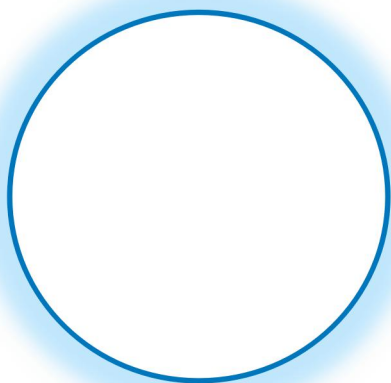
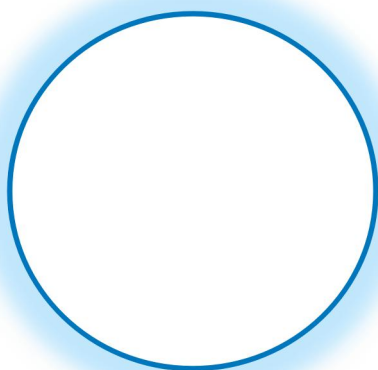
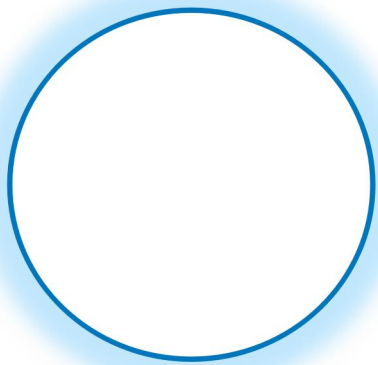


Mr. Jie, founder. Previous project manager of Cryptape (the only agent of Ethereum in China), leading to accomplish the ethpool project. Cloud Computing architect of Huawei, participating in various large cloud computing architecture project. Senior securities analyst.



Mr. HansChen, co-founder. Machine vision professor of Tsinghua University, leading to finish many frontier researches on machine vision and deep learning with major breakthrough.





2. 顾问

