

IntelliShare Foundation 2018.01.12

# **The Eco-business Environment**

# constructed by IntelliShare

# will change

# the everyone's way to use the Internet

and lead to a new shared-era.

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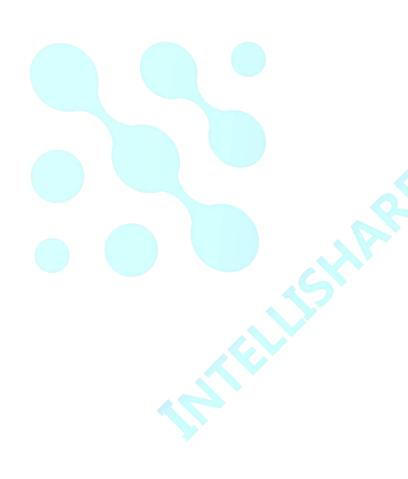
# **Team Introduction**

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## **Team Preface**

Once, the desires and demands for high-speed delivery of information promote the modern Internet emergence.

Now, the desires and demands for more direct convenience of communication will soon catalyze the rise of the next Internet age -GMN(Global Mesh Network).

This is the trend of our times

When BlockChain technologies fuse into Mesh Network,

Where Value locked in Each Mesh Network Node.

This is the opportunities given by our times

In this tide of trends, capturing the sail of chances, we are altogether to

witness the arrival of this great era !

----- IntelliShare Team

IntelliShare

# **Overview of Current Internet Development**

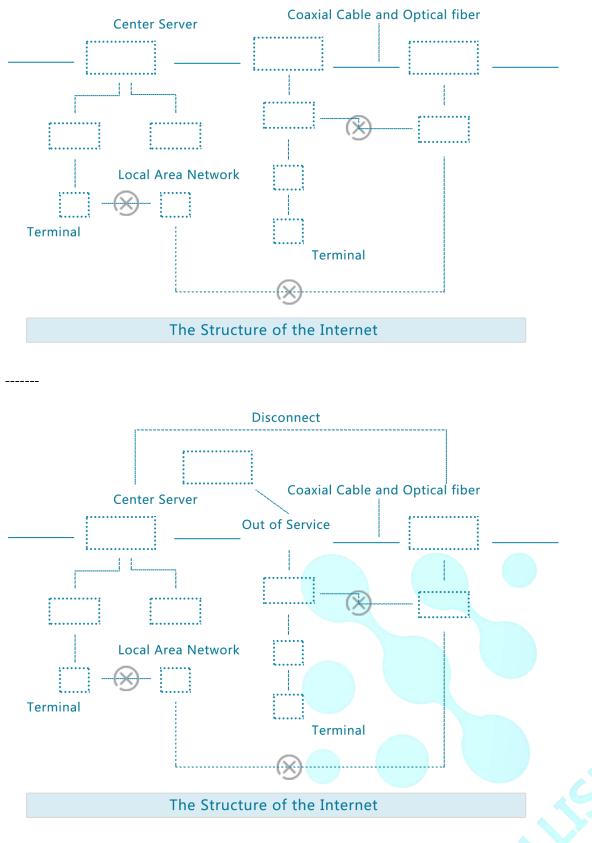
The Internet has transformed this blue planet into a global village. Although only a short period of two decades, the Internet has undergone several stages of development. At this stage, the biggest change is as follows:

#### Turn to the mobile Internet

Nowadays, the development of Internet has not been able to meet the needs of users in many aspects, and it faces a series of problems in the implementation of many communication layers and application scenarios. For example, poor security leads to difficulty in management and limited functions when facing unpredictable situation. The current Internet structure has not been able to adapt to or even hinder the further development of Internet applications. This is mainly due to the fact that the current Internet environment and the Initial design of the Internet have appeared to be very different. The main form of Internet has shifted from the traditional Internet to the mobile Internet. The emergence of mobile terminals has not just resulted in a tremendous increase in the number of users and the bandwidth of the Internet. But more importantly, the emergence of new networks, computing technologies, new business applications and business models has put forward new demands for the Internet.

#### Internet tree structure

The Internet communication platform built on the basis of physical structures such as optical fibers and cables is a world-wide huge computer network composed of various types and scales of independently operated and managed computer networks based on common protocols. It is a common set of information resources and shared resources. The computer networks that make up Internet include small-scale (LAN), city-scale (MAN), large-scale (WAN) and etc. These networks connect universities, companies, research institutes, military and government organizations in different countries through lines such as ordinary telephone lines, high-speed dedicated lines, satellites, microwaves, fiber optic cables and etc.



## Limitation

However, the limitation of the tree-like graphics transmission requires that when nodes in two

different-sized LANS or MANS need to establish interactions to form information interaction, they must first transmit information to the local area network, regional network, or wide area network. The central server is then transmitted from the physical layer architecture that connects the different central servers to the other end. The information received by the central server in the other zone reacts to the nodes you want to conduct.

Therefore, the straight-ended problem of the central server network is that a large amount of bandwidth resources will be wasted between the transmission of various servers, and the load rate of the servers will increase, which will affect the use efficiency and lead to the waste of social resources. At the same time, the central server network stores data collectively through servers and data centers, making the data vulnerable to attacks. On the basis of more and more attention to network security, different components of the service depend on each other in the application which is based on a central server network. Failure of one component will cause excessive damage to the entire system, and the fault tolerance system is low.

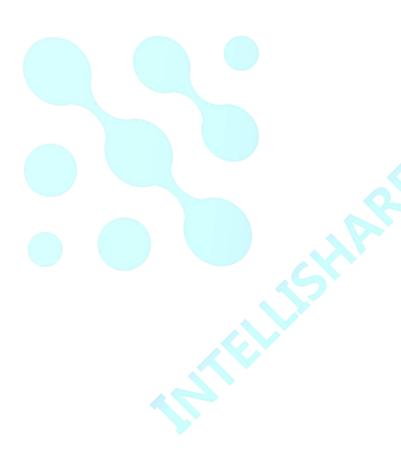
# **Direction of Mesh Network Development**

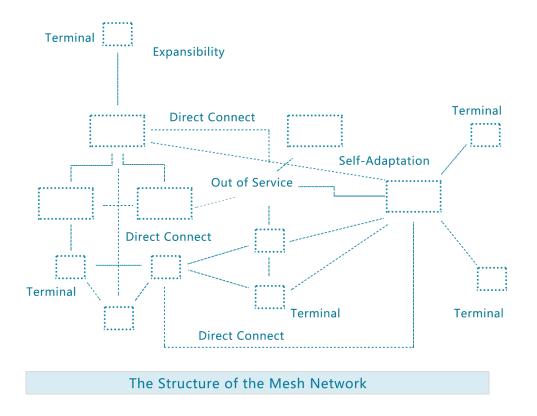
However, the Mesh network has emerged. Distributed node composition allows us to have different thoughts for the construction of the network.

In a wireless mesh network, a mesh-type jump based on Ad-Hoc(point-to-point) technology can realize the idea that any mobile terminal device node acts as an AP (ACCESS POINT) and router at the same time. Each node in the network can send and receive signals, and each node can directly communicate with one or more peer nodes. If the flow is too large and a relay node is congested, the data can be automatically rerouted to a neighboring node with a relatively small flow to transmit it. By analogy, the data packet can continue to be routed to the next nearest node for transmission according to the network flow until it reaches the final destination, greatly reducing the waste of bandwidth. Each node is independent of each other and does not need to store and transmit data through the central server, thereby reducing the risk of network security caused by servers-attack.

### **Features of Mesh Network**

Its characteristics can be simply summarized as:





#### **Self-organization**

For a Mesh node joined into Mesh network, the only thing you need to do is to take out the Mesh device and turn on the power. Then, this node will "recognize" the other same type Mesh devices and connect each other automatically.

Moreover, users can also add more nodes to enhance wireless network signals and their coverage.

#### Comprehensiveness

Not only can it be used in places where most of the wired networks can be used, such as companies, campuses, hotels, hospitals, and etc., but also it can be used in places where is hard to reach with wired networks, such as large warehouses, port terminals, military exercise sites, islands, mountains, emergency communications and other application scenarios.

#### Expandability

The Mesh network is expandable. The signal can automatically select the best path to transit

from one user to another, eventually reaching the purpose of signal expansion and enlargement, increasing its network coverage.

#### **Safety Repair**

Mesh network performs more robustly than normal network because it relies not just on the performance of a single node. In a traditional network, if a problem occurs in a node during transmission, the entire network system may fail to work. If one major node fails, the entire network may collapse. But in Mesh network, because its node design has multiple transmission routes, even if one intermediate node is failed, the original data still can automatically reroute to destination by using backup path.

#### Balance

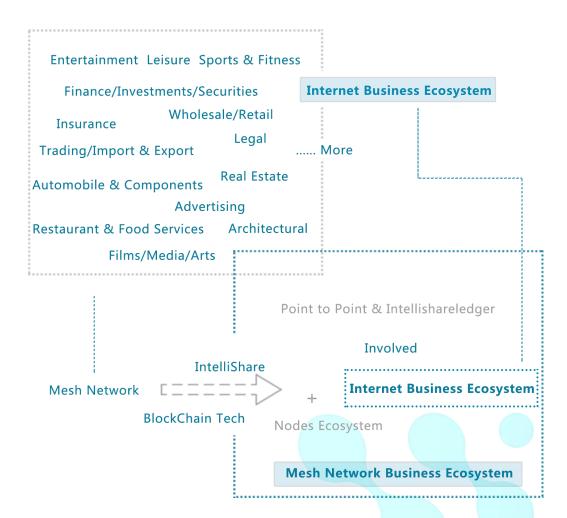
In a traditional single-hop network, the AP is shared by all devices. If multiple devices share the same network, it may lead to communication congestion and reduce the overall system operating speed. In advanced Mesh network, devices can share through multiple paths, so the overall performance of the system will not be affected.

The emergence of Mesh network naturally solves and contains problems arising from the large-scale application of centralized networks. Its comprehensiveness, including self-expansion, self-organization, self-management, self-repair and self-balancing technical characteristics, is bound to be the future direction of the Internet.

# **Blockchain Technology Creates the Value Ecology of Mesh**

# **Networks**

Business ecology is the value exchange based on information exchange.



## **Traditional Internet Business Ecology**

The large-scale application and development of the traditional Internet essentially solves the problems of information transmission and the exchange of values between nodes, with the combination of ease to use and relatively low cost. At the same time, the similar "Internet economy", "Internet +" and other large-scale commercial ecosystem are built on the Internet platform, assuming they can lock the values through central organization, and this promotes the further development of the Internet.

#### **Business Ecology of Mesh Network**

As a new direction for the future development of world network, Mesh network has the characteristics of decentralization, point-to-point distribution, continuous expansion, and self-management. It has shown tremendous development advantages in information transmission, but its lock application at the value layer has not been fully excavated with the gradual improvement of its function. Its value exchange function has not been fully realized. The promotion and development of things need to build their own business ecosystem to drive their development. This is the embodiment of development law at the level of value , and it is indispensable. At this time, the IntelliShare emerges.

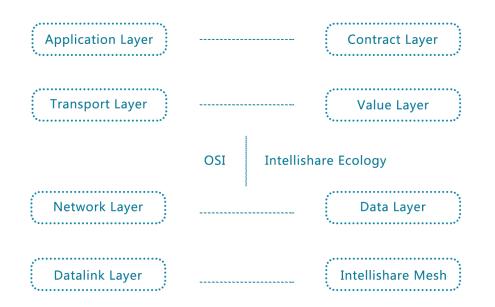
## **About IntelliShare**

The core of blockchain is to lock the values. The IntelliShare uses the blockchain technology to perfectly create such a self-organized, self-expanding business ecosystem, thus, forms an ecological environment that delivers and locks the values for Mesh Network. IntelliShare has constructed a distributed, self-expandable Mesh network validation system that uses each single node to confirm under common protocols. On the basis of the confirmation of distributed information data, the multi-dimensional ecological applications will be further built around the commercialization of Mesh networks, from the information-confirm to the value-exchange, from the confirmation of distributed single nodes to the promotion of the entire distributed community, and from the identification of single structure to the identification of accurate structures , combining the underlying blockchain distributed ledger system, thus, provide a distinctive and versatile Mesh commercialization system.

# **Technical Theory of Blockchain and Mesh Network**

#### **Ecological Structure of IntelliShare**

IntelliShare has its own complete ecological environment, as shown in the following diagram: From bottom up, it corresponds to the Intelligent Mesh network, data layer, value layer and contract layer.



## **Open System Interconnect**

### Underlying environment of IntelliShare

Each Mesh firmware node could combine with the light node of the blockchain. The underlying environment of IntelliShare is composed of intelligent Mesh network, which adopts the self-developed Mesh protocol. It is the underlying environment for IntelliShare which is self-connected, self-repaired, self-expandable, self-routed, self-balancing, and etc. At this stage, our mobile devices can use the APP to call the wireless universal module to form Mesh network. The following is a code example to demonstrate the Mesh implement :

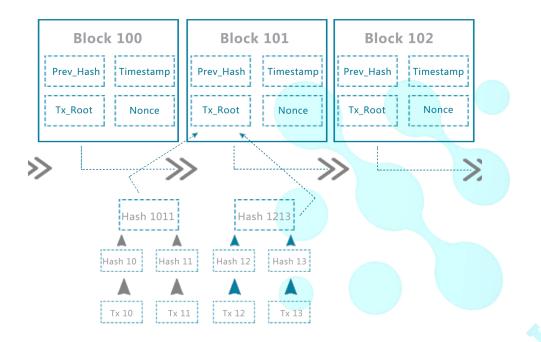
10	<pre>void implIntelliShare() {</pre>
11	<pre>closeWifi();</pre>
12	<pre>initDialog();</pre>
13	createFile()
14	
15	
16	ShellUtils.execCommand(commnandList, true);
17	<pre>thread.start();</pre>
18	}

Our Mesh network can also be implemented directly at the link layer. In other words, without APP, mobile phones can be directly connected to Mesh network through wireless blocks. This means that the future Mesh network is transparent to the users, which greatly enhances the user's experience. The firmware had Mesh network abilities can directly set blockchain light nodes in it, continuously creates and gets values.

#### **Data Layer**

At the data layer, it is the chain structure of the underlying data blocks of IntelliShare, forming the IntelliShare Foundation Chain (Intelligent Chain). The complete data of intelligent chain is stored distributedly in a large number of nodes on the network, ensuring the use of asymmetric publickey and privatekeys, time stamps, and other technologies, guaranteeing the data completeness and immunity.

The following is a blockchain schematic diagram:



The following is an illustrative code for verifying the integrity of a new block:

```
Blockchain Mesh Ecosystem
For Next Generation Internet
```

49	var	isValidNewBlock = (newBlock, previousBlock) => {
50		if (previousBlock.index + 1 !== newBlock.index) {
51		error.log('invalid index');
52		return false;
53		} else if (previousBlock.hash !== newBlock.previousHash) {
54		error.log('invalid previoushash');
55		return false;
56		<pre>} else if (calculateHashForBlock(newBlock) !== newBlock.hash) {</pre>
57		<pre>error.log('invalid hash: ' + calculateHashForBlock(newBlock) + ' ' + newBlock.hash);</pre>
58		return false;
59		}
60		return true;
61	}	

## Value layer

IntelliShare uses an improved PoS Consensus Mechanism , called PoSS (Proof of Stack & Service). In IntelliShare Mesh network, the node coinage difficulty is set based on a comprehensive assessment of the total Tokens holden and the services of Mesh networks provided. Putting in the node wallet, you can "mine" to gain benefits. If the node can serve other C-side clients in Mesh, such as providing Internet access, helping content distribution, and etc., there is also a chance to obtain "accounting rights." This mechanism locks the value of each individual who joins the IntelliShare Mesh network. As long as you are willing to share, you will be rewarded.

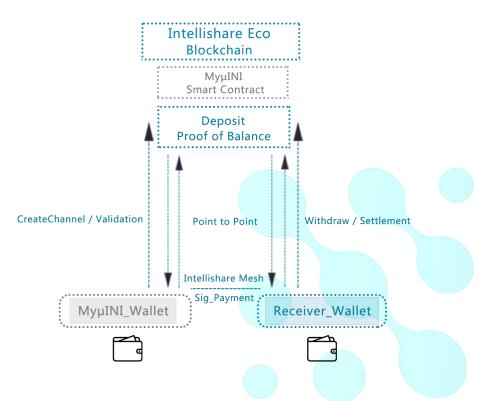
The following is a demo code of partial PoSS algorithm schematic:

```
117 // Find a lucky Winner - We create a pool of validators and choose the validator
118 // who gets to forge a block to the blockchain by using WinnerAlgorithm
119 func pickForger() {
         . . . . . .
        setValidatorsPool(){
         . . . .
123
         ValidateNote(Note) {
124
         . . . .
         weightStakeNService();
126
         ....}
         add2Pool(Validator){
128
         ....}
129
         }
         forger=pickWinner(ValidatorsPool[],WinnerAlgorithm);
         if block.Validator == forger {
133
                      . . . . .
                      Blockchain = append(Blockchain, block)
134
                      . . . . . .
136
                                   }
                                   . . . .
138
                      break
139
         . . . .
140
         }
141
```

#### **Contract Layer**

At the contract layer, IntelliShare encapsulates various application scenarios and cases in Intelligence Mesh through various scripts, algorithms, and smart contracts, so that users can easily build various applications on them, such as content distribution systems, accurate data validation, point-to-point matching transactions, small amount payments and etc. The following is a partial instructions code for small amount payments:

234	
235	TokenTransfer2Wallet(myID,value,myWalletID)
236	
237	createChannel(contract add,myWalletID,receiver add,value deposit)
238	
239	tokenExchange(myWalletID,receiver add,value)
240	validatingProofofBalance(myWalletID,receiver add,balance msg,balance sig)
241	
242	closeChannel(settlement, open block nubmber, balance, close sig)
243	
244	



## Structure

The IntelliShare network platform will provide support for clients on the entire platform,

including the following clients: Web browsers, Android clients, IOS clients, PC clients.

First of all, the user experience Alpha version for Android clients and IOS clients has been tested

internally, and the beta version have been gradually released to the public.

#### The distributed ledger system of IntelliShare

The distributed ledger records are the vital fundamental infrastructures, playing an overwhelming part in data storage and interaction in the Mesh Internet. Features of this technology like decentralization, irreversibility and common accounting are key to realizing the value system of Mesh Internet in closed environments for IntelliShare.

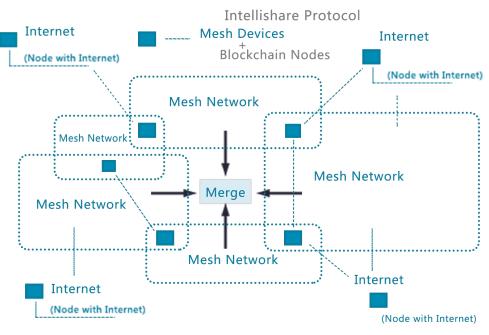
In IntelliShare Ecology, by utilizing the distributed accounting technology, it may help to register the Mesh Internet nodes offering traffic, conduct the data-matching identification, and make the node port perform a unique value authentication through time, loss and nodes in fixed proportion and double-check according to the comparison of data-maintenance among nodes to ensure their accuracy.

On the other hand, we do not merely aim to offer the data-maintenance of Mesh nodes, but also to support behavior-maintenance. That is to say, each time when the data corresponds to a unique matching timestamp, the acquirement and usage of data will be recorded on the accounting books, and a record of data complete process comes into being, which contributes to keeping the characters of uniqueness and irreversibility for the data among nodes, and also laying a safe foundation for the formation of more gap points.

Meanwhile, we are wielding the distributed accounting technology. On the premise of this, we could conduct data exchange framework supported by multiclass equipments on the basis of IntelliShare Ecological equipments, stimulating the traffic supply and support among nodes, consolidating and stabilizing the base station of Mesh Internet.

# **IntelliShare Mesh**

IntelliShare Mesh, A network platform for the Mesh network business ecosystem.



## **Intellishare Mesh**

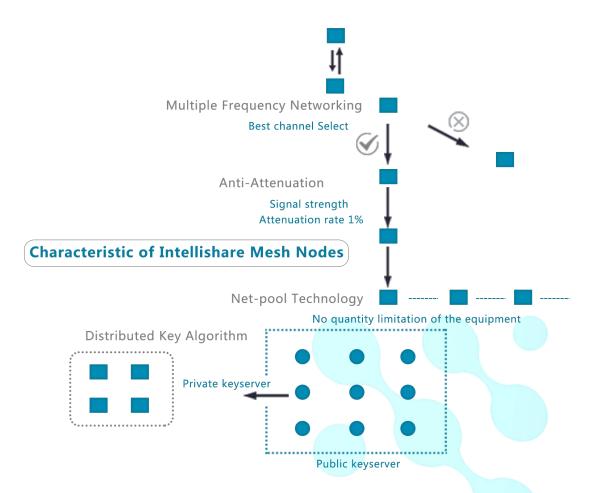
Mesh Network + Internet + Blockchain

The integration of traditional Internet + Mesh network + blockchain technique. IntelliShare Mesh is an organic combination of Mesh and traditional networks, a convenient and innovative network where the decentralized point-to-point distributed mobile scenarios, whose interconnection is automatically optimized , deeply rooted with block chain technique. The core of the IntelliShare Mesh is to allow each node in the network to send and receive signals, and to solve the problems of low expansion ability and poor transmission reliability that existed in the ordinary wireless technology in the past. A large number of the terminal equipments in the network can be automatically connected into net structure through wireless; each node in the network has the function of automatic routing. Each node only communicates with the adjacent nodes and accesses the backbone network. Therefore, it is a self-organizing, self-managed intelligent network, a flexible network that can be built without the backbone

network.

Only the modules for wireless communication are required to build the ad hoc network conveniently. It can be connected to the Internet through any relevant nodes. The Mesh network in the same protocol with different subnet can not only be connected by Internet, it can also be merged directly into a large Mesh network through nodes.

Nodes are the cornerstone for building the Mesh networks, the characteristics of the nodes of the IntelliShare Mesh are:



#### Multiple frequency networking

Each node in the IntelliShare Mesh can use different frequency bands in the post backing and accessing. The problem of channel interference can be solved by using the unique optimization algorithm to select the best channel automatically, which improve the network extension and communication performance.

## **Anti-attenuation**

The signal strength of the traditional Mesh network would decline slowly with the skip of the number of the nodes. According to our team's data model of Mesh network test at the present stage, this attenuation rate can be controlled at about 1%.

#### **Distributed key algorithm**

The "double key" confirmation method extended by the concepts of public keyserver and private keyserver. The connection confirmation of the fixed nodes in the underlying protocol link layer formed by the public keyserver and the secondary confirmation formed in the application layer shall be determined by the specific private keyserver. The "double key" model can form the confirmation of scaled accurate data, and provide a variety of rich and accurate business scenarios and precise business scenarios that face the final customer for the IntelliShare Mesh on the business level.

#### Net pool technology

The net pool technology is the core technology of the nodes of the IntelliShare Mesh. The extension features of the nodes of the IntelliShare Mesh can break the quantity limitation of the equipments, that is the interconnecting equipments between the nodes do not have corresponding connection problems with the increase of the number of nodes, they can maintain their smooth and multi-hop feature.

#### The application scenarios of IntelliShare Mesh

IntelliShare Mesh is a dynamically and constantly expanding network framework using multiple frequency network , anti-attenuation , distributed key algorithm , net pool technology , etc. to create an exclusive mobile wireless LAN for individuals or organizations. With the extension of the network scenarios and the complete matching of equipments, the IntelliShare Mesh build on the basis of blockchain technology can be used as the complement of existing network, and form the pattern of parallel networks. Its application scenarios can be widely used in wireless

customized exclusive LAN, non-network communications, network traffic balance, transportation networks, outdoor sharing economy, node online, AR scenarios, near-field social networking, and urban big data operations, making everything connected to the Internet a reality.

#### The realizable business form application scenarios can be divided into:

#### Wireless Customized Exclusive Local Area Network(LAN)

At present, social organizations such as urban communities, schools, commercial complexes, and enterprises mostly use wireless WiFi or wireless cellular telephones to communicate. Wireless Mesh network that add or adjust AP has faster and more flexible configurations than wired AP, and is easy to install and have lower costs. Especially for organizations with frequent access points, IntelliShare Mesh's flexible configuration and multi-hop architecture technology will effectively help their adjustment and upgrade.

Companies or schools can use IntelliShare Mesh to create a wireless LAN environment that can both perform internal fine-grained management and communication as well as prevent external Internet interference with the organization.

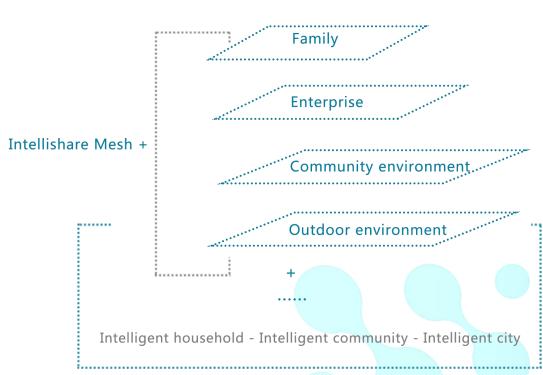
IntelliShare upgrades the interaction mechanism of commercial complexes, urban community advertising, and property management through blockchain + mesh technology. Currently, it has been implemented in the IntelliShare Mesh LAN for networkless communication, networkless distribution, fixed-point delivery, and networkless content release.

IntelliShare mainly helps urban communities, schools, commercial complexes, corporations, villages and towns and other social organizations to achieve point-to-point(P2P) communications and DAO autonomy. The purpose is to improve the organization's collaborative efficiency and guarantee the individual rights of the organization's members. Currently, it has established cooperative relationships with multiple companies and has taken the lead in the field of enterprise integrated management and application.

#### **Urban Big Data Operation**

With the development of science and technology, the construction and management of urban

facilities in the future will surely move toward digital and intelligent development. At present, the landing projects for the Internet of Things industry are more about urban infrastructure systems such as traffic monitoring, sewage monitoring, and garbage monitoring. IntelliShare Mesh can provide a more convenient, stable, safe, and low-cost wireless underlying network for the "Internet of Things" that consists of sensors and smart devices throughout the city system. It not only assists them in the measurement, monitoring and analysis of the core systems and information infrastructure of the city's operations, but also locks in the real value of the large amount of important data generated.



**Scenarios of Intellishare Mesh** 

## **Network Traffic Balance**

At present, people are accustomed to Internet-based Internet life. The NB-IoT and LTE centralized mode adopted by traditional mobile operators make all signals are transmitted to the central server cluster through the base station. However, when the amount of usage is large, it is easy to have network congestion. IntelliShare Mesh breaks through the limit of the number of devices through its unique net pool technology, that is, the nodes connected to each other do not have corresponding congestion problems as their number increases rapidly, and they keep the

network open and multi-hop feature at any time.

#### **Networkless Communication**

Around world, there are still many regions in the world that are relatively poor and backward, and 56% (about 4 billion people) do not have access to the Internet. Due to insufficient financial resources, remote geographical position, and too sparse population density, it is impossible to carry out a large amount of telecommunications infrastructure in these areas. The people there are completely in the state of "no network". Compared with the traditional communication mode with high cost, IntelliShare relies on the technical characteristics of the blockchain+Mesh network which only requires low costs to allow users to communicate with each other in a networkless environment, and can also jump into Internet through the node to synchronize with the world.

Similarly, IntelliShare Mesh can be used to solve problems such as wiring difficulties and high installation costs, allowing users to use free and high-speed wireless networks in other outdoor environments, such as some scenic spots that are difficult to reach because of the long distances.

#### **Transportation Networks**

IntelliShare builds a stable and unobstructed underlying communication network environment for the car network, which makes each high-speed moving vehicle become a node with multiple frequency networking, anti-attenuation, distributed key algorithm, multi-hope extension and other characteristics. It can promote the vehicle to truly become a mobile communication terminal with intelligent applications, so as to realize the functions of unmanned driving and safe rescue of the vehicle; it can also transmit all traffic information within the urban traffic system, thereby avoiding traffic jams and solving the problem of public parking. This low-cost, even zero-cost, data transmission network will be extended to the global scope and can include areas such as water, air, and ground transportation in the future.

#### **Outdoor Sharing Economy**

IntelliShare Mesh network is also ideally suited for use in outdoor shared devices such as OFO,

Mobike, and shared power bank. After the installation of IntelliShare Mesh, these shared devices can realize the zero cost of communication between the devices. This will greatly reduce the operating costs of the sharing economy and provide a low-cost underlying network environment for more common equipment in the future.

#### Node Online

Industrial IoT requires that nodes must be "always online." Ordinary IoT nodes often need to rejoin the network due to connection failure. This can cause network attacks, consume a lot of network bandwidth resources, and even lead to "network partitions". For example, using IntelliShare in the field of unmanned factories, the communication mode between robots can be improved from two aspects: On the one hand, each robot has a built-in hardware key. The identity ID derived from the private key enhances the authentication, ensures the security of the communication based on the digital signature, and prevents the proliferation of false information and intrusion of illegal devices. On the other hand, IntelliShare Mesh's features such as self-repaired, self-management, multiple frequency networking, anti-attenuation, and balance can ensure the uninterrupted internal communications of unmanned factories, and IoT nodes are always online.

#### **AR Scenario Support**

AR (Augmented Reality), an augmented reality technique, is a technique for calculating the location and angle of the camera image and adding the corresponding image, video, and 3D model. The goal of this technology is to put the virtual world in the real world and interact with it on screen, which is with strong sense of substitution. With the enhancement of CPU computing capability of electronic products, the use of augmented reality technique will become more and more extensive in the future. However, due to the high interaction cost on data transmission and location between men as well as man and substance , it can not be popularized. The underlying network of IntelliShare Mesh architecture has the characteristics of low cost, anti-attenuation, self-extension, and self-networking, which provides information channel scenes for various AR projects, such as games, military, medical, and so on, so that the AR technology is truly realized,

and more people experience the world of the fusion of real environment and virtual objects.

#### **Near-field Social Networking**

Close communication between people still depends on voice and body movements whether in elevators, subways, underground parking, or tunnels, and there are many obstacles to communicate closely with acquaintances and strangers. IntelliShare can solve people-to-people and face-to-face social issues in the near-field. People can connect with other people to form a mobile LAN, share bandwidth and flow resources, conduct point-to-point data transmission, and complete near-field social networking while ensuring privacy by installing IntelliShare Mesh on mobile phones. This can fill the market gap left by the traditional Internet social platform and solve a variety of social issues arising from face-to-face interactions between people in real life.

#### IoE (IntelliShare Mesh of Everything)

IBM predicts that more than 25 billion devices will be interconnected by 2020, and will have huge communication needs. Relying on traditional network technology to transmit data will have extremely high network operating costs. The Internet of Things, in combination with IntelliShare, builds a self-organized network with distributed transmission functions that can optimize Lora and NB-lot. This not only ensures the security of data, but also allows Internet of Things companies to avoid spending huge sums of money to build their own private networks, saving 80% of the cost of Internet of Things companies. IntelliShare Mesh can ensure a variety of smart devices to complete the point-to-point data zero cost transmission quickly and easily, providing a data transmission network environment for a variety of application scenarios in the Internet of Things.

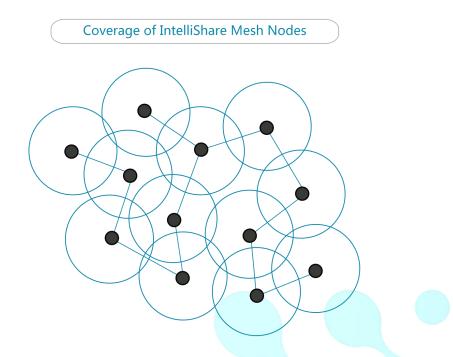
Any equipments that need to be connected can be added into IntelliShare Mesh in two ways:

- Equipments with external or built-in chip with SSPU.
- Direct carry out firmware upgrading for the compatible chips.

#### **Coverage of Mobile Payment**

All the IntelliShare equipments are interconnected for common use. From the scope of application, it can be as small as covering a floor, a community; or as large as covering a city, even covering the entire region to realize the wireless IntelliShare communication, and bring better information service and life experience.

More importantly, in the case of widespread node coverage, any sing.le node can easily connect to the WAN through a certain jump. Moreover, these devices themselves can also be the blockchain node to confirm the data, gradually achieve non-blind area mobile payment function.



With the promotion of electronic terminal equipments that have the function of IntelliShare nodes, all IntelliShare smart devices can implement peer-to-peer information transmission, and multiple nodes form a dedicated local area network.

Each dedicated local area network can have high data storage and processing capabilities and bandwidth conditions, with functions such as custom distribution, flow provisioning, subscription division, convenient payment, and mining revenue. This is actually a "super node" in the Internet world. In this"super node", each terminal node records and locks its own value in the "super node" through the blockchain consensus mechanism, and then through the interconnection between the "super node" and the outside world (directly or indirectly) achieves value locking and exchange. IntelliShare will build a new multi-layered network landscape in smart homes, smart communities, smart cities, and even the entire society.

IntelliShare also provides and support hardware and prototype, product equipment will be brought out step by step, which is testing the Alpha version of the devices including:

## **IntelliShare Router**

New IntelliShare Mesh technologies, elaborate appearance, powerful kernel, build-in loop aerial, strong signal and wide coverage. Intelligent optimization path, no wiring installation and plug-and-play provides the best experience for customers.

#### IntelliShare Powerbank

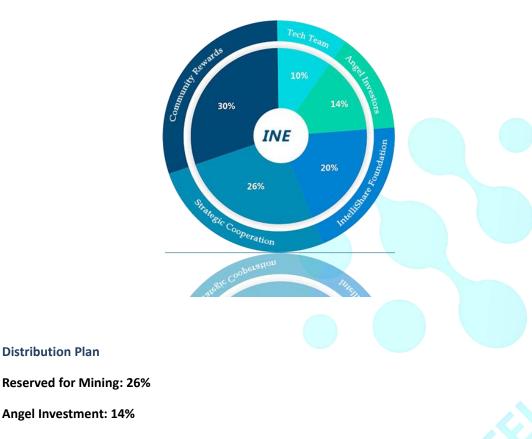
Built-in Mesh chip, acquires the signal of the surrounding networks automatically, connect to weak password route or IntelliShare nodes automatically and become the "Mobile IntelliShare nodes". Select the best path and the strongest signal automatically and self-organize LAN with other IntelliShare nodes to create a carry-on Mesh network that truly belongs to you.

# **Distribution Plan of IntelliShare Token (INE)**

#### The issuance of digital asset

**Distribution Plan** 

IntelliShare token, hereinafter referred to as IntelliShare token (INE). At this stage, INE Token is the Smart contract based on Ethereum. Ethereum is an open source and public distributed computing platform, it provides a distributed Turning-complete virtual machine to support the operation of intelligent contract. It is a block chain digital asset build on the basis of latest distributed consensus algorithm used for trading and supporting digital assets, and paying the service charge of block chain transaction, it is circulated around the world. We use IntelliShare as the basic unit of INE Token. IntelliShare equipments is the basis of IntelliShare, combine block chain technology with IntelliShare Mesh, use Token mechanism to stimulate the addition and sharing of each node, let the server, the user and the owner benefit from it, thereby creating a new ecosystem sharing economic cycle of value networks.



To reward early investment incubators and individuals and promote rewards for long-term stages.

#### Reward for the research and development team: 10%

For the long-term research and development of technology.Promotes the continuously perfect

of technology and rewards for long-term stages

### Reward feedback to the community: 30%

To encourage the developing of community technology and the application of products.

#### IntelliShare Foundation: 20%

To maintain the operation of the foundation, promote the maintenance of the value of network digital asset and create the ecosphere of IntelliShare.

### **Unlock plan**

#### Strategic Cooperation: 26% (locked position)

Release 10% immediately after the private placement is completed. Release in the order of 15%, 20%, 25%, and 30% every 30 days after coming online on the trading platform. A total of four months have been released.

### Angel investment: 14% (locked position)

Gradually put on the market for six months after issuance, the first release: 25%; unlock after 12 months: 25%; unlock after 18 months: 25%; unlock the rest after 24 months: 25%.

#### **Development team Holds 10%**

Locks up for two years, gradually puts on the market in the third year after issuance, releasing for the first time: 25%; unlocks for the fourth year: 25%; unlocks after the fifth year: 25%; unlock the rest after the sixth year: 25%.

## Reward feedback to the community

Complete distribute 30% in 5 years. First year: 10%, second to fifth: 5% each.

#### **IntelliShare Fundation**

Locks up for two years, and gradually put on the market according to the needs of the foundation's operation.

#### Detailed rules and regulations for issuance

The total amount of the INE issuance is 986,000,000; the total amount is constant and will never

increase. INE corresponds to the use of DT(Digital Token) and DApp. The digital asset is not issued by the Central Bank, credit institutions, and electronic money institutions, the problem of decentration and trustless is solved by block chain, it is transmitted through an encryption algorithm, and it is a collection and payment tool based on the circulation and application of virtual or specific environment. We believe that the core value of the future of INE lies in:

- The value of the collection and payment tool under the application environment: Its value derives from the market demand of the application environment.
- Characteristics of the digital asset when it is analogy to metallic currencies: The quantity of digital asset is controlled strictly.
- 3) It will be applied to the application environment of the continuous developed new basic chain, its use value and circulation value will be greatly improved, and it is a long-term digital asset holding scheme.

### Application experience and earnings

INE adopts POS consensus mechanism, which make it gains earnings on the mobile terminals . The nodes that provide the service will have a corresponding Token in return; for the users of IntelliShare Mesh, they also have the chance to obtain Token in return. Accept the issuance of content and acquire the share of the Token. For example: promotion information of the merchants, advertisement release, and network communication.

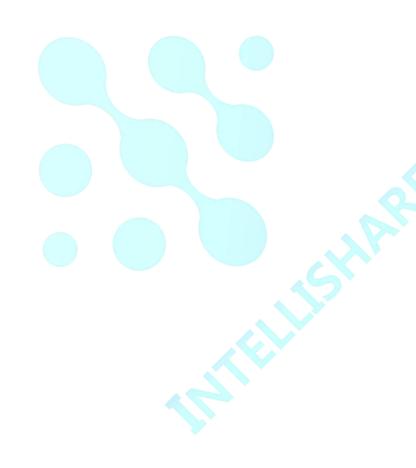
#### Share network resources, gain Token reward

There are Token rewards for the nodes that provide the service. For example: nodes provide Internet channel to other intelligent devices, so that the Shared traffic can be rewarded with a certain Token.

If you put the INE that would not be transacted for the moment into the IntelliShare Wallet, you will have regular and stable dividend earnings.

Along with the completion of IntelliShare public chain, all the INE Tokens will be mapped onto

its own public chain



# **IntelliShare Fund Council**

#### **IntelliShare Foundation**

IntelliShare Foundation (INIF) is headquartered at Boulder, United States and is a NPO established by major bloackchain research and development companies and venture capital institutes. The Foundation devotes itself to the promotion of bloackchain knowledge, manufacturing ,research and development of bloackchain technology, and the drive for the development of blockchain industrialization.

#### **Board Institute**

In order to maintain the sustainability, management effectivity, and fund-raising security, IntelliShare would establish IntelliShare Board Institute to regulate its organization and activities, and protect legal rights of the institute, relevant profiteers and users. The institute must obey the constitution, laws, rules, regulations and relevant national policies.

## **Board Team**

The Board Institute of IntelliShare governs commerce committee, finance committee, human resource committee, personnel committee, joint representative committee, Technical Committee of major events, business committee, and finally, personnel committed jointly-elected by finance and human resource committee. The chairman of the joint representative committee is elected by joint representatives and is responsible for affairs of daily management. Joint representative committee is the highest decision-making institute, whose jobs include:

- a) Modifying management regulations of IntelliShare.
- b) Supervising the realization of IntelliShare regulations.
- c) Hiring or firing the chairman of joint representative committee as well as leading officers of committees.
- d) Formulating or modifying important decisions.

Members of the joint committee have a term of five years, and after members of the joint committee receives full term, the technical committee, business committee, financial and

personnel management committee would again vote for 5-20 new members, who would represent IntelliShare Board to make important and urgent decisions and need to accept credit extension investigation.

## **Technical Committee:**

Technical committee of IntelliShare is responsible for the development of bottom-level technologies as well as the development, examination and management of various products. Specifically they include:

- a) Code management, code development, code tests, code examinations, debugging and online Initialization of code.
- b) Setting up project-tracing meetings to communicate in project progress and needs.
- c) Exploring scenarios of IntelliShare application for business realization. It is allowed to be non-open sourced for examination of codes, public chains, union chains and private chains.

## **Business Committee:**

- a) It is responsible for the promotion of IntelliShare technology as well as products of original chains, and the joint of various resources.
- b) It shapes the brand image of IntelliShare, build cooperate culture and establish and improve various administrative regulations.
- c) It is responsible for public/relation issues. If any events that affect the reputation of the Board,the committee replies publicly after inner examination and evaluation.

#### Finance and Human Resource Management Committee:

- a) It is responsible for project fund-raising application and examination, salary management, and daily operation cost examination, etc.
- b) It is responsible for various administrative issues, such as the drafting of relevant files, discussion and arrangement of meetings, etc.

# **Team Introduction**

#### **Core team**

#### Raymond Xiong / Project Founder, CEO &CTO

Master of Computer at California State University

Former Sky IT Support Senior Advisor, Los Angeles Area

He has worked on data acquisition, processing system development and algorithm research in the United States for more than ten years. He has participated in the research and development of early blockchain technologies and has authoritative views on the landing and application scenarios of blockchain technologies.

## Eric Zhu Ph.D/General Architect of Technology/Leader of IntelliShare Shanghai Team

Doctor of Computer at Fudan University

Expert of Expert Committee of Shanghai Cloud Computing Promotion Center / Expert of Open Source Committee of Shanghai Software Promotion Center / Member of OpenStack China Community Expert Group, former chief engineer of Pudong Software Park.

He has been engaged in the research and development of technologies and products in the field of communication technology and high-performance computing for more than ten years. He has published many papers in International Rank2 conferences and SCI journals.

## Edgar Lei/Senior Software Engineer/Leader of IntelliShare Silicon Valley Team

Master of Computer Science at University at Buffalo, New York

Participated in the establishment of the US financial company GMBP Capital to build the Fintech system

Serves as Senior Software Engineer to design and develop cloud data system at Tesla America Silicon Valley Corporation responsible for the design and development of cloud data systems. He has more than ten years of experience in software development for IT companies in the United States.

Gurinder Bhangoo / Senior Software Engineer / Head of IntelliShare & TheDEN Blockchain

## **Educational Organization in Silicon Valley**

Chief Blockchain Instructor of Peerbuds

Early members of Crypto World which is a world famous digital encryption technology community

Famous blockchain technologist in Silicon Valley

The early developers of blockchain smart contracts. He has considerable experience in developing blockchain, distributed ledger technology, smart contracts, and encrypted transactions.

### Alfredo Aguirre Valdez / Senior Software Engineer

Co- founder of Rino Soluciones, Technology Interviewer of Tesla He leads Apple, Github develops multiple applications. His Customers include American Express and BBVA Compass.

### Lin Ma Ph.D / Senior Software Engineer

Ph.D. of Computer at Washington University in St. Louis Distributed parallel system laboratory architect and data scientist in HUAWEI US Silicon Valley Research Center

Former member of Intel WiMAX Technology and Business Development team, CUDA Library development team, and BALSA Consulting Group.

He has published more than ten IEEE/ACM top-level international conferences and more than ten journal papers, obtained three U.S. patents, and has been the judge and reviewer for more than 20 international conferences and journals in the field of parallel computing.

### Bo Zhang Ph.D/ Senior Software Engineer

Ph.D. of Electronic Information Engineering at University at Buffalo, the State University of New York. He currently works as the project technical manager in bak, a startup company in New York State, responsible for the development and management of mobile electronic products. He has more than 10 years of research on the technical principles of wireless communication, many years of experience in mobile electronic product development and management. His research areas include algebra, topology, massive mimo, mesh network, etc.

#### Yuhao Wang Ph.D / Senior Software Engineer

Ph.D. of Electronics and Electrical Engineering at Nanyang Technological University, Singapore
Postdoctoral scholar of Carnegie Mellon University
Currently works on the development of integrated circuit EDA software in the Synology
Technology Corporation in Silicon Valley and researches blockchain algorithms against ASIC.
He has published more than ten papers about computer architecture, machine learning, and
cryptography. He also serves as reviewer for several international journals.

#### Rui Wang / Senior Software Engineer

Master of Computer Science at Stevens University of Technology, Full Stack Development Engineer of Google

Years of experience in software development for IT companies in the United States.

#### Xiaosong Zheng/ Senior Software Engineer

Former Shopex E-Commerce system architect, with nine years of software system architecture and development, technical team management experience. Technical consultant for large customer of Shopex E-Commerce in b2c, b2b2c and other system.

#### Congcong Jiang/ Senior Software Engineer

He has about 20 years of software system architecture and development, technical team management experience and has worked in AXA, Pioneer, Denso and other world top 500 enterprises. He has successively led and participated in the development of various Toyota, Lexus car control systems, and has achieved good response in the market. Then he was responsible for the company's micro-services, distributed services, and automated testing and other business. During this period he restructured the company's overall Web architecture .

Expert of the blockchain development language golang, led the development of blockchains for

multiple golang languages.

#### Hengtian Yao / Product Design Director

Master of Mechanical Engineering, University at Buffalo, New York, Chair of CSSA Student Council Senior Product Structure/Industrial Appearance Designer

#### Nicholas Wan / Chief Financial Officer (CFO)

Master Degree of Accounting Management at University at Buffalo, New York/ Bachelor of Accounting at Daemen College, New York American Certified Management Accountant(CMA), member of the American Institute of Management Accountants (IMA) He has worked in financial management area for many years and is familiar with various types of financial applications, sorting out financial status, and managing the company's systematic financial environment.

## John Win/Investor/Chief Capital Operating Officer

Founder of Sum Tim Investment Management He has more than 20 years of experience in asset management In the A+H era, he was the president of a listed company in Hong Kong, and was the director of risk control for capital market operations. He has served as a trainer of capital operations for derivative companies in Hong Kong.

#### Wanlong Gao/Investor/Capital Manager

Investment director of Shenzhen Construction Fusion Group Former deputy general manager of Business Banking Department in Thailand Kasikorn Bank, Shenzhen Branch. Marketing Director of Tairan 9<sup>th</sup> Road Business Department in Guosen He has been engaged in foreign-invested banks and has served as domestic well-known securities dealers for over 10 years. He is proficient in equity investment and financial derivatives trading. The service assets of the team that he leads exceed RMB 10 billion.

## **Senior Advisors team**

#### Bina Ramamurthy Ph.D/ Technical Advisor

Ph.D. in Electrical Engineering from the University at Buffalo, Buffalo, NY. She is a Research Associate Professor at University at Buffalo, Computer Science and Engineering Department, the Director of Blockchain Thinklab that was created with an award from University at Buffalo Presidential Circle Funding. She has been the Principal Investigator on four National Science Foundation (NSF) grants and a co-investigator in six Instructional Innovative Instructional Technology grants (IITG) from SUNY. She recently launched a four-course blockchain specialization on Coursera platform for the worldwide online audience. Her current research is in data science with an emphasis on computational models and distributed systems. For the past two years, she has been actively involved in blockchain research, education and industrial collaboration.

#### Terry Xing Ph.D/ Technical Advisor

Chief Technology Officer of UMining

Dr. Computer in the United States, EB1A Outstanding Talent. Research direction Distributed systems, cloud computing and multiple networks. Rich world top 500 development and research experience. He has published more than 20 papers, books and patents (items) related to journals and conferences. At the same time, he has participated as a judge and reviewer in the evaluation of more than 50 top magazines and conferences in the world.

#### Kevin Zhu / Technical Advisor

Chief product officer of Corfire. Former technical development supervisor of Sprint and JVL, led the Omnyway technical team to launch the Big Data Al Commerce Pipeline platform for payment tools Kohls Pay and IBM Pay.

#### Jerry Zhang Ph.D/Finance Advisor

Doctor of Engineering at Princeton University

Former fund manager of YES Foundation in New York, responsible for high-tech project investment

Current PinmoCEO consultant, 1% Quantum Fund partner and co-founder of X es Media Studios

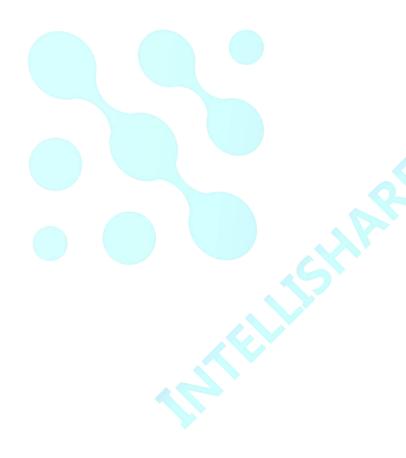
## **Ronnie Sun / Product Planning Consultant**

MBA at Alfred P. Sloan School of Management / Master of Data and Information Technology at University of California, Berkeley Former Senior Consultant of Booz Allen Hamilton Currently works in the product planning department of Apple's headquarters and is responsible for the sales forecast of the iPhone product line and the formulation of production plans.

## Shaun Jia / Marketing Analyst

Master of Science at University of Cincinnati

Former Amazon software engineer. Currently serves as a senior software engineer at LinkedIn, responsible for R&D and incremental growth of advertising products. He has spent years studying and investing in US stocks, and he specializes in medium and long-term trend analysis of technology stocks.



# **Risk Warning and Disclaimer**

#### **Risk Warning**

For INE exchangers, please read the IntelliShare white paper carefully to gain a thorough understanding of the risk-return characteristics of IntelliShare and take into account your own risk appetite, take rational participation and make prudent decision. Whether as an INE buyer, consumer, or investor, you may be exposed to the following risks:

**Trading Risk**: When the IntelliShare Token enters a market transaction, the price may rise or fall and price fluctuations may cause a loss.

Policy Risk: As blockchain is an innovation, the current policy regulation is not clear. Therefore, any change in policy may have an impact on the project itself or on the market price.
Business Cycle Risk: There is cyclicality for any industry. The blockchain industry also has cyclicality. After the market turns from a bull market to a bear market, most projects will be

affected.

**Cyber Security Risks:** Blockchain technology is also built on the Internet and hacker attacks can result in project and customer losses.

**Development Progress Risk:** Since blockchain is a science and technology innovation, there are no precedents in many fields. There may be a risk that technology development will not reach the expected level in technology product development.

The risk of core brain drain: there is a very short supply of chain block talent. Loss of core technical personnel and operational personnel of a team may have a greater impact on the product or community.

**Technical Risks**: The application of blockchain technology is very fast in its application iteration. There may be a risk of product loss and users' loss due to technical imperfections. In addition, there are some unknown risks, and participants are also asked to consider carefully before buying and investing. Buyers should understand that IntelliShare items will not be refunded under any circumstances. As IntelliShare, the team will make rational use of digital assets, abide by their duties, perform honest and diligent obligations, and conduct product development, business expansion and community maintenance.

Note: IntelliShare Token only represents the right of credit inquiry in IntelliShare, which does not represent or contain any rights, uses, purposes, functions or characteristics. Although IntelliShare Token may be able to trade, they are not money, securities, goods or any other type of financial instruments.

#### Disclaimer

- This article is for informational purposes only and does not constitute any opinion on the transaction related digital assets. Any similar proposals or inquiries will be carried out under a trustworthy clause and under applicable laws, and the above information or analysis does not constitute investment decisions or specific suggestions.
- 2) This document does not constitute any investment intentions or instigation investment.
- 3) This document is not composed or understood to provide any act of sale, nor is it any forms of contract or commitment. The sponsor clearly stated that users should have a clear understanding of the risk of investment. If investors participate in the investment, they will understand and accept the risk of the project, and are willing to undertake all the corresponding results or consequences for them.
- 4) The platform expressly disclaims any direct or indirect losses caused by the participation in the chain (INE), including the economic loss caused by the users' erroneous transaction operations, any errors or negligence or inaccuracy caused by the personal understanding, and personal trading losses or any action caused by all kinds of block chain assets.

# **Contact Information**

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Global Community: global-community@IntelliShare.io

Public Relations: pr@IntelliShare.io

Investor Relations: ir@IntelliShare.io

IntelliShare Council: capital-council@IntelliShare.io

## IntelliShare Foundation: Registered in the United States, is a non-profit organization with a

global development team.

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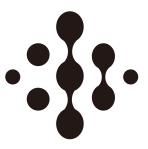
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## **Contents Description**

This document is the first version of the white book of the "IntelliShare". We focus on the strategic objectives and technical roadmap of the "IntelliShare". In the future, we will continue to upgrade this document to reflect the latest development of the "IntelliShare". For the latest edition, roadmap, team, foundation governance, investors, strategic partners and other information of the white paper, please visit the official website.

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