# Kcash Digital Currency Wallet Whitepaper

V4.0

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# Catalogue

# 1. Summary

Kcash, the crypto currency wallet, facilitating the transaction and consumption of digital currency in real world, aimed at resolving the inconvenience of managing a variety of crypto currency, multifarious trading process and the problem of insufficient application scenario. Kcash provides a powerful infrastructure for cryptocurrency development which also promotes the application and evolution of the cryptocurrency industry.

Kcash provides a security and swift, decentralized one-stop solution when supporting various blockchain asset management. Users are able to store, manage and exchange BTS, ETH and some other mainstream crypto currency with integrated management, in which way can totally self-control personal crypto currency and make the application and management of crypto currency more flexible and agile.

Kcash has a high-performance block chain (Kchain), which supports Turing-complete smart contracts. The main chain of Kchain is a non-Turing complete smart contract, which provides safe financial services for digital assets and avoids the great security risks brought about by Turing-complete smart contracts. Kchain also has a one-click side chain, side chain supports Turing-complete smart contract, Kchain provides proprietary cross-chain and cross-contract technology that links the main chain and the side chain. Both the contractual assets on Kchain and the assets that is not on Kchain can be transferred and exchanged through the cross-chain and cross-contract technology of Kcash. Kchain is a block chain that was designed for issue, exchange, value transfer of digital currency and other financial features, at the same time it has the side chain function to configure and generate Turing-complete by one-click, allows enterprises to concentrate on their business logic, and don't have to worry about the security of the digital assets and high cost and difficult research and development of block chain. Based on Kchain, Kcash platform provides distributed computing power and distributed data interface for digital assets on Kchain, which greatly enriches the practicability of block chain.

Furthermore, Kcash has already cooperated with Visa, Master and other international banks and card issuers to jointly issue crypto currency cards. Users can apply for virtual or physical bank cards through Kcash online, you are able to use the cards for online and offline consumption of goods and services and have access to ATM withdrawal in the tens of millions of bank cards network around the world as long as you recharge bank card with any digital currency, in this way, the application scenarios of crypto currency has been greatly extended. With the Kcash card, any digital currency has a bridge to the real world, it is no longer an unusable asset.

With the sustainable development of blockchain technology and crypto currency market, as one of the basic application, Kcash will provide significant support for more new projects, to assistant the management as well as circulation of blockchain assets, and make efforts to improve the ecological efficiency and promoting crypto currency market prosperity.

# 2. Background

## 2.1 Development Step of digital currency

In 2008, Mr. Satoshi published the paper titled "bitcoins: A Peer to Peer Electronic Cash System" in Bitcoin BBS, very firstly put forward the concept of blockchain, and thus build the technology foundation of transaction information encryption transmission and BTH network. Since the establishment of the Bitcoin crypto currency platform in 2009, the Bitcoin system has been in stable operation and automatically realized the process from distribution to transaction circulation. At the same time, the blockchain, as the basic support technology, has been gradually independently applied to more scenarios, which has created a variety of crypto currencies based on this concept, such as the Lite coin, Doge coin, Riple, etc.

In 2015, as the popularization of the concept of intelligence contract platform derived from Ethereum open source project, it has realized the registration and transfer of various types of assets and contract, facilitated the issuance ·and circulation of crypto currency, and greatly enriched the crypto currency type. In particular, from the beginning of 2017, through the way of ICO, various generations of tokens have emerged, bringing a new round of prosperity in the crypto currency market. So far, there are nearly 1,000 crypto currency types in Coinmarketcap, with a total value of more than $300 billion.

## 2.2 Users and Market Bottleneck

### ● Inconvenience of Crypto Currency Management

There is a strong demand for a perfect solution for the storage and management of crypto currency, although crypto currency market is keep growing rapidly, how to safely backup crypto currency wallet key or private address key is one of the biggest barrier for users. The management of different asset allocation and diversification has been more complicated with the emergence of more and more crypto currency categories, as for the difficulties, one the existing strategy is to install different decentralized wallet separately for different type of crypto currency; or you can put it in a centralized wallet or exchange and authorized the central agency to manage it. The former one brings great inconvenience to users' operation and management, and the latter has certain security risks, if the central agency is attacked or the bankrupt coursed by poor operation. Thus how to balance security and convenience is the core direction for all the service providers working on.

### ● High Thresholds for Trading and Exchange

The current way of transaction and exchange for crypto currency mainly depends on exchanges, which is a high threshold for non-professional users

because of the strict real-name authentication in register process. The transaction of digital currency requires users to learn the relevant processes and operational steps, and there are usually limits to recharge and withdrawal. The exchange between digital currencies requires the use of a digital currency to convert to a legal currency and another for a digital currency.

Another way is realized in the off-market crypto currency trading platform supplied by the facilitator like LocalBitcoins, users who have the demand to buy and sell declare their respective quotations in the platform , and they do one-on-one transaction as long as the price is acceptable for each other, just like shopping on the C2C online mart such as Ebay. But the downside is, the crypto currency has to be hosted on a thirdparty platform in order to ensure counterparties do not breach of contract, which increases the risk of theft or loss of assets.

## ● Shortfall in performance and unreasonable design of Block chain

The large fork of Bitcoin took place for the first time in August, 2018, and BCH was produced, and in the following months, the bitcoin network continued to be forked.   Because of the DAO event, hard fork of Ethereum network happened, ETC and ETH was produced, what's the reason?

1. The performance of Bitcoin is seriously insufficient, and BCH made a hard fork of Bitcoin in the name of the expansion of bitcoin.

2. With concentration of computing power, the system should be decentralized is controlled by one side, and the blockchain network will be arbitrarily manipulated, which violates the original intention of decentralization of blockchain.

3.   The smart contract of Ethereum is a great progress in block chain, but there is a huge problem with this design concept, which is that the financial logic and business logic are coupled together. It is not hard to imagine what a bad design it would be to write Facebook's chat data in a bank database.

So when the storage capacity of Bitcoin network is not enough and there are bugs in the smart contract of Ethereum, the entire financial system needs fork to keep working. This is a disaster for a system that contains over hundreds of billions of dollars.

## ● High development cost, high waste of computing power, difficult to connect with the real world

With the development of block chain technology, enterprises in various industries will use block chain technology in the future, but the high cost of block chain development creates a barrier for most enterprises. With the mining mechanism of POW, due to the fierce competition, the hardware required is constantly updated, this proves to be extremely wasteful as the redundant hardware is simply discarded as garbage. And POS mechanism cannot have the decentralization advantage of POW. It is hard to know data of real social for blockchain technology itself, such as air temperature, share price, weather and so on. Some miners can provide some common data, but due to the complexity of real world data types, miners cannot provide the data enterprises want, and if enterprises provide these data, it can't realize the characteristics of decentralization, it is difficult to convince people, this will result in the difficulty of connection between block and real world.

## ● Lack of Application Scenario

More extensive application scenario is required in order to support longer-term development in crypto currency area. At present with the deepening of the

research in blockchain field, especially for the exploration of intelligent contract direction, some product solutions have gradually combined with the real world economy to seek win-win cooperation. But it still not has been adopted in large-scale use till now, and there are only a handful of services for clients. Any of the crypto currency including the Bitcoin, Ethernet, and any other token issued on the intelligent contract platform can increase the value of itself, only by way of interacting more with the physical world, which can further promote crypto currency market prosperity and efficiency in the physical world.

## 2.3 Mission and Vision

Kcash is devoted to provide the public a safe, swift and efficient crypto asset management tool. We aim to enable everybody anywhere at any time conveniently use their digital assets, provide rich blockchain technology and cryptocurrency application scenarios as well as promote our services to business progression and social development by bridging the gap between cryptocurrency and the real world.

# 3. Service Introduction

Kcash is the future Alipay, and the main service carrier is composed of the Kchain blockchain, wallet APP and digital currency debit card. Through products and services of Kcash platform, it provides enterprises with services to deploy high-efficiency solution of block chain at express speed. And Kcash is basically one of the cryptocurrency wallet, which realized the transaction and consumption of crypto currency in real world, and its main service carrier is the wallet APP and the crypto currency card. Kcash provides a one-stop management of Bitcoins, Ethernet and any other token, making the transaction and exchange more security and swift, binding digital assets to the bank cards,

which realize the seamless connection between digital currency and the physical world. And Kcash enables your cryptocurrency to be used in various transaction consumption scenarios and activates your digital assets authentically.

In accordance with the existing laws and policies of all countries, Kcash is based on the global market, cooperating with payment agencies and issuers to provide public users with the legal and secure products and services.

# 3.1 Multi-Blockchain Asset Management

Kcash wallet APP provides users with the unified management of multiblockchain assets, which has the following characteristics:

## ● One-Stop Management Service

A variety of digital currency can be unified managed and stored by Kcash wallet APP, including the Bitcoins, ETH and some other mainstream assets, as well as the standard protocols of intelligent contract platform like Ethereum and Achain, which brought a rapid increase in the generation of tokens based on different platforms. On one hand, it reduce the user management burden, on the other hand, it also provides the wallet service support for new ICO projects, so that the project team can be more focused on the core services.

## ● Decentralized Service

Kcash adheres to the core principles of blockchain, to provide users with decentralized crypto currency storage solution, the wallet keys and all the private key information of various crypto currency stored into the user's local

system. Besides that, Kcash provides a convenient key backup solution - users only need to backup for once, write down 12 words, and save them to a safe place. Even if there is an increase in the number of crypto currencies in future, all categories of digital currency assets can be restored with the backup of the above 12 words.

## ● Multiple Security Assurance

Kcash make users completely control their wallet keys, and also provide multiple signature technology guarantee and two-step-authorization verification for different scale of digital asset management, users can choose any of the verification method like phone code, fingerprints or other biometrics when doing transfer trading, thus to comprehensively guarantee the security of crypto currency assets.

## ● Multilingual support

The Kcash wallet APP is to support multiple languages in mainstream crypto currency markets such as Chinese, English, Japanese and Korean, clearing the language barrier for a world-class wallet application.

# 3.2 Crypto Currency Exchange and Transaction

The Kcash wallet APP supplies simple, swift and safe exchange and trading service for users by the original NO-LOCALCOIN exchange network and connecting with the exchanges' API.

## ● Risk-Free Currency Exchange

Kcash develops the NO-LOCALCOIN exchange network based on the Kchain platform, realizing the risk-free digital currency exchange service through intelligent contracts and cross-chain gateway technology (For details, see description of technical feature). Users exchange the crypto currencies via Kcash, and the whole trading process will be monitored and performed by the intelligent contract mechanism created by the platform or the third-party agency, which avoids the risk of default by the parties involved in the transaction process. Compared with the centralized platform service, the intelligent contract avoids the loss incurred from subjective default risk or objective attack of the platform. Even for the tokens issued by the new ICO project, it can do risk-free exchange through the wallet service as long as Kcash wallet is supported. On Kchain, there is standardized exchange service of all kinds of digital assets, and various digital assets are freely convertible.

## ● Simple and Swift Transaction

There will be a certain entry threshold and learning cost to buy and sell digital currency through exchanges. Kcash provides users with the optimal market prices and simple operation experience by connecting with the exchanges' API, to be specific, Kcash simply shows the users buying and selling rate by optimizing selection mechanism, and users only need to input the number to complete the transaction like on ecommerce platform.

## ● Simple Deposit Tool

Kcash provides users with credit card consumption channels and iPOS by cooperating with payment service providers. Users only need to initiate a purchase transaction in the Kcash wallet APP, connect iPOS via the Kcash APP, swipe VISA card to complete the trading of buying $100 Bitcoin. Kcash backend system transfers $100 to the exchanges' account through the exchanges' API,

and then transfers it back to the user's wallet after the exchanges completes its purchase of Bitcoin. The whole process is as simple as the offline credit-card consumption.



# 3.3 Kcash and Kchain platform

Main chain of Kchain is non-turing-complete smart contract, it is designed to provide digital assets with transfer, exchange, trade and other professional financial services. Similar to block chain network of Bitcoin, Kchain has generated a lot of financial smart contracts in advance. On the main chain, it can't release smart contracts optionally, in this way the security problem of digital assets is completely solved. The main chain of Kchain focuses on the financial functions of digital assets rather than complex business logic. The advantages of this design are security and high performance without redundant data.

In the design concept of Kchain, digital assets and business logic are separated. In the main chain of Kchain, only digital assets themselves can complete the

financial functions of digital assets. If the digital assets require some decentralized data or mining services, in the digital assets on main chain of Kchain, it can generate a corresponding performance function that is configured in the contract. At the same time on Kcash platform, it can generate algorithm to provide the data or mine, and deposite commensurate Kcash tokens, and release them on Kcash platform together. In this way, there will be a lot of decentralized users of Kcash APP (mobile phone or PC) and they can run this data program or mining program in order to provide data or mining service for the digital assets to earn Kcash and the corresponding digital assets. For example, the digital asset of a contract is to provide insurance service for crops, when the rainfall index is under a certain numerical value for several months, certain digital assets will be returned to insurance user. In this case, smart contract need to know the daily rainfall index, if the index is provided by the official, there will be risk of official fraud and hacking, this means the index data can't be trusted. But the official can configure corresponding performance function in the smart contract, at the same time publish acquisition algorithm on Kcash platform and deposit a certain amount of Kcash tokens. Users of Kcash on platform find that running the program can earn Kcash tokens and the digital assets of the contract, they will provide the digital asset with decentralized data services. At the same time, the program can also provide users with the function of the mining. As long as applications released by official have this function, users can also get some of the digital assets. When it runs for some time, users find even if the official does not provide additional Kcash tokens, because of the data and mining services, they can also obtain the official digital assets, and revenue is good, they will continue to provide service for the asset. For the official, they can obtain decentralized computing power, data and mining service by paying some cost with ease. For users, they can obtain data and good income of mining. Of course, the users need to deposit some Kcash as margin to promise not to provide false data. If the system detects that the user is cheating, it will withdraw income of user and confiscate the deposit of user. This form of mining is called contractual mining. As we all know, when some new digital asset projects are released, the depth of the buying and selling is often not enough. So when the user needs to consume digital assets equivalent to $1, he has to spend extra digital assets. But with our contractual mining of Kcash platform, item side can provide mining process, a exchange service between the project's digital assets and Kcash tokens for the

mining users. So that when users use digital assets of the project, the exchange service will change the digital assets to deep enough Kcash tokens to consume, and at the same time users can get Kcash tokens from item side and corresponding mining fee of digital assets. With this kind of service, the new project can also complete the business logic of consumption in the real world.

Of course, many projects are not just simple data and mining services, they need their own blockchain to complete their business logic. Creating a project on Kchain is also very simple. It only need to configure corresponding data in their contract of digital assets, such as pattern of blockchain, the size of block, the consensus mechanism, the mining mode, etc. And it need to deposit a certain amount of Kcash tokens, so miners of Kchain will find this requirement, if miners feel that income is good, they will change some computing power to generate the side chain in order to support block chain of the project to earn Kcash tokens and the corresponding digital assets. If it is found that supporting the digital asset is not cost-effective, they will throw out this digital asset. In this logic, the miners can always automatically configure their own computing power to get good benefits. At the same time when computing power competition of a digital assets is too fierce or mine owner found his mill has been eliminated by computing power of the digital assets, they will automatically transfer their computing power to some less competitive digital assets, this makes the mill can be reused rather than being eliminated as garbage. For the project party, it can be simple enough to deposit Kcash tokens to obtain decentralized side chains and corresponding computing power support. When there is a data failure on a side chain or a side chain is completely dead, that also won't affect the operation of the main chain, and side chain has its own independent computing power, and serve its own business logic compeletely, it doesn't have to worry about the problem of network congestion. In this way, digital assets and business logic are separated, it solves performance problems and makes digital assets safer. For example, if there is a major accident in the main chain, but there is detailed data on the side chain, it can restore the user's digital assets. If there is a major accident in the side chain, it's just an accident of business data, it does not affect the user's digital assets at all, and project side can backup data of side chain to restore the side chain. On Kchain, generating and running block chain is so simple, high-efficient and safe. The most important thing is that simple configuration

can gain a strong decentralized computing power. Under this design framework, if one day, the performance of the side chain is insufficient, it is very simple to ramp up capacity for block chain. All the miners are willing to upgrade. It is just business logic on the side chain, does not involve digital assets themselves. Maintaining the old chain is not similar to that BTC forked out to BCH to get a double income of digital asset, because digital assets will not fork out on the main chain.

If the business logic of the project uses the current blockchain technology but can not meets performance requirements, how to deal with it? It's very simple, also on Kcash platform, it can provide contract which is connected to the main chain and centralized service program. After depositing Kcash tokens and releasing on Kcash platform, there will be users of Kcash who provide computing power to provide connection service.

In the whole design framework, the project party's digital assets are completely decentralized and have a very trustworthy credibility. Kchain and architecture design of Kcash platform architecture design, thoroughly solved the problem of the performance of block chain, the problem of high cost and difficulty of block chain development, the problem of computing power waste, all kinds of problems about the combination of centralized and decentralized business logic and the problem about connection between block chain and the real world, etc.

# 3.4 AI (Artificial Intelligence) and IOT (Internet of Things)

The world of artificial intelligence and the Internet of things is coming, but it needs the blockchain and the digital assets on the blockchain. Without digital assets, we cannot freely complete various services, the transmission and exchange of values. Block chain is the best carrier of artificial intelligence and

Internet of things. Imagine a scenario, one day in the future, you're sitting in a self-driving car, your mobile phone needs charge and WIFI service, you need to pay the cost of the car, you need to pay for snacks in the car, you also need to see a paid program. Each service has its own service provider, undoubtedly, it is the best way to receive payment if they have their own digital assets. Your cell phone can automatically connect with these devices by near field communication (or bluetooth, etc.). You only need to tell your phone your need, it will automatically pay for all services, at the same time, it will automatically pay for service of charge and WIFI. There is a problem, so many services, whether digital assets of service provider is on Kchain or not, network of Kchain will automatically complete the exchange of various digital assets by its unique cross-chain and cross-contract technology. Kchain will be the infrastructure to communicate all this.

## 3.5 Crypto Currency Bank Card

In order to connect digital currency and the physical world, Kcash cooperated with the card issuers to open the function of activating banking debit card in the wallet APP, and users can apply for a physical card or virtual card and recharge it with crypto currency to do transaction and consumption in physical world. At present, Kcash team has established a cooperative relationship with the card issuers, and already had the banking card supporting the crypto currency recharge, demo as follow.
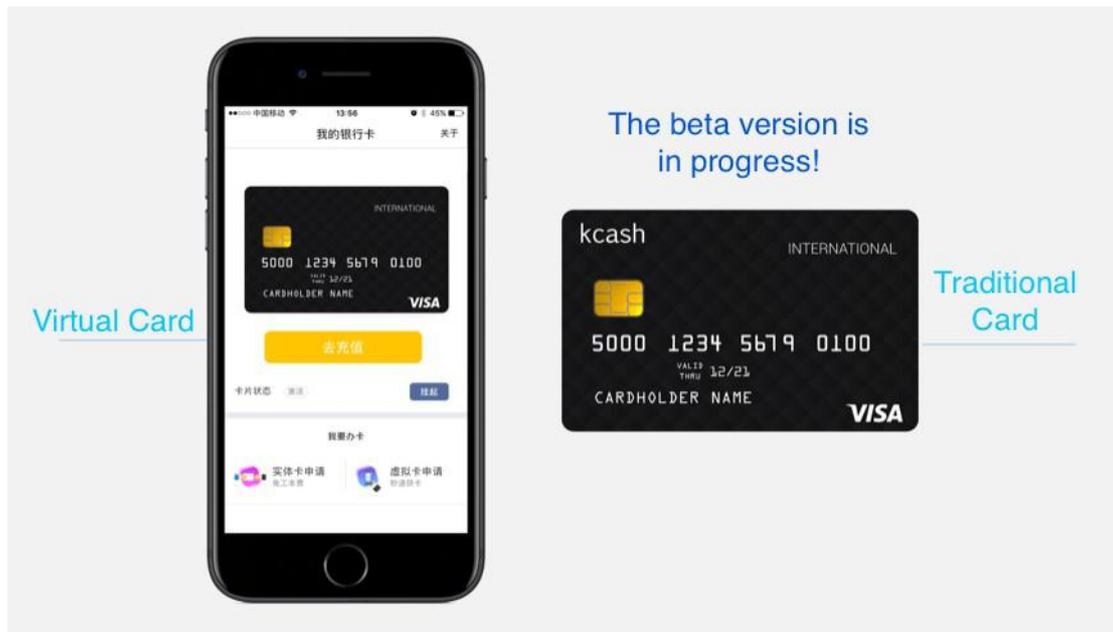
The crypto currency banking card has following characteristics

## ● Activate Card in Topspeed

There are three steps for users to activate banking card, firstly, online apply in the Kcash wallet APP, secondly, select the card type, physical or virtual, and thirdly, fill in the basic KYC information. The virtual card will be effective immediately as soon as it activated successfully; while physical cards require a certain card making cycle, which usually be delivered to the users in 2-3 weeks.

## ● Real-Time Swap

According to the current market exchange rate, users can convert any of the crypto currency by kcash wallet into the corresponding legal currency, to carry out the online and offline transaction by recharging the legal currency into the bank card. In this way, users always hold crypto currency assets in their own wallet accounts, which will be converted in real time if they need to do transactions.

## ● Extensive Application Scenarios

Banking card issued by Kcash can carry out online and offline trading, comparing with traditional channels, it can provide lower rate and higher efficiency no matter in domestic e-commerce online payment, or the overseas transfer remittance. Meanwhile, Kcash banking card also support tens of millions of branch network for consumption in the whole world, and withdraw local currency from any ATM in more than 200 countries and regions, which provides a great convenience to overseas study, travel and business activities, etc.

## ● Typical Application Scenarios

Overseas e-commerce shopping - when the user need to use foreign currency to pay the order on overseas e-commerce platform, they just need to bind the real or virtual card to the corresponding e-commerce platform account, and then recharge the banking card with crypto currency to complete the payment.

Overseas travel consumption - when users traveling abroad, they can recharge the physical banking card with crypto currency through Kcash, which realizes the overseas consumption and foreign currency withdrawal, thereby avoids the trouble of swap.

Cross-border remittances – when you have the demand of overseas transfer remittance for the reason of study abroad, overseas work or business trip, you can do the crypto currency transfer via Kcash wallet to consume or withdraw money in real time with a better transfer speed and rate.

# 4 Technical Feature and Innovation

## 4.1 Zero-Knowledge Proof

Zero-Knowledge Proof refers to that certifier can convince the verifier that one theory is correct without providing any useful information to the verifier. And Kcash has achieved cross-chain and cross-contract technology with Zero-Knowledge Proof.

## 4.2 SHA512-ZERO Algorithm Encryption Technique

SHA is a series of cryptographic hash functions designed by the national security agency (NSA) and published by the national institute of standards and technology (NIST). Through the customization of SHA512 encryption technology, the SHA512-ZERO encryption technology which is exclusively used by Kcash is developed to guarantee the data security of the Kcash network.

## 4.3 Ring Topology Hub Technology

The Ring Topology Hub technology of Kcash connects multiple links to a Hub, making it easy for a digital asset terminal to achieve a single key cross-chain and transformation. The advantage of the ring is that the topological structure has a much smaller resource consumption than the star type and tree type. It may not be obvious if the node is small and the distance is close, but the advantage of the loop network will be quite obvious when the long distance and multiple nodes appears.
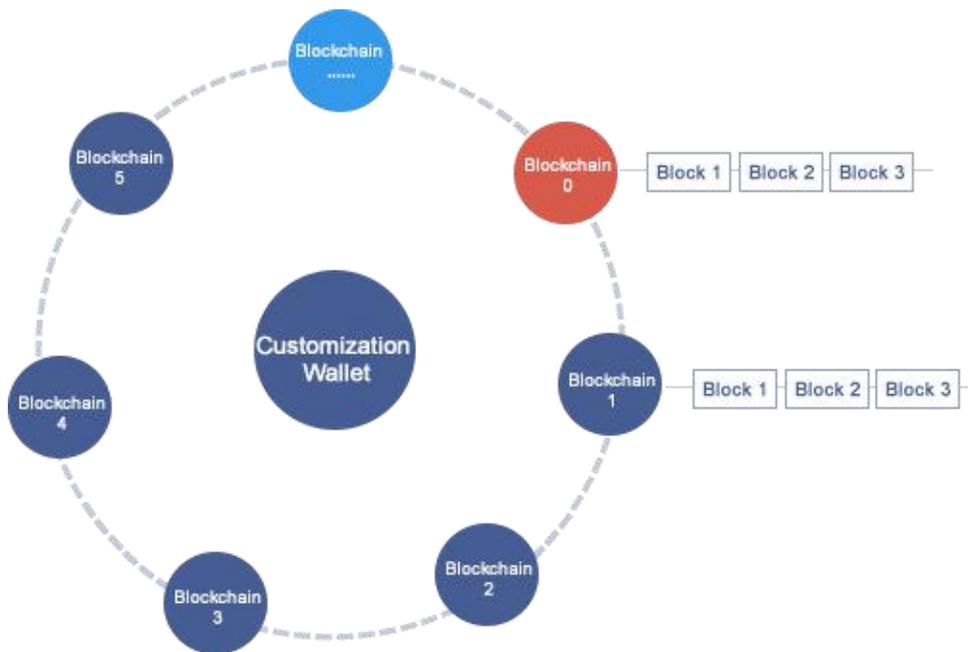
## 4.4 NOBLOCK Technical Engine

Kcash's original NOBLOCK technology engine enables light wallet to be actually lightest. But there is a big problem for light wallet to receive the BLOCK information from blockchain network till now. The light wallet network requests takes up a large amount of network bandwidth due to the blockchain network implement the data security through data synchronization redundancy.

Our design idea is to let the blockchain browser to be our BLOCK data source, and it no longer synchronize BLOCK data. The problem using the data source from the blockchain browser is how to guarantee the data source's correctness. We adopted the architecture of the Block Chain

Browser Pool (BCBP). And the schematic demo shows below:

## 4.5 NO-LOCALCOIN Exchange Network

The NO-LOCALCOIN exchange network is based on the Achain platform through customizing intelligent contract and cross-chain gateway technology to realize the risk-free crypto currency exchange. Kcash platform or the users with Kcash tokens can create intelligent contracts to provide guarantee services, evade default by all parties according to contract mechanism, avoid the arbitration bias of centralized custodians, and make sure there is no risk of loss for participating. After the contract founder facilitates the exchange transaction, the corresponding proportion of the guarantee returns. The whole process like below.
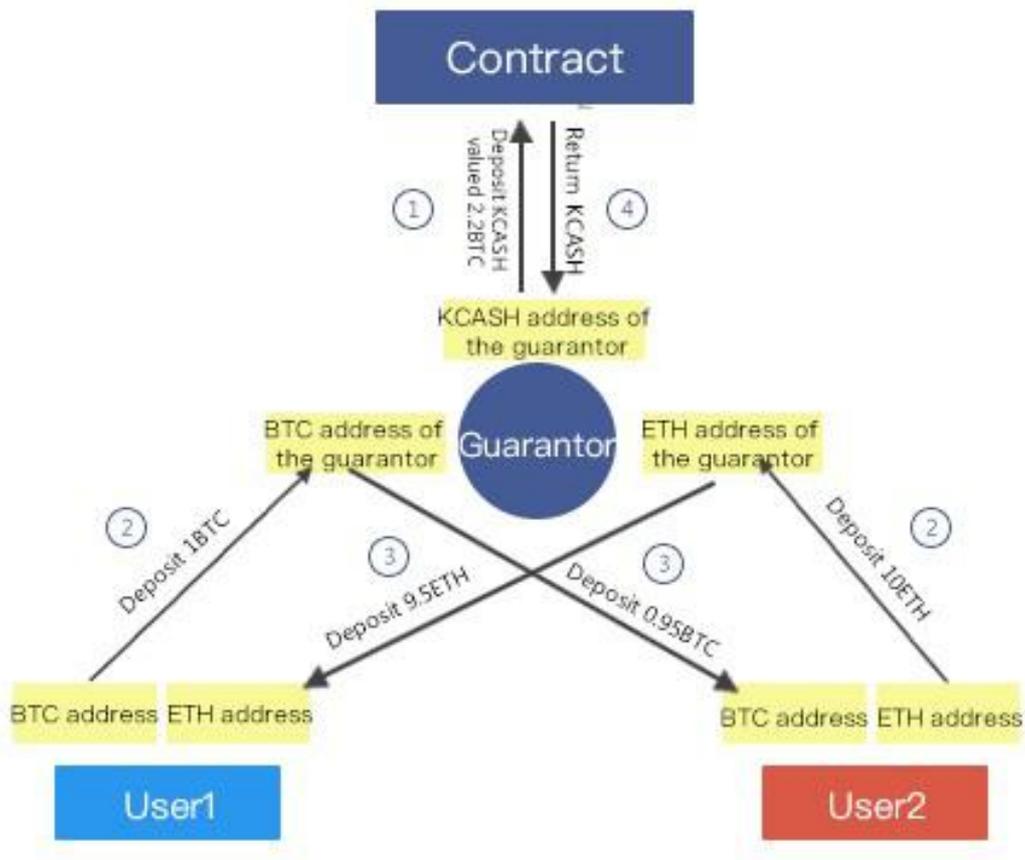
## 4.6 ZeroPay Network

The decentralization technology of blockchain resulted in low payment efficiency. We implement Kcash lightning network by the following technical skills, basically speaking, it is based on the existing blockchain network to build Kcash VPN subnet, realize the second-level confirmation for funds transfer, and ensure real-time credit card consumption is not affected by blockchain.

Customized mobile client, all the Kcash users' blockchain transfer records have the SHA512 - ZERO encryption mark

We developed enterprise blockchain nodes, which is able to detect Kcash users blockchain activities at any time, verify the validity, do flow analysis, etc. The enterprise node has 7X24-hour continuous detection, the balance change of analysis of users will be provided to the server, and reported to the Kcash server as well.

Kcash server receives the enterprise blockchain node analysis, when users initiated the charge request, it can real-time verify whether the user has had a real blockchain transfer request, to prevent malicious double spend.

Legend below, the blue ones is our global deployed sniffer node:
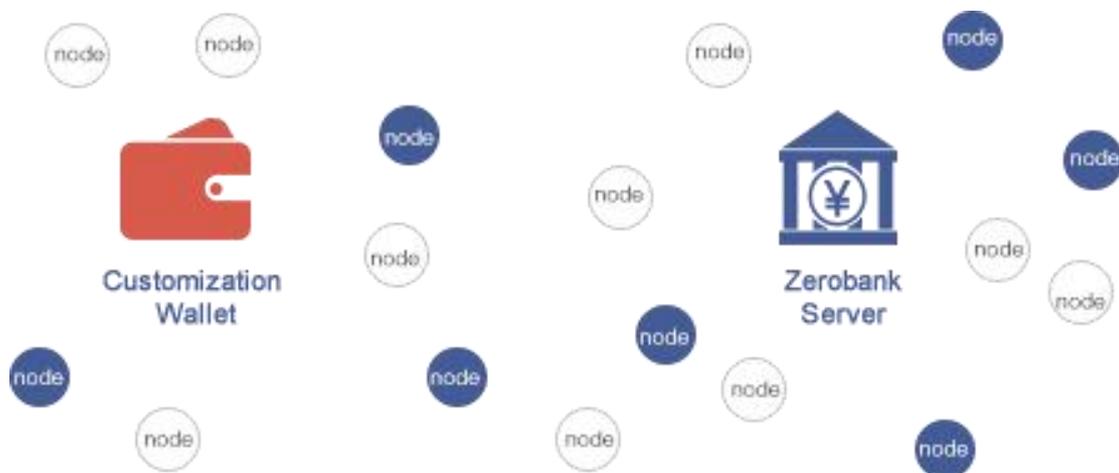


# 5.Project plan

| Process | Time | Milestone | Functional service |
|---------|------|-----------|--------------------|
| Phase 1 | Q4, 2017 | Wallet | Support mainstream tokens management |

| | | APP1.0 | (BTC, ETH, LTC, ACT and other tokens issued by Ethereum and other platforms) |
|---|---|---|---|
| Phase 2 | Q1, 2018-Q2, 2018 | KCASH token comes into the exchanges, issue digital currency bank card | 1. KCASH token comes into the exchanges<br><br>2. Issue digital currency bank card to connect digital currency with bank card, support online and offline transaction |
| Phase 3 | Q3, 2018-Q4, 2018 | Token trading goes live on Kchain | 1. Kchain main net goes live, supports smart contract, side chain project and wallet computing power platform<br><br>2. Achieve risk-free secured transactions based on Kchain platform smart contract |
| Phase 4 | Q1, 2018-Q2, 2019 | DAPP platform connects with exchanges | 1. Enrich DAPP platform, create application ecology<br><br>2. Connect with exchange, support convenient transaction of digital currency |

| | | | within APP |
|---|---|---|---|
| Phase 5 | Q3, 2019 and later | Continuous iterations | 1.Optimize the service of currency conversion and transaction, and improve the use procedure of digital currency bank card<br><br>2. Improve the technology of main chain and side chain of Kchain.<br><br>3. Explore the cooperation with banking and financial institutions, provide diversified innovative services for users. |

# 6. Team Introduction

## 6.1 Core Members

- **Xuejiao Zhu** Founder of Kcash, graduated from Tsinghua University with 8 years of experience in technical research and development, Full stack engineer and serial entrepreneur. Join create YardWallet. He developed bitcoin payment gateway, bitcoin wallet and copyright authentication system independently.

- **Kun Liu** Co-Founder of Kcash, graduated from Peking University Youdao product manager, YardWallet co-founder and Qiandai product director. He participated in the creation of multiple products such as bitcoin wallet, POS receipt and mobile payments.

- **Shui Yu** Co-Founder of Kcash, graduated from Nankai University with 7 years of experience in management consulting. Former business partner of Hejun Consulting and founding partner of Huiyuan Consulting. He provided strategic planning, business model design and talent training for several A shares listed companies.

## 6.2 VC Investors

Nearly 30 company executives in payments industry support strongly Kcash, as angel investors, they provide Kcash with project funds, industry resources, business development proposal and other many-faceted support and help. They are the solid supporter and the effective assistance for long-term and rapid development of Kcash. Detailed list of angel investors will be posted on official website.

# 7. Detailed rules and regulations of tokens

## 7.1 Release planning of tokens

The name of token issued by Kcash is KCASH, total supply is 1 billion, the specific distribution plan is as follows:

| Percentage of total supply | Distribution scheme | Details |
|---|---|---|
| 20% | Presale | Used for the subsequent development of Kcash project, talent recruitment, market promotion, etc. The use of this part of the fund needs to be publicized at fixed period. |
| 30% | Mining | On the platform of Kcash, users can provide the support of computing power and data, mining and other services for Kcash and Kchain to obtain rewards. This part makes up 30% of total supply. It will be accomplished in eight years, and there will never additional issue. It will be released 5% annually in the first four years and than 2.5% annually in the last four years. |
| 5% | Incentive for users | As rewards, used to encourage users to download, promote, deposit, consume, transfer and so on. |
| 10% | Development fund | As development funds of Kcash, used for the subsequent development of project, business ecological construction and development of international business. |

| | | |
|---|---|---|
| | | The use of this part of the fund requires resolution of foundation and to be publicized in advance |
| 15% | Founding Team | In order to repay the founding team's exploration and development in digital currency area, and the effort for the maintenance of Kcash product technology and operation development, give out tokens in return. This part of token will be locked by smart contract after issuance of token, it will be unlocked one month later, and 3% of this part will be unlocked per month. |
| 5% | Early Investors | Early investors made contributions to the development of Kcash in terms of financial resources, resources, strategic planning and personnel assistance, so give out tokens in return. This part of token will be locked after issuance of token, it will be unlocked one month later, and 20% of this part will be unlocked per month. Complete it 5 months later. |
| 15% | Institutional Investors | It is used to reward enterprise investors and establish business cooperation with cooperative enterprises. This part of token will be locked |

| | | after issuance of token, it will be unlocked one month later, and 2% of this part will be unlocked per month. Complete it 50 months later. |
|---|---|---|

## 7.2 Business model

● **Gas of digital asset consumption**

On Kchain blockchain, the creation and transfer of any digital assets require the consumption of Kcash token as Gas miner's fees.

● **Cost of computing power**

On Kchain blockchain, if the project party needs to generate a side chain quickly, they needs to deposit a certain amount of Kcash tokens into the contract that configures assets of contract in order to attract miners. Similarly, if the project party requires users to provide decentralized computing power, data support and mining services, the project party also needs to pay a certain amount of Kcash token in advance.

● **Exchange fee**

To complete the exchange between different digital assets, users need to pay a transaction fee in order to utilize the decentralized exchange service.

## ● The use of service charge

Users consume in the store through bank card bound by Kcash, VISA or Master or other service providers will charge corresponding transaction fee from merchants (this fee will be affected by consumption area, the types of consumption, consumption amount and other factors). And then according to a certain proportion, it will assigned to Kcash as shared revenue. We estimate that shared revenue of average transaction fees is about 1% (the actual situation may change). Let's assume that Kcash has $1 million users, average consumption is $100 per user per month, total transaction amount of one year is $1.2 billion, shared revenue of transaction fee is $12 million.

Kcash team will use more than 35% of shared revenue of transaction fee every month to buy Kcash tokens, repurchase tokens and deposit them into development fund address. They are used for the subsequent development of project and ecological construction of product.

## ● Deduction of fee

When a user makes a digital currency exchange transaction through Kcash, he or she can use the current market value of Kcash to deduct the transaction fee. Later, the Kcash team will collaborate with the exchange to allow Kcash to partially offset the digital currency transaction fees as far as possible.

## ● Incentive for users

Users who hold Kcash tokens, can be the creator of contract in Kcash' s currency exchange services. They can obtain income of fee by prompting the exchange

transaction (see description of NO-LOCALCOIN exchange network for specific mechanisms).

Users who bind their bank cards through Kcash wallet will receive 10% of the transaction fee as "cash back" for each purchase. Kcash will automatically distribute to users' wallets in the form of Kcash tokens. This not only gives users a rebate but also expands the user group of Kcash tokens.

# Contact information:

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