# WaykiChain
## CHANGING THE WORLD

# WAYKICHAIN
# WHITE PAPER

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# 1. Introduction

WaykiChain is an innovative technology company focused on the development and operation of blockchain technology. The third-generation blockchain commercial, public chain independently researched and developed by WaykiChain is at a leading level in the industry. With high-performance transaction processing capabilities, efficient consensus mechanisms, powerful smart contract engines, and the blockchain upgrade management capabilities. WaykiChain can provide enterprise-level blockchain infrastructure and industry solutions.

With the team's continuous investment in R&D and the active participation of users and community eco-system builders, the bottom layer of WaykiChain public chain has been continuously upgraded and optimized. Remarkable results have been achieved to empower developers and application layers continuously. As one of the critical infrastructures to the Decentralized Finance promoted by WaykiChain, the stablecoin project built on the bottom layer of the public chain has been continuously improving the potential for decentralized business models development.

Finally, with continuous innovation, widely used business application and the advantage of proper governance, WaykiChain has developed core competitive advantages in the following areas:

◆ Team: WaykiChain has an experienced and robust technology team. The team members have accumulated resourceful industrial and technological experiences in many sectors, including finance, entertainment and IT. They also achieved pioneering breakthroughs in R&D and the application of the blockchain technology.

◆ Industry resources: The WaykiChain team has a perfect combination of experienced professionals who have years of practical experience in three industries, including game guessing, assets exchange and foreign exchange. They are professionals who have a deep understanding of the development of the sector. Besides, the WaykiChain team has signed strategic cooperation agreements with leading companies in the target industry. They will provide strong support for the WaykiChain's linking and promote the actual implementation of WaykiChain's application.

◆ Business management: unlike general new projects, WaykiChain has a clear and accurate strategy towards target industries. WaykiChain will utilize the features of blockchain technology such as decentralization, irreversibility, encrypted security and point-to-point value transfer. WaykiChain will professionally and persistently permeate into the target industries and gain market share in a fast way.

◆ Market potential: Every WaykiChain's targeted industry is worth trillions of dollars. According to a conservative estimation in 2019, the market size of the game guessing industry reached USD 1.5 trillion. Additionally, the game guessing industry is just the first industry which will be subverted by WaykiChain.

◆ Sustainable growth: by building up a complete governance structure, WaykiChain Team has realized effective administration on standard procedures, code management, financial management,

salary management and privilege operation scope, etc. to guarantee the sustainable growth of WaykiChain.

As the underlying system of blockchain 3.0, WaykiChain has not only flawlessly inherited the characteristics and advantages of the eco-system of the traditional blockchain, but also solved the technical bottleneck of the current blockchain, thus truly combining blockchain with commercial applications. Moreover, WaykiChain is investing vigorously and continually in the R&D and the innovation of financial technology. Based on its latest achievements, WaykiChain has a clear vision to develop "Blockchain +" and to appreciate the value of the traditional industries as well as other sectors, building up a win-win blockchain eco-system for the 21st century.

## 2. WaykiChain Mission and Vision

### 2.1. Mission

The mission of the Waykichain products and foundation is to create an unbiased blockchain ecosystem for the everyone all across the world. WaykiChain 3-Token Economy Model provide enterprise-level blockchain infrastructure and industry solutions, and create a new business model for the new era.

### 2.2. Vision

We are committed to working with the community to develop a platform that will strengthen and grow the ecosystem. We are committed to working with the community to develop a platform that will strengthen and grow the ecosystem.

| **Scalability** | **Enterprise** | **Developers** | **Users** |
|:---:|:---:|:---:|:---:|
| More apps | Greater flexibility | Better tooling | Greater security |
| More users | Better compliance | Faster app development | Less friction |

As the needs of the community and software platform continue to grow, we expect to iterate and prioritize these enhancements to continue making Waykichain the most performant blockchain software in the market.

# 3. WaykiChain Technology

The blockchain market is becoming highly competitive, and many platforms are emerging every day. It is a rare case to see a platform that not only incorporates well with the traditional businesses but also has application in real life.

Even the earliest emerged Bitcoin has more collection value than its currency value. Such situations have more or less deviated from the final objective given to the blockchain technology to change the society or even to subvert the current business model.

We aim to build up a brand new blockchain eco-system which will be an option for the internet value transmission protocol in the future. WaykiChain is promoting the usability and applicability of the whole blockchain industry. Combining blockchain with traditional industries applications, WaykiChain will bring this emerging technology to people's daily life.

With the support of its leading blockchain technology, WaykiChain will be based on its precise business and strategic planning, firstly permeate into and gain shares in targeted markets such as game guessing, assets exchange and foreign currency exchange and accumulate users' reliable support. Based on this, WaykiChain will gradually develop into a blockchain technology platform that incorporates practical commercial applications.

## 3.1. Blockchain 3.0

With Bitcoin as the first generation of blockchain and Ethereum with smart contract capability as the second generation of blockchain, WaykiChain stands as the third-generation blockchain for its high transaction processing speed through embracing a more efficient consensus algorithm called DPoS. Besides, WaykiChain adds DeFi features like CDP (Collateral Debt Position) and DEX (Decentralized Exchange) right into the base layer instead of second-layer of blockchain to enjoy the best performance, flexibility, usability and extensibility.

## 3.2. Blockchain +

Blockchain+ or Blockchain plus is akin to Internet+ or Internet plus as advocated as a jargon inside China's top internet expert groups, which means applying blockchain technology to help upgrade existing application domains in embracing and leveraging blockchain's unique capabilities to create new values.

## 3.3. Consensus Algorithms

WaykiChain (WICC) uses DPoS+pBFT consensus algorithms to balance overall performance and consensus efficiency. A total of 11 supernodes are set up by voting, and a new block is generated every 3 seconds. After running stress tests in the latest version of WaykiChain main net, it is approved that WaykiChain's trading ability reaches an average of 3300+ TPS and peaks at 7800+ TPS.

## 3.4. Dual Virtual Machines

WaykiChain provides dual-engine smart contract technology, which implements Turing-complete computing ability: LuaVM + WASM VM, at the bottom layer. Lua is a lightweight and compact scripting language that allows DAPP developers to develop smart contract rapidly. WASM VM is a powerful, highly efficient virtual machine that supports multiple programming languages, which enables developers to implement advanced functions in DApps.

## 3.5. Cross-chain Technology

WaykiChain will support heterogeneous cross-chain and decentralized atomic technology, such as Bitcoin and Ethereum, which support multiple isomorphic sub-chains of the core technology in WaykiChain eco-system (e.g. high-frequency DEX sub-chain). Targeted industry-level applications will also have separate sub-chains built on WaykiChain. Application data are independent and parallel with each other. Application sidechains can define their protocols, such as consensus algorithms, sidechain assets, and block intervals.

## 3.6. StableCoin Technology

The stablecoin system is based on the bottom layer of WaykiChain public chain. The stablecoin is pegged to market value and can be generated by pledging twice of the value of the asset on the chain. It can be freely circulated between accounts to meet the demand of various upper-level applications. Its stability is calculated by the decentralized feed price and the reference feed price of each block on the chain, to ensure that the value is referenceable. When the cost of the collateral asset fluctuates, a liquidation mechanism will be triggered (artificial liquidation and systematic liquidation) to ensure that the overall value of collateral assets can be back up by the stablecoin in the entire ecosystem. Stablecoin can be freely exchanged and circulated between users. At the same time, the stablecoin system will implement automatic pending orders and matching in the decentralized exchange (DEX) on a chain. For the interested user paid and the penalty generated during the liquidation process, part of them will go to the risk reverse pool, and the rest will be repurchased and destroyed in the decentralized exchange.

## 3.7. Decentralized Exchange (DEX)

An efficient decentralized exchange based on the bottom layer of WaykiChain supports the entire process from completing pending orders, to matching and settlements. All transactions are recorded on the chain to obtain an auditable transaction account ultimately. Besides, various types of crypto assets issued on WaykiChain, they can be used for purchases on DEX.

## 3.8. Asset Issuance Standard

Currently, the primary applications of WaykiChain are complete. The team is making an effort to promote the DApps landing on WaykiChain. Assets issued standards that are even more refined than ERC20 tokens are introduced to help users issue assets on-chain faster and more secure. Break the barriers between traditional finance and crypto-assets on WaykiChain through the formulation of standards. WaykiChain supports five types of assets (underlying assets, collateral assets, user-issued assets, cross-chain mapping assets, and smart assets) at the bottom layer of the public chain so that it can become a robust and scalable settlement layer to meet the arrangement and circulation demand of various commercial and financial industries.

## 3.9. Governance Systems (Governance Token)

With introduction of stablecoin technology inside WaykiChain, a governance token is needed for two purposes: 1) serves as an equity for continuously earning the interest incurred and accrued through stablecoin activities (collateralizing, redemption & liquidation); 2) offers value to liquidate those CDPs that are under-collateralized through the system inflation process in a real-time fashion. The total amount of WaykiChain governance is 21 billion.

## 3.10. Decentralized Oracle

Feeding accurate information like on-chain token prices into blockchain is a paramount task for many applications to function correctly. WaykiChain has developed a robust and patented technology to allow external feeding data into blockchain in a reliable and trust manner. The software which feeds the information into the blockchain is called an oracle which interacts with blockchain directly. There can be many such oracles that can operate independently while collectively ensuring only the data points supplied/agreed-upon by the majority oracles get fed into the blockchain. Besides these oracles have to be designated/sanctioned by the community elected top delegates.

## 3.11. Block Browser

Block browser is a WaykiChain application data display system. Based on blockchain's app data, it will display information such as transfer record and balance of addresses accounts. All of the data is open, transparent and irreversible by nature.

### 3.12.  Browser Wallet Plug-in

The browser wallet plug-in (e.g. WaykiMax) is a kind of WaykiChain light wallet that allows website browsers to interact with smart contracts on WaykiChain, as well as various decentralized applications on WaykiChain. The barrier to use is significantly reduced, and the convenience is improved in future asset releases and transactions.

### 3.13.  Mobile Wallet

WaykiTimes is a mobile wallet for WaykiChain. It is designed mainly for crypto investors, blockchain developers and industry partners, helping users to manage digital assets, experience De-Fi and other applications more conveniently.

### 3.14.  WaykiChain Node Technology Architecture

There is only one WaykiChain node program available through the code repository on the WaykiChain GitHub, but it can be divided into two types of roles when deployed:
1.  Core nodes (or accounting nodes, super nodes): used to verify transactions and generate new blocks; there are 11 such core nodes deployed in WaykiChain.
2.  Common nodes: used to synchronize data with WaykiChain core node, manage the wallet private key and address, and include initiating transactions to the chain. The only condition that determines whether a node becomes a core node is the number of votes that are won. Since the WaykiChain holders can initiate the voting and withdrawal at any time, the number of votes received by each node may continuously be changing. Only the nodes with the top 11 votes become the core nodes and need to perform similar blockchain accounting job.

WaykiChain node architecture is shown in figure 2-1:
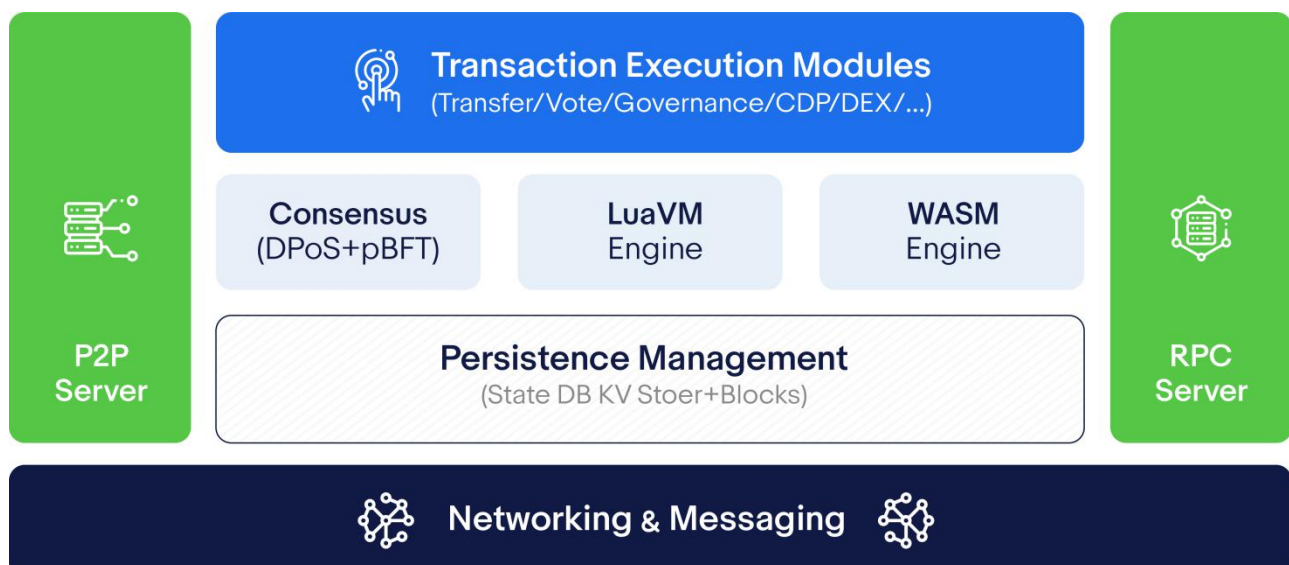
Fig 2-1 WaykiChain node architecture

The specific modules are described in the following table 2-1:
Table 2-1 WaykiChain node module architecture

| Module Name | 模块说明 |
|---|---|
| Transaction Execution Modules | Verify and execute various transactions, and update the corresponding account status |
| Consensus Module | Block generation and fork processing module |
| LuaVM | Lua virtual machine execution module |
| WASM VM | WASM virtual machine execution module |
| Persistence Management | State library and block data persistence |
| P2P Server | P2P network communication service |
| RPC Server | RPC node interaction service |
| Networking & Messaging | Node discovery, network connection and message processing module |

In general, the technical characteristics and advantages of WaykiChain are mainly reflected in the following aspects.

1) The world's first stablecoin and DEX    based on the bottom layer of the public chain;
2) Supports five types of assets (underlying assets, collateral assets, user-issued assets, cross-chain mapping assets, and smart assets) at the bottom layer of the public chain, to become a robust and scalable settlement layer to meet the settlement and circulation demand of various commercial and financial industries;
3) Using DPoS + pBFT consensus mechanism, it can process 3300 transactions per second, which has distinct advantages among mainstream public chains;
4) Dual virtual machine smart contract execution engine (Lua + WASM), ensuring security, efficiency, scalability, developer friendliness, and supports multiple languages for development;
5) Main-chain and Sub-chains separation, better meeting the scalability, transaction performance and industry customization needs;
6) Through decentralized atomic cross-chain, diversify the types of assets on the chain and achieve reliable interaction with other public chains;
7) More secure, transparent, and scalable.

## 4. The World's first 3-Token Economy Model

Three-Token Economy Model Based on The Bottom Layer of WaykiChain (WICC), is composed of WaykiChain public blockchain assets WICC, stablecoin WUSD and the governance coin WGRT. The mutual promotion and balancing of the three different types of a token can provide the entire stablecoin system with the stronger risk resistance, manageability and development potential. The relationship and functions of three tokens can be summarized in the graph below.
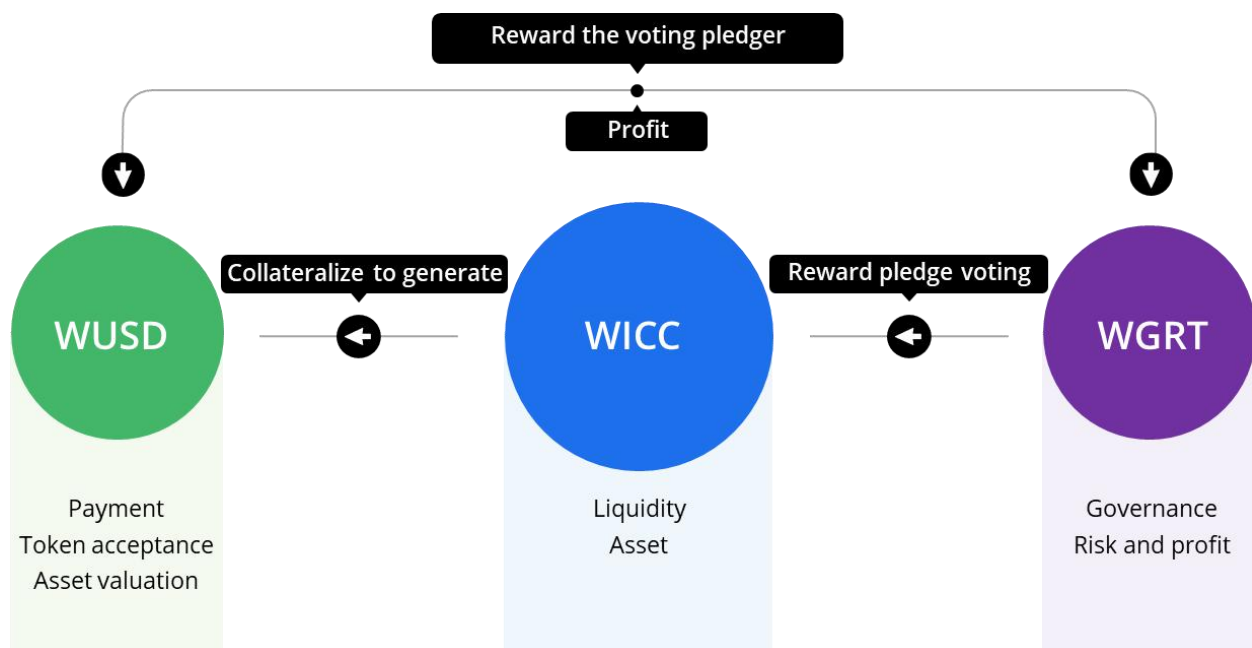


### 4.1. WICC cryptocurrency token

WICC is tokens consumed in WaykiChain's operations. WaykiChain users can use WaykiChain applications and functions by consuming their WICC. For better understanding, WICC can be compared to a kind of fuel.

The minimum trading unit of WICC is to eight decimal places. Every WICC will be linked to the corresponding voting right. WICC holders can participate in ledger node election (self-recommendation is allowed). Every voting user can get identical interest as a return. Please review 2.2 for details.

#### 4.1.1.    Statement of WICC's Attribute

WICC is tokens only used and circulated in WaykiChain's applications. WICC itself has no attributes of fiat currency. WICC can be obtained through mining, voting, subscription, or transactions with other holders, which means that WICC receives trade value by listing on

exchanges and trading with other cryptocurrencies. However, this does not imply that WICC itself has attributes and value of fiat currency.

### 4.1.2. WICC Allocation

WICC allocation figure 5-1
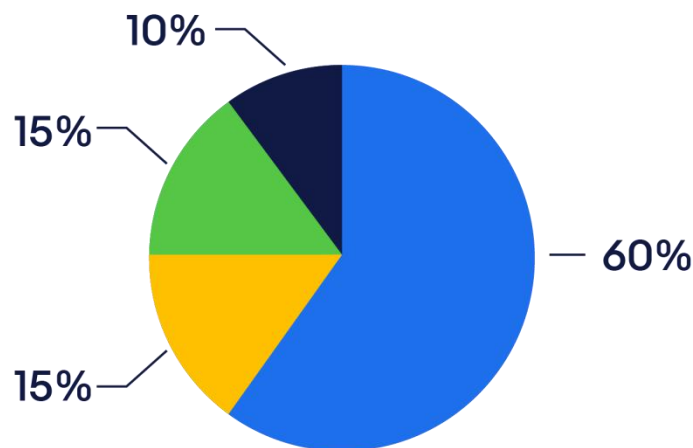


Total number of WICC: 210 Million

● 60% for public sale

To guarantee sufficient liquidity to start the project in the early stage and the equality and credibility of all participants, 60% of WICC will be open for public sale. WaykiChain Foundation will keep the fund raised from the public auction. It will be used to pay for the operation cost, including product development, technology upgrade, marketing, finance, legal consultation and community incentives, etc.

● 15% for the development team, operation team and early investors

They have made a significant contribution to WaykiChain's early development by providing human resources, resources and technology, etc. Part of the reserved WICC will be awarded to them for their participation.

Most of this part of WICC will be reserved as the incentives to encourage the sustainable development and maintenance of the team. These WICC will be frozen for some time, and the holders cannot sell them during the period. The freeze period will be six months. These frozen WICC will be unlocked 5% every quarter from the 6th month after the public sale.

● 15% for strategical planning

This part of reserved WICC will be used for WaykiChain's target industry deployment. It is managed by WaykiChain Foundation and will regularly disclose the detailed usage information. It will use token exchange and project support to bind interest with influential forces in the target

industry, expand WaykiChain's influence in the target industry and accelerate the process of market expansion.

●10% for private investors

Early private investors provided the necessary fund for the team's development and assumed the risk of uncertainty in the first stage of the project. Therefore, 10% of the total amount of WICC will be allocated to private investors. This part of tokens will comply with a specific pre-established freezing mechanism.

WICC was launched in January 2018 with a total supply of 210 million tokens, of which 15% (31.5 million) will be distributed to the development team, operations team and early investors for their contribution in the first stage of the project. This part of WICC was unlocked in July 2018 and then opened 10.5 million quarterly.

To prove the team's determination to develop WaykiChain project, the group decided to lock the unfreezing tokens for another four years. In July 2018, 21 million WICC were locked via WaykiChain mainnet smart contract for four years.

## 4.2. WUSD StableCoin

WUSD is the stablecoin collateralized with cryptocurrency BTC, ETH, WICC (hereafter referred to collateral assets) as its value base. Currently, the WUSD is fixed to USD, later on, WUSD will accept other cryptocurrencies as collateral. Any collateral asset holder can obtain a proportional amount of WUSD by pledging WICC to CDP (Collateralized Debt Position). The amount depends on the collateralization rate chosen by the users. Collateralization rate is the ratio between the value of WICC assets and the value of WUSD obtained.

By the system rules, there is over-collateralization, meaning that pledgor must pay WICC more than the value of WUSD to complete the transaction.

Over-collateralization is used in the system rules, which means that the pledgor must pay WICC more than the value of WUSD to complete the transaction. To maintain the stability of the stablecoin's worth, the system must ensure that there is enough decentralized asset as collateral behind each issued WUSD to endorse it. Therefore, a clearing system is introduced to liquidate CDPs that are insolvent. A risk reserve is also prepared to cope with the potential fluctuations on cryptocurrency caused by the black swan event.

## 4.3. WGRT Governance Coin

As for governance coin, WGRT represents a right responsibility and obligation to participate in community governance. This is more reflected in the WGRT coin holders' proposals and voting rights. Any administrator who meets the system setting rules can initiate a plan, which mainly includes setting the system running parameters such as interest rate and penalty rate — all WGRT holders vote to determine whether the proposal is approved and implemented. According to the

voting governance rules, the more WGRT you have, the higher the right to speak. It can be said that WGRT holders jointly participate in the governance of the whole stablecoin system.

WGRT is the abbreviation of governance coin. It also represents WaykiChain Great. The W represents WaykiChain, G refers to governance. R refers to Right. T refers to Treasure. WGRT acts as a regulator in the system. When the stablecoin system functions regularly, the system will purchase WGRT from the market, repurchase and destroy the interest incurs from generating WUSD and the penalty from CDP liquidation. Therefore, WGRT will continue to deflate in long-term operation.

In Black Swan Event, if the value of a collateral asset falls dramatically, causing part of CDPs to enter the insolvent state without liquidation (theoretically refers to a collateralization rate less than 100%, but no greater than 104% in practice). The system will use the Risk Reserve to resolve the insolvency and close the CDP, as well as issuing new WGRT to purchase WUSD from the market for repaying the Risk Reserve（the amount of additional issue is subject to the insolvency）.

The total amount of WGRT issued is 21 billion, with the initial face value of $0.01 USD. 30% for instituition subscription through private placement, partial lockup position in accordance with aggreement. 15% is reserved for the development team, and will be lockup for a maximum of 5 years. 15% for strategic reserve deployment, which is used for large scale strategic resource exchange with the lockup duration more than 3 years, and the rest is held by the foundation for a maximum of 5 years. 20% for the budget for DeFi marketing campaign project, and will be all airdropped to users of popular currencies such as BTC, ETH, HT, BNB and others as community resource swaps, or to reward participants by holding offline events, all airdrop tokens can be lockup to 6 years. 10% for distribution through WaykiChain's super node voting rewards, and 10% will be airdropped to WaykiChain's currency holders and lockup users. Super node voting rewards and airdrop users can lockup for up to 6 years. The lockup duration can be adjusted according to the specific project progress and market conditions, and WGRT holders use partial non-lockup position to initiate a vote to adjust, and the adjustment results will be publicly announced by the community.

## 4.4. Earning

The operation of the stablecoin system will generate a stability fee and penalty. Users holding WGRT will share the income — during the maintenance of CDP and liquidation, part of WUSD entering the system will be converted into WGRT and destroyed, which will indirectly increase the value of WGRT.

Resources for Asset Restructuring

The system's risk stems from the possibility that fluctuations in the price of mortgage assets could lead to CDP insolvency. Hence, in addition to introducing the liquidator mechanism, WaykiChain stablecoin system also initiated the second risk defence mechanism, the risk reserve funding pool.

The stablecoin system will use the WUSD in the risk reserve funding pool to close the position of the insolvent CDP. After the liquidation, the WUSD that is vacant by the risk reserve fund will be supplemented through the exchange of WUSD for the assets released by the CDP, and the system will also issue WGRT and convert it into WUSD in the decentralized exchange. This is why WGRT

serves as a resource for asset restructuring to supplement the loss of insolvent CDP to guarantee the stability of WUSD.

## 4.5. System Participants

Price feeder: The group provides the prices of WICC, BTC, ETH and WGRT in the secondary market for the stablecoin system. Price feeders are the supernodes of WaykiChain, with requirements to lock up a certain amount of WICC.

Pledgor: Users who pledge asset into CDPs. They can collateralize cryptocurrency to obtain WUSD, to meet their need such as purchasing in DAPP, leveraging cryptocurrency or other financial needs. Moreover, they receive additional liquidity without transferring the ownership of the collateral assets.

Governor: WGRT holders. Obtain corresponding rights, responsibilities and obligations in the system.

Liquidator: Users involved in clearing abnormal CDPs under clearing mechanism. Liquidators can be anyone in the market, as long as they have WUSD, they can participate in liquidation and get profits from the system. For the arbitrage purpose, the Liquidator clears the abnormal CDP and maintains the overall stability of the system.

Underwriter: Pledgors who offer WUSD to others and benefit from it. Underwriters provide services to the users who want to acquire WUSD without collateralization, as well as reverse conversion. Underwriters profit from premiums or service fees in the conversion service. To encourage Underwriters to issue sufficient WUSD for market circulation, the system set the stable costs interest to be negatively correlated with the pledged WUSD amount. The permanent fees will decrease exponentially with the guaranteed WUSD amount increases.

## 4.6. Collateralization System

CDP is used to keep and protect the asset pledged by users. The WUSD collected by the Pledgor from CDP represents the debts owed by the Pledgor. To redeem the pledged asset, the Pledgor has to repay WUSD. Like the collateral practice used in the legal tender system, the number of debts will be lower than the value of the pledged assets.

The crypto assets that can be pledged at the initial stage is WaykiChain public chain token WICC, following by BTC, ETH. Along with the development of our business, other valuable assets will also be accepted as collateral.

### 4.6.1. Creating CDP

The Pledgor may initiate a transaction in the stablecoin system, specify the type and quantity of a pledged asset, and choose the amount of WUSD that the Pledgor wants to borrow. Upon completion of the transaction, namely completion of CDP, the pledged asset will be locked up in CDP.

### 4.6.2. Closing CDP

1. Repaying Debts through WUSD
To redeem the pledged asset, the Pledgor shall repay debts in CDP and pay the corresponding stable fees. The permanent fees shall be paid through WUSD. The WUSD received in respect of payment of stable fees will be converted into WGRT and eliminated in the decentralized exchange. The debts in CDP will be considered being fully repaid upon the amount of payable WUSD and stable fees to CDP.

2. Automatic Return of Pledged Asset and Closure of CDP

Upon full payment of debts and permanent fees, and choose to return all of the collateral, CDP will be closed after that.

### 4.6.3. Maintaining CDP

Each address only corresponds to only one CDP. After the Pledgor creates CDP, the Pledgor may continue to borrow from CDP, pledge an additional asset, redeem pledged asset by stage or repay debts by step as long as CDP is not closed.

**No additional pledged asset required**

The Pledgor can borrow additional WUSD without pledging another asset only when the collateralization ratio exceeds 200%. Additionally, the Pledgor shall ensure that the collateralization ratio after the other borrowing remains no less than 200%.

**Additional pledged asset required**

1) The Pledgor may pledge additional asset in CDP to increase the collateralization ratio;
2) If the collateralization ratio is no more than 200%, the Pledgor shall pledge another asset in CDP if he or she wants to borrow additional WUSD. Besides, the additionally pledged asset's value should be at least twice of the additional WUSD that the Pledgor intends to acquire.
3) If the collateralization ratio is more than 200%, the Pledgor can also pledge another asset in CDP. Moreover, he can borrow WUSD on the condition that the collateralization ratio after the borrowing shall be at least 200%.

**Redeeming Pledged Asset/Repaying Debts by Stages**

The Pledgor may redeem part of a pledged asset by repaying WUSD, provided that the collateralization ratio after such redemption and repayment of WUSD shall be at least 200%.
The Pledgor may repay WUSD and refrain from regaining pledged asset, from increasing the collateralization ratio.

All the high maintenance or closure of CDP shall entail stable fees that correspond to the CDP in question.

### 4.6.4. Parameter specification

When pledging or redeeming assets, the Pledgor shall know the following key parameters set in the system:

1) The minimum collateralization ratio = 200%. For instance, the Pledgor can borrow $50 worth of stablecoins on every $100 crypto assets that are pledged.

2) No upper limit is set for the collateralization ratio.

3) The interest rate for stable fees = a/lg（1+bN）. In the formula, a and b are constants, and N represents WUSD borrowed by the Pledgor. Such interest rate is an annualized rate, and changes as an exponent. The more WUSD the Pledgor borrows, the lower such interest rate will be. The initial values set in the system: a=0.2, b = 1.

Stable fees Interest Rate

4) The upper limit for the total quantity of pledged asset = WICC quantity *25%. Indicating that there is an upper limit for total WUSD that can be issued by the entire CDP system, which means the ceiling of debts.

### 4.7. Stability Mechanism

With the volatility in crypto price, the values of collateral assets in the stablecoin systems fluctuate all the time, as well as the collateralization rate. The system will perceive the collateralization rates related to all CDPs in real-time. When the collateralization rate falls to 150% or below (the exclusive 150% collateralization rate is called the liquidation rate), CDPs are defined by the system to be in an abnormal state and vice versa, to be in the security state. Guaranteeing that there are enough assets behind each issued WUSD to endorse it, abnormal CDPs need to be liquidated in time.

### 4.7.1. Clearing mechanism

The normal CDP only belongs to the Pledgor, and only the Pledgor can redeem it. The abnormal CDP will enter the compulsory liquidation pool, and anyone can initiate liquidation. At this time, the Pledgor can still regain his abnormal CDP in the redemption interface; thus, abnormal CDPs can be closed by redemption or by liquidation.

The liquidated CDP does not incur any interest, but a 13% penalty each time. Besides, to complete the liquidation as soon as possible, the liquidated assets will be sold to the Liquidator at a discount of 97%. According to different collateralization rates, there will be three theoretical scenarios in liquidation:

**The collateralization rate is within 113%~150%**

The collateral assets valued 113% of the loan WUSD will be sold to the Liquidator, who will pay back the system so that the Liquidator can obtain this part of collateral assets. In that case, WUSD of the loan value will be destroyed. And for the remaining portion, 50% will be put into the Risk Reserve Funding Pool, and other 50% will be used to buy WGRT on a decentralized Exchange, and then self-destruct. Unsold collateral assets are going to be returned to the Pledgor.

**The mortgage rate is within 104%~113%**

All of the collateral assets will be sold to the Liquidator, and no remaining assets will be returned to the Pledgor. The WUSD provided by the Liquidator to the system also meets the liquidation demand of CDP first, and the spare part is exchanged into WGRT, and then be destroyed. The difference is that the actual penalty rate is between 4% -13%.

**The mortgage rate is within 0%~104%**

The system will use WUSD in the Risk Reserve Funding Pool to close out the insolvent CDP. Then the assets released by the CDP are converted into WUSD in the decentralized exchange. Meanwhile, additional WGRT will be issued to be converted into WUSD in the decentralized Exchange (the amount of other issue is subject to the insolvency fund gap of current CDP). After the completion of the transaction, both parts of WUSD will be returned to the Risk Reserve Funding Pool.

### 4.7.2. Risk Reserve Funding Pool

The systemic risk is that the volatility of collateral asset prices may lead to the insolvency of abnormal CDP. Thus, the risk defence mechanism is essential. During liquidation, the Liquidator mechanism is the first risk defence of the system, and Risk Reserve Funding Pool is the second defence. The WUSD stored in the Risk Reserve Fund mainly sources from two parts: 1)The assets raised from the issuance of WGRT will be exchanged for risk reserves; 2) When the system has been liquidated, a portion of the penalty will be put into Risk Reserve Funding Pool.

### 4.7.3. Emergency Shutdown

When the market encounters Black Swan Events, it may cause the value of the assets depreciates under the obligation value.

When the overall collateralization rate (the total value of collateral WICC in all CDPs / the full value of WUSD in the market) falls below 80%, the automatic protection mechanism will be turned on by the system to suspend all operations related to CDP. After the market stabilizes or rebounds, the community can initiate a restart proposal.

### 4.7.4. Supply-demand regulating

In the system, the price of WUSD is hard pegged to 1 USD, while in the secondary market, it will be soft pegged to USD due to the change in supply and demand.

Therefore, besides using the clearing mechanism and the risk reserve to ensure the collateral assets value over the value of issued stablecoins, it is also necessary to respond to the price fluctuation of the WUSD in the secondary market.

If the WUSD values over 1 USD in the long term, theoretically, market arbitrage behaviour can make the price callback. However, the arbitrage path is long, and there is an additional risk of fluctuations in assets value. Therefore, the effect of market self-regulation is challenging to forecast accurately. If market behaviour does not work for a long time, the Governor must play a governance role. For instance, lowering interest rate, and encourage Pledgors to issue WUSD mainly.

If the WUSD values under 1 USD in the long term, the Liquidator can hoard the WUSD for use in liquidation to optimize the profitability. If market behaviour does not play a useful role, the Governor is also needed to perform a governance role, such as raising the stable fees rate and actively expanding the application needs.

## 4.8. Community Governance

To receive stable fees and penalties, the Governor is playing a vital role in the stablecoin system and maintaining the stable operation of the system. WGRT is the governance coin of WUSD, and the user holding WGRT is the Governor of the system. The supernodes will control the parameters of operations and may even change the operational rules of systems.

Unlike other stablecoins in terms of smart contracts, WUSD is the underlying public chain stablecoin, which is an integral part of the WaykiChain ecosystem. To ensure the economic connection between WICC Governors and WGRT Governors, participants vote in the supernodes election of WaykiChain will receive a reward of WGRT. It demonstrates that the supernodes of WaykiChain play essential roles in stablecoin system.

Any Governor that meets the system rules can submit a proposal. Whether or not such motion shall be passed and put into practice will be decided by voting.

### 4.8.1. Voting governance

All WGRT holders can participate in the management of the entire stablecoin system. Qualified proposals will be submitted for voting, and all WGRT holders can vote to determine whether or not such plans shall be passed and implemented. Suggestions are mainly about setting operational parameters of the system, such as interest rate and penalties.

### 4.8.2. Submitting proposals

Any WGRT holder can submit proposals. A proposed plan can only become a qualified one when applicable WGRT locking-up requirement is satisfied.

Adequate proposal – a proposal that corresponds to at least 210,000 locked-up WGRT in the voting system will directly become a qualified proposal and be voted on after that.

### 4.8.3. Voting process

An adequate proposal will have a voting period of one week. During the period, WGRT holders may vote on the plan, with one coin representing one vote. Holders will have three options, namely "Agree", "Disagree" and "Abstain".

### 4.8.4.  Confirming voting results

A qualified proposal needs to satisfy the following conditions before being recognized by system and becoming effective:
Over 20% circulating WGRT has voted
Excluding those who have abstained, over 60% of voters chose to "agree."
If either of the above conditions is not satisfied, the proposal in question will not be passed. 10% of the WGRT pledged by the user whose plan is not adopted will be included in the "voting incentive pool", and the remainder will be returned to the original holder. If the proposal is passed, all locked-up WGRT will be returned to the original holder. The remaining funds in the "voting incentive pool", if any, will be rewarded to the user who submits such passed proposal based on the ratio of "Voting WGRT/All circulating WGRT".

### 4.8.5.  Implementing the passed proposal

The adopted scheme will be implemented immediately. The system will immediately start to operate according to the newly passed plan.

### 4.9. Price Feeding

All the processes of pledging, redeeming and liquidating involve value determination and conversion, and in such operations, the system needs to know each token's prices. The method of recognizing expenses is called "Price Feeding".
The system will use the median of quotes of every price feeder as the system price, which will impact operations including pledging, liquidation and redemption. The fed price will be the weighted average of those in all major centres and decentralized exchanges, and the weightings will depend on the distribution and trading liquidity of WICC.

**Price feeder**

Price feeder refers to the user feeding prices for the stablecoin system. The supernode of WaykiChain that locks up 2,100,00 WICC in the order can become a price feeder for the system.

### 4.10.   Public Chain Ecosystem

**Public chain ecosystem & stablecoin**

Each WUSD is backed by an encrypted asset that has a much larger value than such WUSD. Such an arrangement will ensure the stability of WUSD. The growing volume of WUSD will push up the value of the corresponding pledged asset.

The fluid volume of WUSD depends on the scenarios and scale of its use. At the initial stage, the use of scenarios mainly involves the following three aspects:

Decentralized financial system's demand for WUSD, such as using WUSD in asset financing or using it as the primary charge unit in decentralized exchanges

Using WUSD as a bridge to provide a more convenient and safer financial instrument for users, such as decentralized exchanges' access to the legal tender financial system

Using WUSD as the infrastructure to offer better trading and payment experiences for DApp on a public chain

The stablecoin can boost the value of pledged assets, create a good use scenario for open chain and help the open-chain ecosystem reach more users.

The public chain's inherent advantages and disadvantages will also impact the experiences of stablecoin system developed by it.

## 4.11. Main Risk and Response Plan

Any system's development and operation face risks. It's necessary and essential to let the original designers and developers govern the communities, understand the risks and set related rules to minimize risks or their damages.

Market fluctuation
A steep decline in value of the pledged assets for WUSD or a black swan can entirely suspend the stablecoin system, and endanger the pledged asset.

### 4.11.1. I Response plan:

"Debt ceiling" will be set to allow only part of the total pledged asset to flow into the stablecoin system. Such an arrangement can prevent massive liquidation activities from causing a further decline in value of a pledged asset. The governing community will set the "debt ceiling" according to actual operational conditions.

Improper governance
The stablecoin system is governed by a community where all WGRT holders can take part in decision making. Based on the voting rules, those who hold more WGRT will have more say.
Besides, supernodes are not necessarily experts. Most of the holders may not have the economics or technological backgrounds required for making sound votes to sustain the system so that they may make mistakes.

### 4.11.2. II Response plan:

The mechanism design of the whole system constitutes a strong relevance between WICC and WGRT. Thus, entities holding WGRT will be the most relevant parties to the interests of WICC. In theory, supernodes have no evil motives because the damage to the stablecoin system is also hurting the overall benefits of itself.

Therefore, the rules will ensure each role's rights correspond to obligations to prevent wrongdoings inside the community.

In the early stage, WaykiChain team will provide detailed knowledge about the stablecoin system, and work with the community to better transmit such knowledge.

Price feeding error

Pricing feeding will be a crucial process, and any failure can impact the system's stability and jeopardize the user's interests.

### 4.11.3. III Response plan:

The system price is determined through a "median price" system, so a few price feeders' errors in price feeding or failure to feed amounts will not impact the accuracy of estimates.

Lack of usability

The stablecoin system is decentralized and has a complicated mechanism, so maybe only a few users can understand the system and the perception that decentralization causes bad experiences may impede the expansion of the user base.

### 4.11.4. IV Response plan:

WaykiChain public chain has made breakthroughs in performance and been an industry leader. In the short-to-medium term, the open-chain can support the smooth operation of the stablecoin system. Moreover, the product presentation and service will be made as simple and easy as possible. Ordinary users that do not understand the mechanism behind WUSD can still use WUSD easily. For users who have more demands, our team and the community will help them understand the system's mechanism in various ways; users or institutions with industrial backgrounds are well equipped to understand the system.

# 5. WaykiChain's Industry Application Prospect and Realization Scenarios

## 5.1. The First Breakthrough: Global Decentralized Game Guessing Application

### 5.1.1. Pain points of global game guessing industry

The quality and credibility of the traditional centralized Internet game guessing platform look pessimistic.

All the current Internet game guessing platforms adopt centralized business model-operated by an organization or a company, where users who participate in the game guessing have to hand over their assets to a centralized platform. However, the qualifications and credibility of many Internet platforms are disturbing. There are technical loopholes, black-box operations, violation of guarantees, the establishment of funds pools, platform fraud, non-real-name authentication, information insecurity and lack of legal protection of investment and other problems in these platforms, which might bring significant risks to users.

From a technical perspective, after examining five major security tests, including code security, data storage security, data transmission security, network service interface security and multilateral interacting process security. We concluded that most of the online game guessing applications and clients showed symptoms of encryption algorithm misuse, encryption protocol's incorrect implementation or partial missing. They also rank low in areas such as user trading information protection, user deposit protection, preventing transaction history tempering and user identity theft, etc. As a result, hackers are given plenty of opportunities to play with their tricks in this process.

(2) Limitation of market supervision in traditional game guessing industry

The authorities in different countries have different attitudes towards the game guessing industry. While some countries have a positive attitude towards the game guessing industry, others see it as gambling and have put restrictions and tedious supervision, which has substantially limited industry's development and innovation capacity.

(3) The high percentage of commission fee collected by traditional game guessing platforms

Operators of centralized game guessing platforms require a high return to offset their risks because centralized game guessing activities or events themselves mean high risks. So the participants in the game guessing activities are forced to bear some of the cost of the operators. The legal compliance fees collected by the supervision authorities as mentioned above, also covertly reduce the return, which should be enjoyed by users.

Besides, now the total rate of return in the sports contest game guessing in China is usually around 70%. Some illegal platform can provide 80%-90% rate of return. However, this is far from enough in the market. According to probability theory, nobody can win in the long term in such a distorted market.

(4) Niche game guessing the market

Traditional game guessing market is supervised by the government, which has resulted in a situation where most game guessing platforms are hidden in the underground market. The outside world knows little about the platforms' information, and so the market need is not met adequately. Therefore, the seller, or the operator of a traditional game guessing platform, have higher bargaining power, which can further squeeze the return of investors. On the other hand, providers of popular game guessing activities, due to their covert characteristics, are more challenging to gain the trust of users, because users feel very difficult to verify the qualifications of the providers in the private market, or such providers intrinsically bear risks of trust breach. Hence the participants of the game guessing activities are further discouraged, and new users are blocked from the market.

(5) Lack of diversity in traditional platforms

In the traditional business model of the centralized game guessing platform, the operator, as the opponent to participants, will bet oppositely. The operator can only make profits when participants make wrong judgments. Therefore, most traditional game guessing platforms have established their risk control systems and product research departments. If the game guessing rules of a particular event will give participants some advantages, then definitely such a game guessing event will not be adopted and published by the operator.

A philosophical question is raised: only the products and events which are regarded by the operator as advantageous can be published on the platform. In contrast, those events distributed to participants are proved to be beneficial for the operator. Therefore, in the market, there is only a limited number of activities available to game guessing participants. In most cases, such events are disadvantageous for participants.

## 5.1.2. Business solutions for decentralized game guessing games

The decentralized game guessing application built on WaykiChain system has inherited the features and benefits of the blockchain technology, it will entirely solve the unreasonable aspects facing the current competition guessing industry, including the low rate of return on traditional game guessing platform which is heavily criticized, shortage of available game guessing products, and opaqueness, non-transparency, legal risks, fund insecurity, and cheating of the operator, etc.

Because the game guessing application built on WaykiChain is decentralized, it will not be controlled by any party of interest. Moreover, the game guessing information is recorded in the distributed ledger and cannot be altered by any party, so forged game guessing results are impossible.

All users can check the real-time game guessing records through the blockchain browser. Any fraud or other illegal, malicious behaviours will be found out in time and prevented. For example, in the soccer game guessing, the WaykiChain application will refer to the officially published match results or those reliable results accepted by the public and will collect and verify real-time data. All

users will get consentaneous results. Then WaykiChain's smart contract will distribute yield based on the automatically calculated rate of return.

Because the execution of a smart contract is preset, and the game guessing information of all users are recorded and cannot be altered in the blockchain. Hence, all users enjoy a just, open, and fair game environment. The blockchain technology itself has become the most potent credit endorsement for the game guessing application.

Compared with traditional game guessing platform, the game guessing application built on WaykiChain features another significant advantage: operational cost. Full nodes and users jointly operate WaykiChain, so no organization like the traditional operator will share the interest that is payable to the game guessing participants.

Any individual who is very confident about a specific case can also publish his game guessing activity without a charge. A publisher, by using the smart contract provided by WaykiChain, can write his event in which he trusts into WaykiChain, and places his assets limits which he pledges in WaykiChain as the game guessing return. Any user who is interested in and has opposite opinions towards the event can participate in the game guessing. And the rate of return is decided by the proportion of capital invested by participants when the final event result is released. The smart contract will help strangers to solve the biggest trust obstacle, and at the same time, it will not generate a costly third party's witness fee.

## 5.2. Global Decentralized Assets Transaction Application

### 5.2.1. Pain points in the global centralized assets exchange

(1)     Traditional centralized assets exchange's security risk

The traditional security market is developed around the exchange. The transaction system in the swap guarantees the standard procedures of all transactions. Once the system is attacked or doesn't work, the whole network may be compromised, and all operations must be halted. When the centralized assets exchange suffers loss because of malicious outside attacks, all users on the platform usually experience. Famous examples include Mt. Gox, MF Global, and Bitfinex exchanges. Users must bear the loss when hackers attack the transaction, or the transfer goes bankrupt; Sometimes, the inside job occurs.

By selecting the centralized assets exchanges, users must trust them entirely and let these platforms keep their assets. This means that the right to assets disposition is transferred from the proprietor to the trustee, the centralized assets exchange. Therefore, the trade is not only entitled to dispose of your assets, but also oversee all of your transactions. No one can guarantee that the exchange will not execute the transaction to its benefits, and as a matter of fact, many exchanges have been done so. Moreover, every trade has many employees, which increases the difficulty of internal supervision.

(1)     The unfairness of traditional centralized assets exchange

Due to the visibility of transactions of users, information is visible in the exchange, and the wrongdoing of insider trading in major exchanges can be seen frequently. Besides, the speed of transactions is not very fast in the trade. If some traders can always execute their purchases more

quickly, they can gain benefits utilizing computing advantages and transaction proceeding speed, which is called a high-frequency operation and this can be very unfair to the other traders. Competing for faster transactions requires more investment, hence increasing the cost of a deal.

(2)    Rules limits in traditional centralized assets exchange
In traditional centralized assets exchange, such as NASDAQ, and the emerging digital currency exchange, such as Coinbase, users are required to follow the rules as stipulated by the transaction, including limited trading time, the quota of cash withdrawn every day and even the proof of user's assets income as required by some exchange.

Moreover, the assets products that can be traded in a traditional exchange are limited too. The traded assets registered within the transaction must pass various kinds of inspections and supervisions, which causes legal compliance costs and time cost as well. Many quality assets are thus refused to be traded by the assets market.

(3)    Time cost and high transaction fee caused by traditional centralized assets exchange

The foreground system in the exchange is responsible for matching transactions, while the background system is responsible for settlement and delivery. There are many procedures and links in the two systems, which leads to time and fund cost. Moreover, according to rules, real-time settlement cannot be made on the date of the transaction, which also brings about potential risks to assets.

Furthermore, the operational and promotional fees in the exchange are expensive, and such charges will be labelled as handling fees from users' transactions. Take the digital currency trading website Bitstamp as an example, and a user must pay USD 5 for every deal worth USD 1000. However, the handling fees of Bitstamp are not the most expensive among digital assets exchanges.

## 5.2.2 Business solutions of decentralized assets transactions

The blockchain technology helps to realize the concept of the decentralized assets exchange. The decentralized assets exchange built on WaykiChain system will inherit all the functions of traditional centralized assets exchange, such as stock trading, rare metal trading, commodity trading, etc. The decentralized exchange can not only bear the load of the same or even more significant trading volume compared to the centralized exchange but also solve the pain points that are common in centralized assets exchanges.

Firstly, blockchain technology utilizes many distributed nodes and high-performance servers to support peer-to-peer networks. The overall operation will not be affected by attacks or problems on some nodes, which will increase the high availability of asset transactions.
Secondly, decentralization of blockchain technology means that no stakeholder groups or organizations can control decentralized exchanges, thus keeping their justness, fairness, openness and transparency. At the same time, users don't have to worry about the credit of the trade, because the object of trust has transferred from traditional centralized organizations to blockchain smart contract. In WaykiChain's decentralized assets exchange, all transactions are realized through smart

contracts, without the existence of any fraud or malicious promise-breaking behaviours. Therefore, blockchain technology and smart contract can provide more effective support for the transaction of digital assets products, hence laying the foundation for delivering operations of digital assets.

WaykiChain decentralized assets exchange system empowers users so that they don't have to worry about the time and high cost as if in traditional centralized assets exchanges. The blockchain technology can simplify and automate lengthy trading procedures, so that assets publisher and investor can trade with each other directly, reducing interactions between the foreground and background and save a lot of human resources and material sources. Moreover, the limits often seen in traditional exchanges do not exist in decentralized exchanges. Users can trade at any time freely. Cash withdrawal is not limited. Every user has full power to dispose of his properties.

WaykiChain decentralized assets exchange adopts blockchain technology's consensus algorithm, irreversibility and distributed ledger, so it can help traders share data easily. Every user's transaction is recorded in block browser and cannot be altered. Meanwhile, the exchange allows for anonymous operation. Users don't have to worry about their privacy or miss-use of their information. Nor of the fact that others could spy on them or use the information towards their advantage.

Any user can pledge his assets on WaykiChain decentralized assets exchange and then issue his WaykiChain assets. For example, John owns a company with an annual profit of USD 1 million, and the estimated value of his company is USD 10 million. However, due to various kinds of limits from the stock exchange and supervision authority, John is not able to list his company by issuing stock shares to the public. Now, John may choose to issue his WaykiChain shares on WaykiChain decentralized assets exchange.

John's WaykiChain shares are granted with value because he has pledged the future income and some proprietary rights of his company in the smart contract of WaykiChain decentralized assets exchange. Every year, based on the share ratio of the investors, the profits of the company will be automatically allocated, and the investors also enjoy shareholders' right in the company. Thanks to the smart contract of the blockchain technology, the cost to establish trust is reduced dramatically in the transaction.

WaykiChain decentralized assets exchange allows users to pledge any assets to issue the corresponding WaykiChain assets. The price of such assets will be recognized by investors following the law of the market.


## 5.3. Settlement Time of International Remittance and Forex

### 5.3.1. Pain points of global cross-border remittance and forex

(1) Settlement time of international remittance and forex

In the cross-border transaction, if the remitter and payee don't belong to the same bank, the procedures necessary for the operation is very tedious. Different banks have different ledgers. When the cross-border transfer is executed, banks involved have to check their accounting, and the transaction can only be fulfilled after the information is exchanged and verified by every bank. Then comes the breach risk when both parties make the settlement.

Therefore, the ideal solution is to seek the third party as an escrow account; and only when the transaction is completed, the third party will transfer the fund into the account of the payee. Tedious account verification will slow the transaction speed. Mainly when the cross-border transaction happens, more than one bank is involved if the respective bank for the remitter and payee intends to complete the transaction. The time necessary in such procedures is unpredictable. Sometimes, the deal can finish in one day, and sometimes it will take several days.

In the forex market, following the ordinary procedure, one trading party transfers its fund to the intermediary. For example, CLS, a foreign currency settlement provider, will hold the fund until the counterpart party provides its fund. One problem that occurs in the procedure is that, before the settlement is completed, the fund of the initiating party will be frozen in the transaction for one day usually, or even longer. Therefore, the forex market, as well as the cross-border transfer, faces the same problems, such as uncertainty and delay of the transaction completion time.

(2)      Exchange rate risk in the cross-border remittance market

The parties involved in the cross-border remittance and forex must face the risk of exchange rate fluctuations due to time delay of the transaction. Usually, the parties involved are required by banks to bear the rate fluctuation risk when they use the inter-bank transfer service, which increases the uncertainty of transaction for both parties. The risk of rate fluctuations can be particularly fatal for forex parties.

(3)      Fees in the cross-border remittance market

In the market, every participant involved in remittance will be charged with specific fees. And the more the money involved, the higher the relevant costs are. Hence another uncertainty occurs, because the total costs for one transaction cannot be determined until the completion of the deal. Generally, the fees for one sale is 2% - 3% of the traded amount; in some extreme cases, the costs may exceed 10%.

(4)      Non-transparency in the cross-border remittance market

As mentioned above, neither the remitter nor the payee is sure about the necessary time and fees for the transaction. They only know that the price collected will be fluctuated within a range. Moreover, as the initiators of the trade, both the remitter and payee can neither search for the trading progress in the trading banks, nor can they carry out the active real-time tracing. Because many different participants usually fulfil every transaction, it is challenging to search and trace the relevant information.

When a mistake occurs beyond expectation, it is challenging to locate the error by tracing the transaction. Mistakes will usually be found out after quite a time. For example, wrong account numbers take an even longer time to fix.

(5)      Forex settlement risk

The settlement is a significant forex link. The global forex settlement systems are innovated thanks to the development of information technology. Because financial systems are inter-connected, a settlement failure in a large amount of transaction will trigger a series of breaches. The risk is that the cross-border settlement can only be executed during the reasonable working time of the central bank of the home currency. While both parties in the agreement may reside in different time zones,

if one party makes the settlement before the other party, the other party waiting for the solution will face its counterpart breaches.

If a forex trader pays its currency but doesn't get the money payable, it will face the loss coming from the rate fluctuations of the exact currency payable. The risk comes from the desynchronization of the payments by both parties.

(6) Supervision requirements in the cross-border remittance and forex

As we all know, the regulation on foreign exchange industry has always been a problem. The main reason for this is that there are more than 1,000 industrial organizations. The number of regulatory agencies is small, and the supervision cost and organisational efficiency have become issues that many regulatory agencies need to solve. The supervision of foreign exchange and cross-border transactions in each country has always been a top priority. How to improve organisational efficiency and reduce regulatory cost is also a significant problem for the industry.

### 5.3.2. Decentralized forex business solution

Along with the development of WaykiChain, there will be more and more users using WaykiChain app. These users are from different nations, speak different languages and use different FIAT (legal currency). To make all users participate in WaykiChain conveniently, WaykiChain has provided a solution that different FIAT (legal coins) can be converted into each other. At the same time, the system will serve users who need forex transactions and cross-border remittance.

In WaykiChain's decentralized forex application, there will be forex recipients for various legal currencies. Everyone can become a recipient. The recipient can pledge assets to WaykiChain, such as Bitcoins, WICC and Ethereum, etc., to generate crypto asset that is 1:1 pegged to FIAT (legal currency), such as StableCoin. In WaykiChain, users can either pay WUSD to buy assets priced with corresponding legal currency or withdraw cash by using WUSD, which has provided a channel for capital circulation. WUSD supplies will be strictly recorded in the blockchain browser where everyone can access. WaykiChain will issue WUSD equivalent to corresponding collateral deposit and will recycle the corresponding WUSD in case of cash withdrawal.

For example, investor John owns RMB 70,000 and intends to convert his money into USD. But due to the forex control in the country, John chooses to use WaykiChain to exchange for USD. In WaykiChain decentralized forex application, John finds recipient Terrence who wants to trade for RMB with his USD. John first transfers the equivalent value of WCNY and sends WCNY 70,000 to Terrence. After that, John gets WUSD at the same exchange rate as that of USD. Suppose the exchange rate of USD to RMB is 1:7, John gets 10,000 WUSD. At the same time, the proprietorship of 10,000 WUSD is taken back by the system from recipient Terrence. By continuing to pledge his deposit to WaykiChain, Terrence can gain more WUSD proprietorship so he can offer exchange services.

The smart contract supported by WaykiChain will ensure the transaction's immediacy and security. Foreign currency exchange and cross-border remittance will become much faster and more convenient for customers. Moreover, the transaction cost will be reduced, as well. For the traders, because the blockchain can ensure data integrity without requiring credit accumulation. It can

eliminate the complicated steps of ID verification during forex transactions. The entire process is entirely transparent and is very safe and easy to trace. The blockchain's decentralized settlement of forex transactions will speed up the settlement of transactions. The average cost and settlement risks will be significantly reduced.

Unlike traditional forex platforms, WaykiChain doesn't charge any handling fees. Traders can select his forex rate and the range of fluctuations. Finally, the actual price will be close to the officially published rate because the market will eliminate the listed rate exceeding the market rate.

Since blockchain data is systematically self-verified and recorded, ID verification, data collection by the regulatory authorities and reporting by enterprises are not required. This will significantly reduce regulatory cost and increase organisational efficiency.

Transaction information retrieval and backtracking will be much more comfortable, and it is authentic because it is irreversible. This significantly saves human resources and material resources because of supervision. At the same time, due to the stability and reliability of blockchain technology's data block, both the accuracy and security of data are ensured when the forex supervision is applied. Besides, irreversible data blocks and traceable data nodes provide an excellent convenience for guidance and enhance supervision's efficiency.

### 5.4. Decentralized, Highly Autonomous Public Chain Eco-system

The final goal of WaykiChain is to make a decentralized, community-autonomous big platform and vast eco-system. WaykiChain hopes to continuously generate unique creations through the thought collaboration and collective decision of the whole community, and which are implemented by the start-up team and community together.

For the developers, WaykiChain will adjust the overall technical structure.
1) Modularity: WaykiChain implements the functions of the blockchain into modules, which can be easily added, edited or combined by the developers. This modular design will significantly increase developers' productivity because developers do not have to write protocols from scratch. Modularity also enhances the security of the entire system, as each module is upgraded continuously to become mature and robust, and is continually being reviewed and verified by the community, significantly reducing the potential risks generated by custom code.

2) Generalization: WaykiChain generalizes the smart contracts, wallet SDKs, and public chain API interfaces so that developers and application operators can experiment with more possibilities. And after evolved and naturally chosen, functional applications and business models can stand out and long survive through evolution and natural selection.
3) Openness: WaykiChain will design an open development framework. Any developer has the right to process their applications, development modules, and public-chain interfaces to support the evolution of the entire public chain ecosystem, ultimately constructing a thriving platform with a wide variety of templates, modules and applications.

WaykiChain team is committed to building a complete community autonomy rule that achieves a fair, equitable and open value and power distribution system. It proposes adequate supervision and management charters to ensure that everyone's interests match the overall benefits of the

community. So that continuously condense the people who agree with WaykiChain concept and positively promote community development.

First, everyone can participate in the daily operation of the community through work, sharing or investing. Developers contribute their time and energy to WaykiChain community through their work; investors can become "shareholders" of the entire ecosystem by providing with investment; users can share their resources, such as nodes to share their bandwidth and server resources; evangelists can share their social and networking support, and make a difference to the regular operation of the community.

The distributed architecture and the rules of the community will make most of the effort by collaboratively influencing the community, although everyone works independently. All members of the ecosystem will gain appropriate benefits (including token, voting rights, or the digital currency itself). Ultimately, by uniting everyone's efforts community grows.

WaykiChain team will continually optimize community governance programs and manage them transparently, ultimately constructing a healthy, self-circulating community that is motivated, profitable, and rewarded.

## 5.5. Business Model

The online betting industry is a vast market. According to Statista, it will be worth up to 95 billion USD by 2024. The real pain points of the industry can be solved entirely by the global liquidity of cryptocurrency, the transparency of blockchain ledger technology, and the irreversible nature of the smart contract. Besides, it is relatively practicable to apply blockchain technology into the betting industry and form scale. That's why WaykiChain chooses the online betting industry as an entry industry to provide integrated blockchain solution. While solving the pain points of traditional industries, WaykiChain can also improve the performance of the public chain, as well as accumulate the first users.

When WaykiChain's betting application has developed to an absolute scale, users will need to mortgage their non-blockchain assets in exchange for blockchain assets (betting stake) to run ledger nodes and smart contracts. So a large number of users will have the demand for assets offering and trading. WaykiChain will provide decentralized exchange solution for such users with open and transparent channels for all types of assets. At the same time, the problems of traditional centralized exchanges - poor security, opaque transactions and high handling fee, can be solved. Therefore, the users who have a demand for asset offering and trading will be attracted, and WaykiChain can achieve the second accumulation of users.

As the scale of the decentralized exchange gradually expands, the demand for mortgaging non-blockchain assets (fiat currency of different countries) in exchange for blockchain assets will increase progressively. In the process, the acceptors can provide diverse mortgaged assets, high-quality service and relatively low handling fee. Therefore, it is foreseeable that a group of acceptors will be gathered in the ecosystem (such as the BTC, USDT/fiat currency acceptors on Huobi, Binance, etc.). With the funds and services from these acceptors as business foundation, the user matching mechanism from the decentralized exchange as technique foundation, and the user base from the online betting application, WaykiChain will offer a complete decentralized, efficient

and low-cost foreign exchange solution that complies with the law and expand into another trillion-level market.

In the process of providing solutions, we open-source the bright contrast and DApp source code as a template for the answer to the qualified and demanding enterprise deployment and operation, and provide customized improvements to the community and other commercial developers. At the same time, the WaykiChain team will continue to optimize and improve the various interfaces and technical documentation of the public chain, attracting enough developers to develop a variety of applications on the string through the massive user accumulated in the open-chain eco-system and the developer-friendliness of the open-chain, eventually achieve the diversity of forms.

Efficient and stable public chain, massive users, and rich applications, these three elements form a flywheel effect, mutually promoting the formation of a self-sufficient ecosystem, and ultimately achieve the goal of a large platform and a large eco-system.

# 6. WaykiChain Foundation

## 6.1. Establishment of the WaykiChain Foundation

HongKong WaykiChain technology Ltd. is an innovative company focusing on blockchain technology research and development and related project operation. WaykiChain team ensures the sustainability of open source community projects, the effectiveness of detailed governance and safety of collected fund by setting WaykiChain Foundation.

WaykiChain foundation is responsible for the funds raised by the WaykiChain projects and develop reserved tokens. Meanwhile, WaykiChain Foundation has the responsibility to reasonably use and distribute capitals. After the nodes election completed, the Foundation will gradually disclose the use of funds in an appropriate environment.

## 6.2. WaykiChain Team

The WaykiChain team has industry-renowned developers who have had successful project experiences, as well as experienced operators and experts who have been immersed in the target industry for many years. The WaykiChain is focused on the blockchain industry and aims to develop infrastructure and landing applications. WaykiChain team at this moment includes technology, blockchain researchers, and the business team of more than 50 people. With the development of use and the increasing market share, WaykiChain will be open to attract top calibre professionals who are willing to contribute to the community.

**Main members in WaykiChain Team:**

**Wayki Sun
Founder&CSO**

One of the earliest entrepreneurs and investors of digital currencies in 2013, worshipped by the industry as Godfather of Dogecoin. Net name: Fencer. More than ten years' experience in financial and internet sectors. The founder of Oulu Crowd Funding as well as the president of Hurricane Digital Assets Management Co., Ltd. He enjoys high reputations in both traditional financial industry and emerging digital currency markets. And he has vibrant industrial resources, maintaining good cooperation with many popular digital currency exchanges.



**Gordon Gao
Founder&CEO**

graduated from Columbia University in New York, ex-Lead Data Scientist of Fishbowl in Wall Street, ex-Senior Data Analyst of Alibaba Group, a senior member of Mensa International Club, currently serves as WaykiChains CEO. He is responsible for offering support to WaykiChains commercial model designing and strategy planning, building up a digitalized monitor system for products and operation and promoting WaykiChain overseas with his international background.



**Richard Chen
Founder&CTO**

Master of Computer Science from the National University of Singapore and Bachelor of Communication Engineering from Shanghai Jiao Tong University. Richard served as Senior Vice President for the world's top investment bank Morgan Stanley for three years and Intel Chief Architect for eight years. Richard has received four US patents and won the Intel Achievement Award (IAA). Richard has published several global patents in encryption technology, distributed network communication and collaboration, and big data, and has over ten years of professional system software development experience. Recently, he successfully led an emerging trading, mining and digital currency exchange online and platform coin smart contract research and development, specializing in blockchain underlying technology tuning and overall architecture design. He was entitled "The Father of Student Computer Anti-theft Technology" for his innovative design for security product technology architecture.

**Xi Zhang**
**Founder&CPO**

graduated from Columbia University in New York, ex-Lead Data Scientist of Fishbowl in Wall Street, ex-Senior Data Analyst of Alibaba Group, a senior member of Mensa International Club, currently serves as WaykiChains CEO. He is responsible for offering support to WaykiChains commercial model designing and strategy planning, building up a digitalized monitor system for products and operation and promoting WaykiChain overseas with his international background.

**Tame Huang**
**Chief consultant of WaykiChain**

Founder of Bittimes. Ex-product manager and project manager in Tencent. After leaving Tencent, founded and operated famous web game, Fantexi Basketball's Vice President. After that, acting as the chief strategic officer for Youyue Finance. Invested Ji Dian tech, Yi Xiang Network, Mao Ming Agricultural Bank, Ju Jin tech, Jin Se Finance etc. high-tech enterprises. On May 2013, founded Bittimes Digital Currency Exchange. Good reputation in the industry.

**Xiaowei Wang**
**Creative Director**

with 9-year brand planning background, and rich experience of 4A advertising company and multiple local advertising companies has provided brand strategy, brand image recognition, brand promotion, product packaging design strategy and visual service for several large enterprises and listed companies. With rich experience in brand management and keen insight into the trend of commodity, consumer and market competition, he is skilled to combine brand value innovation system with brand & market demand to enhance the brand value.

**Saijun Wang**
**WaykiChain Operation Manager**

Bachelor and Master of Huazhong University of Science and Technology. Once worked as operation manager of American branch in Huarui Wind Power Technology Co. Ltd and representing Huarui to attend the 2010 Dallas International Power Exhibition. On June 2011, was awarded the title "senior expert" by the Wuhan municipal government. Good at internal management and creating a harmonious environment and space for the company from both within and without.

**Yuanhang Xiao**
**WaykiChain Technology Development Manager**

Professional blockchain technology officer once worked at one of the top 500 corporations: Ricoh Imaging Technology (Shanghai) Co. LTD. In charge of blockchain technology app development and once provided API development and market data analysis services for many digital currency exchanges. Experienced in digital currency developing and professional in different coding languages, including JAVA、C# and Linux C.



**Kris Liao**
**Technology Supportive Officer of WaykiChain**

Master's Degree in Computer Engineering from Sun Yat-sen University, known as one of the founders of the creative workshop of Ethereum in China, and one of the earliest blockchain technology teams in China. A senior developer of blockchain technology; years of research experience in digital encrypted currency and blockchain, engaged and led the development of several blockchain projects.



**Ken Huang**
**WaykiChain Technical Support**
Huawei technology department VP;ACM Practitioner Board;Well-known blockchain expertise; CGI(IT Consulting)chief architect.

## 6.3. HR Management of WaykiChain Foundation

WaykiChain hopes to gather people with passion, ambition and creativity to enhance further development of the company.

For smooth technological development and sustainable, productive, and competitive progress, WaykiChain puts strategic emphasis on attracting top calibre professionals. Unlike other blockchain firms, who demand technical talents desperately, WaykiChain Team also warmly welcomes experienced experts in target industries.

Talents induction

WaykiChain Team will firstly consider the talents with experience and reputation in the industry under the principle of "capability comes first". Additionally, WaykiChain will carry out at least two rounds of the interviews as well as detailed background analysis on candidates to guarantee that every new member shares the same principles as WaykiChain. In specific fields, WaykiChain will hire experienced consultants to ensure the feasibility and implementation of WaykiChain projects.

Performance assessment

WaykiChain team members will receive regular, planned performance reviews. The main contents are formulated according to the project development situation, application development situation and capital income situation. The goal is to maintain the enthusiasm and efficiency of the team member while ensuring the progress of the WaykiChain project.

## 6.4. Legal compliance of WaykiChain Foundation

To provide a more reliable development environment for value creation, WaykiChain is committed to meeting the legal supervision requirements in different areas of jurisdiction in the world. According to law, the foundation is a non-profit organization, and online users obtain only the use of rights of WaykiChain. Buyers should understand that WaykiChain doesn't make the promise of any kind to refund WaykiChaincoins (WICC) under any circumstances.

Law Service Consultant

Beijing Ying Ke Law Firm referred to as Ying Ke Law Firm, is a global legal service organization, its headquarters are in Beijing with 42 branches in mainland China. Moreover, Ying Ke Global Legal Alliance has a presence in the 89 cities and regions in 42 countries, including the United States, Britain, Germany, Switzerland, France, South Korea, and Russia etc.

Ying Ke's honours and qualifications: Council member of China Association Of Policy Science, Legal affairs partner of State-owned Assets Supervision and Administration Commission of the State Council; ALB 2015 'The largest firm in Asia', ALB2015 one of 'China's Fast 10' Law Firms, and ALB2015 One of Top 10 Law Firms on 'ALB China Power List 2015'.

## 6.5. Milestones & Strategic Planning

### 2017

**Jul** • Establishment of the founding team
**Aug** • The entry of seed capital
• Introduction of the resources of strategic target industries
• Startup of the development of the underlying blockchain system
**Sept** • Startup of the PC version of all nodes wallet
**Nov** • Planning and preparation of public fundraising
**Dec** • Initiating the private fundraising

### 2018

**Jan** • WaykiChain Coin (WICC) listed on exchanges.
**Feb** • WaykiChain test net launched
• Startup of WaykiChain mobile wallet application
**Mar** • WaykiChain all nodes wallet release (PC beta version)
**May** • WaykiChain's Shengzhen product release conference
• WaykiChain DApp and mainnet release
• WaykiChain global roadshow - South Korea
**June** • WaykiChain global roadshow - Russia
• Invited to attend the 2018 Global Sleepless Blockchain Leaders Summit
• WaykiChian wallet DApp upgraded to V2.0.
• Invited to participate in the 2nd Haichuanghui global blockchain technology results forum
**July** • WaykiChain CEO attended Shenzhen TV "Hello Interviewer."
• WaykiChain signed a legal advisory service contract with Beijing Yingke Law Firm.
• WaykiChain investors appreciation meeting held successfully.
• WaykiChain China Tour ends successfully
**Sep** • WaykiChain held a press conference
**Oct** • Launched WakiChain Dapp platform development
• WaykiChain and CAITEC reached a strategic cooperation agreement.
• 2019 Campus Recruitment launched
• Global developer program T2D2 launched
**Nov** • WaykiTimes V1.0 launched
• Huobi Global supported WaykiChain mainnet switch
**Dec** • WaykiChain Developer Portal was officially launched
• WaykiChain CEO joined in Huobi University genesis class

### 2019

**Jan** • Jinse Finance awarded WaykiChain Top Commercial Application Potential
• WaykiChain was invited to attend the second Chainers Blockchain Week in South Korea- Chain Plus Summit.
• WaykiTimes entered mainstream app stores: Google Play app store, Huawei application market, Xiaomi application market, Tecent Myapp and 360 App Store
**Mar** • WaykiChain has released the web wallet Plug-in WaykiMax.
• WaykiChain was invited to attend China Development Forum for the second consecutive year.
• The international version of WaykiTimes is launched
**Apr** • WaykiChain(WICC) launches $1.5 Million DApp Funding Program
**May** • WaykiChain(WICC) Global Partner comes out, accelerating expansion overseas.
**Aug** • WaykiChain(WICC) X Huobi Korea Hackathon held successfully
• WaykiChain WICC offline meet-up(Shenzhen) ended successfully
**Oct** • WaykiChain was invited to attend Eurasia Blockchain Summit in Istanbul
• WaykiChain's era of "Teng" officially comes, launching stablecoin WUSD and decentralized exchange WaykiDEX.
• WaykiChain Global Tours(Singapore and Turkey)were successfully held
**Nov** • WaykiChain (WICC) was invited to attend the World Blockchain Conference

### 2020

**Q1** • WaykiChain decentralized cross-chain development starts
**Q2** • WaykiChain multi-industry sub-chain development starts
**Q3** • WaykiChain decentralized forex application development starts

## 7. WaykiChain Legal Statement

### 7.1. Statement

For any third parties or users who have an objection to this legal statement, please do not continue to use WaykiChain services. If you continue to use WaykiChain, you are indicating that you have read and wholeheartedly agreed with this statement.

(1) WaykiChain is a platform that supports Turing-complete smart contracts. Smart contracts can be used for various commercial scenarios such as assets offering, game prediction, copyright verification and cross-border settlement.

(2) WaykiChain is a public blockchain. After opening its API, WaykiChain, like Ethereum and other public chains, can be used by individuals (including users) and organizations (from now on referred to as "Third parties") worldwide to develop and run applications including assets offering, game prediction and copyright verification (from now on referred to as "Third-party application").

(3) WaykiChain prediction DApp is developed to test the stability and security of WakiChain public chain. It is also an entry point to accumulate users. What needs to be stated is that WaykiChain Official only runs prediction games and will not involve in any fiat currency-based gambling or lottery activities. What are used in the prediction games are game tokens issued by a smart contract.

- Applications or websites developed and ran by third parties based on WaykiChain public chain, need to comply with the local laws and policies. Developers and operators can launch and run their apps on WaykiChain open-chain only after they get the permits and qualifications required by the local laws and policies. If third-party prediction application involves fiat currency exchange, they may need to obtain the lottery license or permit. In principle, WaykiChain Official will require third parties to obtain the license or permit that complies with local laws and policies before they run the applications. But prediction apps developed and run on WaykiChain are operating among individuals, WaykiChain Official or any other third party will not be bankers nor accept any users' stake. Thus WaykiChain Official cannot define whether the applications have the attributes of lottery and betting, whether the operators need to obtain permits and whether it complies with regulation policies. Because of the limitations, WaykiChain Official will not guarantee the legality of third parties' behaviour. However, WaykiChain Official solemnly stated that there is no investing, shareholding, or controlling the relationship between WaykiChain Official and those previously mentioned gambling-related third parties.

- The fairness, justness, and transparency advocated by WaykiChain are realized by the characteristics of public blockchain technology, not by the supervision from WaykiChain Official or any other centralized organizations. After opening its API, WaykiChain Official is unable to control the behaviour of third parties. Third parties will bear the legal responsibility by themselves. WaykiChain shall not be responsible for the conduct or provide any kind of guarantee or promise for the legality of the third parties. However, if third parties' actions are suspected of violating the laws or infringing other users' rights, WaykiChain reserve the right to cooperate with local authorities following the law.

- When users use applications developed on WaykiChain, they should comply with local laws and policies of the country or region they located. If the users' participation is prohibited or restricted by relevant laws or policies, the users should not continue to use the applications. WaykiChain Official shall not bear any responsibility for the legality of users behaviour or provide any guarantee or promise.

- This statement is only for the third parties' legality on WaykiChain. For other activities regarding WaykiChain, please refer to the relevant accounts or announcements published by WaykiChain Official.

- If any information or announcement published by WaykiChain Official previously is inconsistent with this statement, this statement shall prevail. If there are any changes or adjustments, please refer to the latest report published by WaykiChain.

## 7.2. Risk Indication

- The blockchain industry is still in its early stage and faces the potential risks of policy, technical security, and financial cycle, etc. Frequently, the price of cryptocurrency fluctuates in a big range.

- WaykiChain suggests that investors should invest in WaykiChain with no more than 10% of your assets. Investors must be compliance in local laws and regulations, and be liable for own profits and losses. WaykiChain does not provide any kind of guarantee in any form.