Block Chain Based Distributed Protocol OpenChat White Paper

1. Background introduction

1.1 Blockchain Technology

Blockchain is one of the most popular topics of all time. It is above all a social trend of thought, which indicates the arrival of a new era of human transition and change. Kevin Kelly describes in "Out of Control": The laws of evolution of nature, society, and technology of biological logic move from edge to center to edge, from uncontrolledness to control to uncontrolledness. The technical basis of the blockchain is distributed network architecture. It is precisely because of the maturity of distributed network technology, to go to the center, weak center, sub-center and shared, consensus, shared organizational structure, commercial architecture can be effectively established. There have been several iterations of blockchain technology today: the first is a distributed ledger. It is a general ledger for all agencies and a general ledger for all business matters. Second, blockchain technology is a new type of database. There is no central computer room, there is no operation and maintenance personnel. The third party enters the data according to the consensus algorithm. The use of asymmetric encryption algorithm to ensure data security; third it is a smart contract. Rely on smart contracts, the world is like a supercomputer running fine, everything can be agreed in advance. Compiled into code, in accordance with the procedures; Fourth, it is TCP-IP model Point-to-Point value transfer protocol. Its invention marks the Internet technology has helped people to transmit information more efficiently over the past two decades. You can start helping people to realize value interconnection without the help

of third-party trust endorsement.

The core value of blockchain lies in its realization of a tamper-proof, secure and reliable distributed accounting system. Multiple participants using blockchain ledgers can form the basis of trust for multi-party transactions without the need for additional third-party guarantee agencies, thus enabling a low-cost, low-latency information exchange and processing system to enable the efficient flow of digital value.

1.2 Encrypt digital currency

Encrypting digital currency is an important application on the blockchain. As the name implies, cryptocurrency concentrates on cryptography. Cryptography provides a mechanism to encode cryptocurrency rules into the system itself. Not only can people use cryptography to prevent interference with the system and thus avoid confusion. We can also use it to code new currency units into the mathematical protocol.

The concept of encrypted digital currency to be distributed by social networks based on the BIMP distributed protocol implements this concept. Relying on the unchangeable, safe and reliable blockchain feature creates a peer-to-peer community for all humanity using encrypted digital currency transactions and exchanges.

1.3 Instant Messenger software background

With the popularization of smart phones, Instant Messenger gradually replaces traditional 2G SMS and voice calls in people's daily life. In developed countries and some countries where mobile communications are developed, instant messaging software such as WhatsApp, Telegram, WeChat and so on has greatly facilitated daily life and communication. Emerging countries with an absolute majority of their

population are in high demand for "IM + e-Payment" models. To instant messaging software as a platform to build advertising, mobile games, e-commerce, peripheral services and other services multiple products. Constructing a well-established online ecosystem in emerging markets and creating a one-stop market for emerging markets and workplaces is where the OpenChat team is fully committed.

While IM software is developing rapidly, traditional enterprises gradually expose some problems in their operations.

Traditional IM applications usually include three parties: platform, partners and users. Each side has a role to sustain the development of the platform. Although everyone plays a key role. But the goals of these groups are to very different goals. The current model does not provide a means by which their incentives can coexist and harmonize. Driven by the supply side's own interests, the future of social networks becomes unsafe. The platform and partner associations do everything possible to gain access to users' information in order to extract big data that is more suitable as a basis for promotion. To ensure their own living space. However, this has left users in deep privacy.

In 2013, Facebook, Skype, Microsoft, Apple and Yahoo! were exposed to the Prisoners Project being implemented by the U.S. National Security Agency, causing an uproar. As a user, you have nothing wrong, but you may become the object of suspicion. They can use this project to scrutinize all your past decisions and review all the friends you've talked to perhaps just because you sent the wrong message once. Nowadays, users in some areas pay more attention to personal privacy. Many people do not care what their authority is used to do. Also do not care about the privacy policy statement in APP.

In 2016, a "Social Software Communication Privacy Ranking" released by Amnesty International was widely distributed on social networks. This list compares and rates current mainstream social software services from five aspects: "Human Rights Protection", "End-to-End Encryption", "Risk Alert", "Open Door to Open Door" and "Publishing Encryption Technology Details". As global mainstream IM Skype and WeChat scores were only 40 points and 0 points (out of 100 points). Shows the seriousness of the risk of privacy disclosure. The traditional information encryption technology called "transmission encryption." Service providers use different encryption methods to encrypt the transmission of information. The biggest drawback of this encryption method is that the messages sent between users are plaintext. In other words, if the service provider in charge of information transmission wants to peek at the privacy of users or inadvertently releases the information, all the user's chat records are unreservedly exposed to the public.

Therefore, the terrible future is no longer the disclosure of personal information, but user behavior has been predicted. When the development of technology led to artificial intelligence advice can affect people's decision-making. Especially behind these AI are controlled by a large company I do not know is the joy or panic.

Blockchain is a new application mode of computer technology such as distributed data storage, point-to-point transmission, consensus mechanism and encryption algorithm. Blockchain as a strong guarantee of digital assets, has been well received by the industry. However, the traditional IM, which should be responsible for the privacy of users, does not provide any corresponding entrance to the blockchain.

At the same time, providers of traditional IM third-party products are constantly competing with each other to ensure their own interests. They simply can not enter into a state of mutualism and mutual benefit. Over time, some good and carry the dream providers have to accept the fate of being eliminated. This not only harms the diversity of the market but also stifles many great ideas.

1.4 Electronic payment background introduction

Many electronic payment methods can be classified based on two basic concepts of cash and credit.

Credit card transactions are currently one of the major online payment methods. For example, users are shopping on Amazon.com (www.amazon.com). First need to enter your credit card information when billing. Amazon receives the account information and feeds back to the payment "system" including the information processor, bank, issuing company and other intermediaries.

If using a third-party payment facility such as PayPal or Alipay. The user experience model would be for the intermediary company to collect the user's bank card information and approve each transaction information and settle the settlement with the seller at the end of each trading day.

Credit-based electronic payment is convenient, but its security can not be guaranteed. Neither the buyer's user defaults nor the payment channel itself are compromised, which can result in loss of the payment system. The cash-based payment system, however, increases the payment system complexity while avoiding the security risk of

providing bank card information directly to the buyer. Users and sellers can not communicate directly. They have to open an account with a third-party payment company.

Encrypted digital currency, represented by bitcoin, supports both user-merchant transactions and transactions between users and users. In fact, the Bitcoin system does not distinguish between users and merchants. Much of Bitcoin's success is due to its support for transactions between users and users. From the beginning, every bitcoin user can send to other users. Because people in the entire bitcoin community are struggling to get support for bitcoin and get businesses to accept it as well. As a result, cryptocurrency is likely to become a substitute for credit card companies and third-party payment agencies in the future. It will truly deliver point-to-point real-time de-trusted transactions as the primary choice for electronic payments.

In addition, whether it is based on cash or credit payment. Cross-border payment of high fees are one of the pain points of the market. According to the McKinsey report "2016 Global Payments: Strong Cornerstones Despite Changes" shows that cross-border payment transactions account for less than 20% of global payments. However, the transaction fee it brings is 40% of the worldwide payment transaction fee. In 2015, the cross-border payment of revenue was 300 billion U.S. dollars. How to improve efficiency and reduce costs is an urgent need to solve the blockchain technology.

2. OpenChat Ecological introduction

The OpenChat project is a set of distributed protocol BIMP based on blockchain technology. The first floor-to-ceiling application of the BIMP protocol will be BeeChat, an Instant Massager add-on light wallet application based on the blockchain cross-link technology, which will build a completely new social-networking eco-economy in the future. ChatCoin tokens made by the BIMP protocol are widely supported in BIMP-based chat tools. It is used to chat tools issued red envelopes, reward, pay to enter a small dense circle and other service content.

2.1 BeeChat Project Introduction

BeeChat, built on the OpenChat protocol, is a true platform to centralize and support multiple blockchains. BeeChat to "IM + wallet" as the model. It instant messaging software as a platform to build advertising, mobile games, e-commerce, peripheral services and other multiple services. Gradually build a sound emerging market online ecosystem. For users to create a one-stop emerging market life, work platform.

IM is the foundation for BeeChat's development. As many assets in emerging countries and markets have not been digitized, such as housing, automobiles and so on. But in the future, when it's all about digital assets, IM can exploit the agreement with ChatCoin to inspire the community's development capabilities for better circulation of these digital assets. Which in turn drives ChatCoin's acceptance.

The complexity of the technology facing the original cryptocurrency is often heavy for most consumers. Transaction costs, private keys, and alphanumeric address issues create barriers for mainstream users. These include the common requirement to hold

cryptocurrencies first (only cryptocurrencies must be held before the other tokens can be acquired and utilized). OpenChat will try to greatly reduce this type of friction for enabling. Prior to being able to interact with ChatCoin, user-initiated processes do not require the expertise to have cryptocurrencies.

BeeChat maintains the Community of Interest Principles. Protect the interests of users and developers and get everyone involved in improving and promoting BeeChat's business. But BeeChat does not represent a purely decentralized anarchist color but rather helps authorities to resolve the issue of trust in social activities at low cost. It is an effective means of promoting the establishment of an honest society. So BeeChat represents the future, while ChatCoin represents the future.

2.2 Blockchain based electronic wallet (Bee Wallet)

The main function required to enable the digital community to use cryptocurrencies is wallet. As a first step, BeeChat will consolidate the wallet for each BeeChat user account. The associated user interface will allow the most common wallet interaction. Support BeeChat's millions of active users by consolidating their wallets. BeeChat wallets have the potential to become the most popular and used cryptocurrencies wallet in the world.

Settings　　　**Wallet**

My assets (8) 👁

	QTUM	0.00315
	79.184586	
	ETH	0.000708
	3072.5151	
	BTC	0.00000156
	97671.55	
	INK	0
	1.944811	
	HSR	0
	99.194565	
	EOS	0
	26.02897	
	BTM	0
	0.866	

Image1: Wallet

2.3 Self-media ecology (Discovery)

Discovery is BeeChat for users to set a circle of friends, news, quotes, transactions in one of the dynamic display area. Users concerned about the dynamic of friends at the same time can also be found in the interests of their own blockchain information.

Discovery is actually BeeChat's effort to nurture users' habits of rationalizing blockchain wealth. Because many users focus on IM, there is no sound financial literacy for digital assets. Discovery through the circle of friends and business dynamic dynamic show so that users look at the circle of friends will also be aware of their own digital asset-related changes in the market and make a reasonable adjustment for their own situation. Really develop the rational use of digital assets and configuration habits.

2.4 Social function (Chat)

With the Chat function, users can keep contact with family and friends and establish their own social circle. Share other decentralized apps in your platform with your social network. Chat is the fastest mobile communication with HD video, voice and text. It has a unique distributed technology, highly secure encryption services to ensure free Hang Zhou chat. It makes it easy to make delay-free, high-quality voice / video calls and supports 500 simultaneous online group chatting.

Due to the large user base of the company's current product, each user's social structure will further merge with BeeChat over time. They will be through the family social, immigrant social, social work continue and continue to spread and eventually form a global BeeChat social system.

2.5 Application Network (Network)

Network is a global, decentralized, symbiotic application market that OpenChat offers.

Users can download the products provided by third-party application developers here. The user gains access to the app by paying or providing valuable action. Developers earn ChatCoin by issuing dapps.

OpenChat will keep its eye on the network. Timely adjust the developer reward strategy to maintain the stability of the symbiotic environment. Encourage more developers to provide innovative dapps.
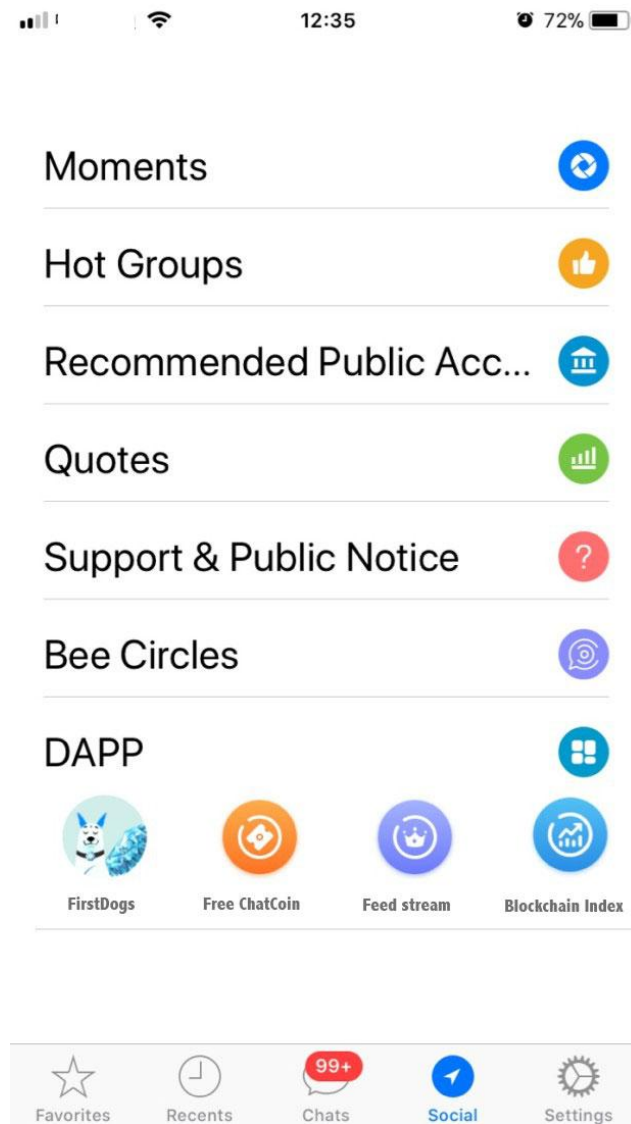

Image2: BeeChat UI

2.6 Qtum based system

They need a medium for these operations before users can interact and trade with each other. Traditionally, this medium was provided by a reputable network owner. However, with the advent of the common chain of quantum chains, we can provide users with a decentralized, de-licensed, de-trusted, fair access and cryptographically verifiable protocol.

As the quantum chain evolves, the world has the technology necessary to create a better model of the Internet. We think Qtum intellectuals will continue to infiltrate financial technologies, legal systems, the Internet of Things and decentralized applications.

Qtum will eventually become a social technology. In order to realize its perceived potential, we need to maximize the utility of non-technical users. It needs to be ubiquitous, always accessible and needs to be part of our everyday life.

3. Economic model brief

OpenChat is committed to creating an open source symbiotic economy. Under this system, all participants (users, DAPP developers) will become a community of interests. We must all work together to win common interests. With the continuous increase of participants, this system will also be expanded indefinitely.

As a user, ChatCoin rewards provided by a DAPP developer are provided by providing valuable activity (clicking on an ad, sending a link, etc.). This not only enhances the user's active ability but also reduces the developer's promotion cost. Thereby promoting

the common promotion of benefits.

As a dapp developer. In this open source symbiosis economy, they can learn from each other and share each other's technological advantages and find out their own shortcomings and correct them. All developers really connect into a community of interests. Everyone will work hard to develop better applications. OpenChat, on the other hand, offers lots of ChatCoin rewards to developers who make significant contributions to technological advancement to motivate more developers.

4. Business model introduction

4.1 The new digital lifestyle service platform

BeeChat will launch several market use cases that will allow consumers and brands to use ChatCoin. Through experimentation, BeeChat plans to iterate through products for users to create unique two-sided market applications. On the supply side, automated programs or content creators will create unique experiences. On the demand side, users will consume such products or services. BeeChat's automated programs will be able to build their own business model in the near future.

4.2 App Scenes

In addition to social scenarios, point-to-point Bee Wallet allows users to fully interoperate in transactions. E.g:

▸ Scene 1:

User A is an Egyptian user. However, forced to live and work from the United States came to work outside the United Arab Emirates. In his spare time will use BeeChat and his family to make transnational calls. After receiving his salary, he can send money to his family through ChatCoin. This eliminates the need for expensive currency exchange and transfer fees.

▸ Scene 2:

User B is a music enthusiast who loves newly released music. But the store's music arrives later, so he can buy online music directly with Bee Wallet.

▸ Scene 3:

User C is a Chinese user who intends to bring his family to travel abroad on holidays. Before going abroad need to exchange a large number of foreign currency. Each bank will draw part of the fee. On the way to travel, will always worry about the body of large amounts of cash is safe. At the end of play, you also need to convert the extra foreign currency into renminbi. The process is very complicated. If Bee Wallet is used, it can be paid out of the box when it is consumed externally, and the transfer of the ChatCoin to the other party is completed.

▸ Scene 4:

User C intends to invest in real estate but finds that the price of a domestic house is already at a high stage. Some overseas countries are attracting more and more people

to travel on holiday. This is a great opportunity to buy a home overseas. So user C used Bee Wallet to buy a house in the UAE. Half a year after the value-added 50% of the house, so they bought the house, the digital money into Bee Wallet.

5. Project implementation

OpenChat devaluation BeeChat mobile communication software has been developed and has landed at the Apple App Store (App Store) and Google Play Mall (Google Play). Users can download and use BeeChat Plus directly. Or visit the official website of BeeChat (http://www.beechat.io/) download.

6. Governance mechanism and risk management

6.1 OpenChat Investor community

- OpenChat will build a decentralized international community and set up the OpenChat Foundation to ensure the management and operation of the OpenChat investor community and the security of funds raised. The OpenChat Foundation's organization will consist of the OpenChat Investor Community Conference and the OpenChat Foundation Autonomous Council and Executive Committee.

- The OpenChat Investor Community Conference is the supreme authority of the OpenChat project. It consists of all ChatCoin holders. All holders are able to exercise their voting rights through Community Meetings and participate in decision making on major issues of the OpenChat project.

- The OpenChat Foundation Autonomous Commission is responsible for Investor

Community Meetings. It is responsible for the executive management and oversight functions of the Executive Committee. The Autonomous Commission will annually change the number and currency of tokens held.

■ The Executive Committee is responsible for the community councils and investor communities. It consists of OpenChat project's technology development and day-to-day operations team. It is mainly responsible for OpenChat project technology development, ecological construction, operation and maintenance services, community management, and other different levels of practical work.

■ OpenChat Investor Community Meeting

The OpenChat investor community conference, comprised of all ChatCoin holders, is the supreme authority of the project.

Has the following functions:

（1） Modify investor community conference management regulations;

（2） Supervise the implementation of the management regulations of investor community meetings;

（3） Election and change of members of the self-government committee;

（4） Undue undue decision of the self-government committee;

（5） Approval of major business issues and changes;

Members of the community to make a resolution to be held by the holder based on the number of coins held in ChatCoin and the weight calculated by the vote on the vote. The community meeting is held annually. The General Assembly conducted a report on the work progress of this year's project. If the Autonomous Commission considers it

necessary or more than one-fifth of the ChatCoin Holder's proposal to hold a community meeting.

6.2 Risk Management

ChatCoin through the blockchain consensus, can not be tampered with technology and digital signatures, end-user encryption wallet and other security measures to ensure that user accounts and financial security. User transfers, red envelopes, built-in trading platforms, etc. will provide financial-grade security services through Qtum to integrate data and transactions into the blockchain. Build a secure trading environment.

6.2.1 Audit

OpenChat Foundation strictly abides by the relevant laws and regulations and industry self-regulation, providing completely transparent financial management. Each year, the Foundation invites internationally renowned third-party auditors to audit and evaluate the use of funds, cost and profit distribution of the Foundation. The Foundation will make an unqualified public third party assessment and audit result.

6.2.2 Information disclosure

The OpenChat Foundation will regularly disclose project development progress, news and capital usage. The OpenChat Investor Community Meeting will vote annually on the audit reports issued by third party auditors and the annual progress of projects announced by the Executive Board. The Executive Committee will also make immediate progress reports on the project according to the actual development of the project, through announcements, official website and various social networking platforms.

7. Project development time planning

7.1 Future outlook

Since the Internet technology has matured. Human society started a big discovery of digital space. The traditional mode of relying on land, equipment and labor to create wealth is constrained by the limited resources. The infinite scalability of digital space, the infinite reproducibility of bit structure, and the multidimensional plasticity of the virtual world may mean the wealth to be developed hidden inside. It will be tens of times more than the physical world. These new forms of wealth are digital assets. However, driven by huge profits, many enterprises are more inclined to compromise the rights and interests of users in return for their own rapid development, of which the most widely used are undoubtedly the user's personal information and privacy.

OpenChat is a fast growing, open source community. We hope to establish a strong digital life platform. Serving every BeeChat user's digital life. OpenChat will later build a new decentralized social economy network. With highly protected users, an automated user-motivated engine and a multi-linked billing system that allows hundreds of millions of users to truly enter the new digital economy.

In the future, OpenChat users simply need to pick up the phone every day to easily discover the best ways to make money today through the artificial intelligence in the platform. And only need to move your fingers can be the wealth in the bag. If the user also want to continue to create value but also to accept the task of other users.

According to choose a different degree of difficulty will get the corresponding ChatCoin. And every day to earn the most ChatCoin wealth users will be in the circle of friends wealth topped the list, shining the audience.

OpenChat is committed to bringing the digital economy into everyday life. We will do our utmost to promote the era of decentralized social economy network. With its huge subscriber base, BeeChat is set to become the maker of the next generation of IM rules and dominate the future of a digital economy.

If you want to be a navigator of digital life in the future, you must know the key to the future. OpenChat is confident that this key will be handed over to you and will lead you to the highest point of your future life.

8. Team introduction

8.1 Team background

The support team behind OpenChat is an open source organization founded by the Google former technology team. It is committed to cross-border instant messaging application development and technological innovation. The company brings together from Google, Huawei and other companies of the technology elite. Has developed a number of different functions of the APP on delivery to countries in the world. Become an essential tool for daily communication of tens of millions of users. Popular in the emerging world market.

At present, the instant messaging software independently developed and operated by the company occupies an absolute advantage in emerging countries. The company is

committed to long-term, in-depth promotion of Internet users in emerging world areas of network communications and personal communication. Serve the majority of global users. The Company will continue to consolidate and develop its existing market advantage in emerging countries in the future. With instant messaging software as a platform to build advertising, mobile games, e-commerce, religious services such as multiple peripheral services. Construct a well-established emerging market online ecosystem. Create a one-stop emerging market life, work platform. And in the Middle East, South Asia, Central and South America, Africa and other rapidly growing emerging markets, continue to promote. Provide more high-definition, safe, speed communication services and convenient mobile networking life experience. The ultimate realization of the global strategic plan.

8.2 Team members introduced

	Oscar
	He is a senior Scrum expert and senior software engineer with many years of experience in team development and project management. His goal is to develop a top-of-the-line, globally-recognized software product.
	Nell
	Java engineer and commercial software consultant specializing in backend development and microservices architecture. Nell is a senior development engineer for our blockchain solutions.

	George
	Back-end and database senior software development engineer, good at software architecture and object-oriented design. Over the years, George has focused on the design of product solutions.

	Mia
	Has many years of legal background, good at helping start-up companies and small and medium-sized enterprises from the beginning of its establishment in the financing stage to solve legal needs. Worked in crowdsourcing and cryptocurrency for many years.
	PikaOne
	The digital designer of the user interface, with many years of experience at Google, has deep research into innovative designs.
	AC
	Brand Interaction and Concept Designer. With years of experience in graphic and advertising design, he is now working on digital design and development.

References

[1] A. Narayanan. J. Bonneau. E. Felten. A. Miller. S. Goldfeder. *Bitcoin and Cryptocurrency Technology: A Comprehensive Introduction*. The China Citic Press, 2016.

[2] P. Wayner. *Digital Cash: Commerce on the Net* (2nded). Waltham, MA: Morgan Kaufmann, 1997.