



**ALCHEMINT**

# Whitepaper

A Hybrid Model Stablecoins Issuing Platform

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# Content

|   |           |
|---|-----------|
| <b>Abstract</b>   | <b>4</b>  |
| <b>1 Introduction</b>   | <b>5</b>  |
| 1.1 The Importance of Price Stability                             | 5         |
| 1.2 Market Prospect and Application Case of Stablecoin            | 6         |
| 1.4 The Huge Challenges of the Stablecoins                        | 10        |
| 1.5 The Vision of Alchemint                                       | 13        |
| <b>2 The Implementation of Alchemint</b>                          | <b>15</b> |
| 2.1 The Architecture  | 15        |
| 2.2 The Function and Value of SDS                                 | 18        |
| 2.3 SAR-Intelligent Digital Asset Reserve                         | 19        |
| 2.4 Commercial Institutional Mode (SAR-B)                         | 20        |
| 2.4.1 Stability and Marketization of Stablecoins                  | 20        |
| 2.4.2 Institutional Customers' Intelligent Digital Asset Reserves | 21        |
| 2.5 Personal Client Model (SAR-C)                                 | 24        |
| 2.5.1 SDUSD   | 24        |
| 2.5.2 Intelligent digital asset mortgage for individual users     | 24        |
| 2.5.3 Price Stability Mechanism                                   | 27        |
| 2.5.4 The Opportunist   | 28        |
| 2.6 Oracle  | 30        |
| 2.7 Systematic Risk of Blockchain Applications                    | 30        |
| 2.8 Roadmap   | 32        |
| <b>3 Community Governance Methods and Architecture</b>            | <b>38</b> |
| 3.1 Establishment of the Alchemint Foundation                     | 38        |
| 3.2 Foundation Governance Principles                              | 38        |
| 3.3 Foundation Organizational Structure                           | 40        |
| 3.3.1 Strategic Decision Committee                                | 41        |
| 3.3.2 Secretary General   | 42        |
| 3.3.3 Technical Review Committee                                  | 42        |
| 3.3.4 Compensation and Nomination Committee                       | 43        |
| 3.3.5 Public Relations Committee                                  | 43        |
| 3.3.6 Supervisory Management Committee                            | 43        |

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|  |           |
|--|-----------|
| <b>3.3.7 Other Operating Departments</b>               | <b>44</b> |
| <b>3.4 Alchemint Human Resource Management System</b>  | <b>44</b> |
| <b>3.5 Foundation's Economic Operations</b>            | <b>45</b> |
| <b>3.5.1 Source of the Fund</b>                        | <b>45</b> |
| <b>3.5.2 Fund Use Principles</b>                       | <b>47</b> |
| <b>3.5.3 Financial Planning and Periodic Reporting</b> | <b>47</b> |
| <b>3.5.4 Digital Asset Management</b>                  | <b>47</b> |
| <b>4 Team Members and Advisors</b>                     | <b>49</b> |
| <b>4.1 Founding Team Core Members</b>                  | <b>49</b> |
| <b>4.2 Advisors</b>                                    | <b>54</b> |
| <b>4.3 Main Investment Institutions</b>                | <b>56</b> |
| <b>5 Contact Us</b>                                    | <b>57</b> |

## Abstract

The huge price volatility is the biggest obstacle for Bitcoin and other digital currencies to become a generally accepted means of payment. At the same time, a large number of decentralization projects are hard to be accepted by the market due to the fact that they use self-issued price-fluctuating tokens as a tool for value transfer in the ecology. An encrypted digital currency with a stable purchasing power, namely a stablecoin, is needed to solve these problems.

There are three existing models of the stablecoin solutions including the fiat reserve model, the Coinage model and the digital asset mortgage model. However, none of these models and related stablecoin projects has a perfect mechanism to deal with the key issues such as a stable supply of stablecoins or a long-term stability mechanism. Alchemint innovates a fourth one - an open stablecoin platform based on the hybrid model. It is a global solution for the development of stablecoins in the medium and long term.

In the early stage of blockchain development, Alchemint mainly empowers commercial institutions through the fiat reserve model which will enable them to issue stablecoins to meet their own ecological and application needs. With the continuous advancement and maturity of blockchain technology, traditional assets will be able to be mapped to the blockchain. Meanwhile individual information including human credit and behavioral big data will become part of personal wealth and be preserved as an asset on the blockchain. Under the gradual trend of asset tokenization, it is estimated that more than 10% of global GDP will be preserved on the chain in the next three to five years. In this situation, stablecoins issued by individuals through digital asset mortgages will gradually replace the stablecoins issued through the fiat mortgage model and become an important means for global circulating currency issuance.

# 1 Introduction

## 1.1 The Importance of Price Stability

Bitcoin has been in development for 9 years since its inception in 2009. Bitcoin was born due to the dissatisfaction of the existing monetary system and the longing of currency marketization. Implying from the whitepaper's name "Bitcoin: A Peer-To-Peer Electronic Cash System", Nakamoto Satoshi's original intention of inventing Bitcoin was to hope that it will become a means of payment. In short, he hoped it would be convenient to use. In the past nine years, supporters of Bitcoin have placed great hopes on this and have made considerable efforts. Those efforts came from the private sector, the commercial organizations and even the sovereign governments. Unfortunately, Bitcoin has never been a widely accepted means of payment.

At present, Bitcoin has in fact become a commodity for speculation. From May 2017 to May 2018, Bitcoin price rose from a low of around \$1,400 to a high of nearly \$20,000 with a volatility of 1400%. In May 2018, the lowest price of Bitcoin was 7,400 yuan and the highest price was 9,900 yuan. The monthly fluctuation was 34%. The current daily price volatility is also around 10%. In less than nine years, Bitcoin price was about 10 million times higher than its birth calculated with price of \$20,000.

We believe that the huge price fluctuations of digital currencies and the instability of purchasing power (price fluctuation against fiat) are the biggest obstacles to their widespread acceptance as a means of payment. The requirement for the stability of purchasing power in the modern economic system is unanimously affirmed by the mainstream economists. If the total amount of a currency is constant or the growth of its total amount cannot keep up with the growth of the economy's demand, this currency will be able to support the rapid growth of the economy and may even cause a recession.

In today's economies, the purchasing power of money has remained relatively stable, mainly through the mandatory use of legal currency controlled by sovereign governments and the use of monetary policy instruments to regulate the money supply. Unlike legal currency, the total amount of each digital currency is usually fixed. It may be issued or destroyed according to a certain linear rule but cannot be flexibly changed according to demand. Therefore, the market demand for digital

money will cause huge fluctuations in its price. If uncertain of the stability of a currency's purchasing power, people will be reluctant to use it as a medium of exchange. For example, an iPhone may now be priced at 0.1BTC or 800USD. The BTC price could become 0.2 or 0.05 BTC the next day but the USD price will remain as 800USD. In this case, in order to protect the interests of both buyers and sellers, people will inevitably use USD as a medium of exchange.

Nowadays, a considerable number of decentralized applications based on blockchain technology have taken root in various fields such as finance, e-commerce, social networking, gambling and artificial intelligence. These projects largely create their own tokens as a tool for their ecological value transfer. However, because the prices of these tokens are unstable, these projects will also encounter problems such as low market acceptance and difficult commercial landing. The emergence of stablecoins provides these DApps with a tool of stable purchasing power for value transfer. It enables smooth payment in the DApps and helps the DApps be further accepted by the market. Therefore, the large-scale application and the landing of stablecoins is an important prerequisite for the entire blockchain industry to break away from the concept and speculation stage to enter an era of commercialization.

## **1.2 Market Prospect and Application Case of Stablecoin**

Encrypted digital currency is an unprecedented form of currency in human history. Bitcoin is a typical representative. Compared with the traditional currency, it has the following new features.

### **■ Security**

Bitcoin technically realizes the inviolability of private property. By possessing the private key, one has the absolute ownership of the account. As long as your private key is not leaked, no one can take your bitcoin nor will anyone possibly seize or freeze your Bitcoin.

### **■ Cost of Ownership**

Whether you hold 1 Bitcoin or 10 million Bitcoins, the cost is the same. You just need to take care of your private key.

## ■ Payment Cost

Bitcoin is a point-to-point payment system based on distributed ledger technology. Sending Bitcoin to people is as convenient as sending an email but without relying on a third party. Peer-to-peer transactions make Bitcoin payments fast and of low cost anywhere in the world.

Bitcoin also has other characteristics that the traditional currencies have, such as a stable nature and can be arbitrarily divided.

Therefore, if the encrypted digital currency can eliminate price fluctuations and turn to be a widely adopted payment solution, a huge market will be foreseeably open. It means that the blockchain economy will transcend from the concept and speculation stage to the phase of commercial landing and integration with the real economy.

### 1.2.1 Global Payment and Economy

Once the price volatility problem is eliminated, the advantage of the stablecoins such as payment convenience will be apparent. Well-known payment service providers such as PayPal and Alipay have been working hard to improve payment convenience. However, these companies still have issues of timeliness, high cost and complicated settlement process when dealing with cross-border payment. Stablecoins based on blockchain technology can solve these problems effectively.

Alchemint has established extensive partnerships with third-party payment service providers, wallet application providers and digital asset exchanges to make payments easier. Users from different countries with different wallets will be truly connected. Alchemint ensures the transactions completed in an instant, secure and low-cost environment while breaks the boundaries of the economies and creates a more efficient global market.

### 1.2.2 Digital Asset Exchange

During digital asset trading, investors often use dollar as a tool to hedge against the price fluctuation. However, nowadays a growing number of exchanges do not support legal currency trading. Therefore, people need stablecoins in the exchange as a hedging tool for their short-selling operation. In addition, in the United States, Japan and some other countries the profit generated by digital currency trading will create tax problems. However in some EU countries, there will be no taxes

unless the digital currency is converted into fiat. Thus stablecoin can also help solve trading tax problems in some countries.

### **1.2.3 Blockchain Financial Services**

Due to price fluctuations, current digital currencies are not suitable for even the most basic financial contracts. For instance, you can't imagine borrowing 1 Bitcoin at the price of \$8,000 and paying 1.2 Bitcoin back one year later when Bitcoin has risen to \$20,000. This is a huge loss for the borrower... Due to this reason, real applications are rarely seen despite the fact that blockchain is closely linked to finance. It is believed that with the spread of stablecoins, blockchain-based financial services will flourish. In addition to the basic lending business, blockchain finance will gradually expand to digital asset management and derivatives markets.

### **1.2.4 Blockchain Ecological Economy**

Blockchain practitioners and analysts generally believe that blockchain is not just a technological innovation; rather it brings about a change in production relations. It is believed that the entire business and the division of labor and cooperation system will be greatly changed. We will witness the rise of a great number of decentralized APPs in the coming future, such as "Blockchain Uber", "Blockchain Airbnb" and other projects in the field of e-commerce, travel, gaming and so on. As discussed earlier, projects using stablecoins as a tool for their internal value transfer will make these DApps more acceptable by the market and more friendly to end users.

Besides, in ICO events the replacement of ETH by stablecoins will effectively reduce the price fluctuation risk for the fund raiser and the investors.

## **1.3 Comparative Analysis of the Existing Stablecoin Solutions**

As the importance of stablecoins being realized by more and more people, some teams launched their own stablecoins projects. These projects have their own characteristics, but they can be divided into three models.

### **1.3.1 Fiat Reserve Model**



Tether, TrueUSD and Centre currently issued dollar-pegged stablecoins with legally reserving the same amount of dollars. For example, each USDT issued by Tether is anchored at \$1 and being backed by \$1 deposit. The advantage of this model is that it can quickly provide sufficient liquidity. But the centralized problem is obvious. As a company that independently holds a legal currency reserve, Tether has the risk of bankruptcy, running away with funds and being freeze by banks. It is possible for Tether to over issued USDT since the reserve account information is not open to public.

TrueUSD and Centre have tried to solve over-centralization problem with the attempts including the introduction of multiple member units, commonly holding fiat, a commitment to regularly publish legal currency reserves and willingness to accept audits from third-party agencies. Although improvements have been made, this model is still inconsistent with the idea of decentralization of the blockchain and can only be used as a transitional solution to stabilize digital currency.

### **1.3.2 Digital Asset Mortgage Model**

Bitshares, MakerDao and Havven issued stablecoins pegged at fiat through mortgaging digital assets on smart contracts. In this model, each stablecoin is backed by a corresponding digital asset. Through the risk control mechanism such as over-collateralization and compulsory liquidation. It means the value of each stablecoin which worth \$1 can be guaranteed with the collateralization of a digital asset worth at least \$1. This kind of risk control mechanism also guarantees the stablecoins holders' right to obtain collateral in the process of liquidation. Compared with the legal currency reserve model, the main advantage of digital asset mortgage model is the characteristics of decentralization. The collateral is locked in the smart contract. It is open, transparent and cannot be misappropriated or frozen. The main disadvantage is that the liquidity of the stablecoins will be affected by fluctuations of the value of the collateral. At the moment, the total market value of digital assets is still small and this model cannot provide sufficient currency liquidity to meet the market demand.

### **1.3.3 Coinage Model**

Basecoin is a stable cryptocurrency of the "coinage privileged model". It is based on the theory of "Quantity of Money" and uses a mechanism similar to the central bank's open market operation called "algorithm bank". Basecoin adjust the price by influencing the demand and supply of stablecoins on the market. The following three tokens are needed.

- **Share:** Share holders can get the premier allocation of new currency based on the amount of their Share
- **Basis:** It is anchored to 1 USD as the stablecoins.
- **Bond:** When the price of Basis is lower than 1 USD, the system will issue Bond. People can purchase Bond with Basis. The corresponding Basis will be destroyed by the system to reduce the total amount of Basis and to make the price of Basis upward. When the price of Basis rises above 1 USD, the system will issue Basis. The newly issued Basis will first be given to the Bond holders. Bond will be replaced with Basis in a 1:1 ratio. After all Bonds have been destroyed, the remaining Basis will be reassigned to the Share holder.

The issuance of stablecoins in the coinage mode does not depend on the collateral. Thus this model can quickly provide the liquidity required by the market. But there is a controversy over the coinage model. Basecoin forms an unfair currency distribution system and creates a privileged class (Share holders). New currencies are allocated to Share holders who sell money to users. This model does not have the mandatory guarantee as the traditional currencies have namely taxation rights and legislative powers. In the presence of other stablecoins competitors, users will not easily accept this stablecoins with obvious exploitative nature. With the increasing supply of Basis, capital needs to flow continually forward the market, otherwise the price will deviate from the target price.

## **1.4 The Huge Challenges of the Stablecoins**

Looking at the current situation of the stablecoins market, we believe that there are two key issues in the field of stablecoins. These two issues will determine whether stablecoins can be successful in the medium and long-term competition. At present, all the stablecoins projects do not give answers to these two key questions.

### **1.4.1 How to Increase the Supply of the Stablecoins to Meet the Market Needs**

As a means of payment, the stablecoins itself has some excellent characteristics that traditional currency does not have. Therefore, the market demand for stablecoins is natural and the current supply of stablecoins is far from meeting the most basic market needs. Tether has issued more than 2.5 billion USDT taking the largest market share in stablecoins. But it is still far from meeting the

liquidity needs of digital asset exchanges. Therefore, the need to sufficient supply of stablecoins has become the most urgent issue at this stage.

Although the fiat reserve model currently provides the greatest liquidity, the legal currency reserve account behind it is the key issue. As the demand for stablecoins continues to increase, the size of the stablecoins has grown from billions of dollars to hundreds of billions. The questions are how to ensure that the reserve funds of the fiat are still safe and how the amount of reserve continues to increase in the reserve account within the current legal system. Without the participation of bank and other financial institutions, the amount of ordinary institutional holding of currency is limited. This bottleneck severely restricts the market of the fiat reserve model. Therefore, in the long run stablecoins issuance based on the reserve of the fiat will eventually be replaced by the decentralized distribution model unless it is realized by the bank.

The model of digital asset mortgage solves the bottleneck problem of medium and long-term stablecoins supply, but this model has a very serious shortage of supply at this stage. Under the digital asset mortgage model, the stable supply will be affected by fluctuations in the market value of the collateral. For example, MakerDao accepts ETH as a collateral to issue stablecoins Dai. But because of the huge price fluctuations of ETH itself, the mortgager itself will be exposed to a considerable risk of loss reducing its willingness to issue Dai. Dai's circulation is currently less than \$40 million and can only be considered to be in the trial run and cannot be put into the market. Under the conditions that the total market value of all digital assets is only 300 billion yuan and the price fluctuates greatly, the digital asset mortgage model cannot solve the problem of stablecoins supply in the short term.

However, with the continuous development of the blockchain industry, the following three trends will emerge in the future:

1. Personal information that cannot be vested in the traditional Internet era can be confirmed under blockchain technology and produce value attributable to the information owner, such as personal behavior information, personal credit information, personal medical information and other privacy information.
2. Real assets and financial assets such as real estate and precious metals will be heavily chained in a mature system.

3. The increasing share of global GDP will be transferred to the blockchain and stored in blockchains in the form of encrypted digital currencies.

When the above three conditions are reached, the digital asset mortgage model will completely solve the current liquidity problem and become an important way to stabilize the issuance of coins.

### **1.4.2 How to Establish a Long-term Stability Mechanism**

When the liquidity problem, namely the problem of "quantity" is solved, the stablecoins competition is about "quality", that is, stability. Without the guarantee of a long-term stability mechanism, the stablecoins cannot provide enough confidence to the market. Therefore, whether it can establish a truly effective long-term stability mechanism is the key to determining whether stablecoins will ultimately succeed.

In the fiat reserve model, in theory as long as the legal currency account does not have problems and promises to pay, the stability is certainly of no problem. But the problem lies precisely in the security of the legal account itself: the uncertainty of the legal currency account includes running away with the fund, the bankruptcy of the bank, the inability to rigidly pay. It restricts the long-term development of this model.

At present, all the digital asset mortgage models have their stability mechanisms mainly relying on speculation and games to anchor the price. This stability mechanism also has certain problems. In a short time span and in a small market, this model can indeed stabilize the price. A small amount of money can manipulate the market and protect the stablecoins from the influence of the external real markets. However, as long as the total size of the stablecoins is expanded, the stability mechanism originally set is easy to encounter the spiral of death, that is, the factors that cause the price of the collateral to fall are positively correlated and single directional. Unless the market has a big change in the bullish trend or a bailout, it is impossible to correct the market with its own game power.

The key to solve the problem is not a more reasonable stability mechanism, but the achievement of the three conditions mentioned in the previous section. When the market value of the collateral itself expands and the volatility decreases, the incentive to issue stablecoins and the liquidity of the stablecoins will be sufficient.

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## **1.5 The Vision of Alchemint**

### **1.5.1 The Currency That Only Exists In the Ideal World**

Under the modern monetary system, money is a special commodity that everyone needs. Currency must be widely accepted to have a use value and the public does not have the ability to manufacture a currency that is universally acceptable. For thousands of years, money has generally been produced and sold by specialized institutions to meet people's needs. . Under this circumstance, the flow of new currency is generally circulated from the central power to the mass market. However, we believe that money is essentially the standardization and unitization of the value of all things in the world. The abstraction of numbers on all things in the world has enabled the basic disciplines such as mathematics and physics to flourish. The ability of human beings to describe the world, to understand the world and to change the world has never been so improved. The standardization and unitization of money for all things in the world enables people's exchange behavior to proceed smoothly, the large-scale division of labor and cooperation system to be realized and the entire human economy to develop and progress.

In an ideal world, money is a special commodity that does not need to be particularly manufactured but is generated by the universal mapping of the world according to a standard that can be generally accepted. In this world, everyone can put their property into it through a magic pool and it will become a standard value unit. One can exchange these goods with others. When one wants to retrieve the property in the magic pool, he just needs to put back the value unit.

The original ownership of the currency should be owned by the owner of the wealth.

The emergence of blockchain technology has made this ideal possible and what Alchemint has to do is to make a such magic pool.

### **1.5.2 Back to the Real World**

We believe that by issuing stablecoins by collateralizing digital asset is the magical way to achieve this. Therefore everyone has the path to manufacture standard value units. Alchemint insists on the digital asset mortgage model as a very important stablecoins issuance model. But at the same time, we also realized that the entire blockchain industry is currently in its infancy. As of January 31, according to the Coinmarketcap.com, there are 1,506 digital cryptocurrencies circulating on various

trading platforms with a total market value of \$509 billion. Also as of January 31, Apple's total market capitalization was \$850 billion. In other words, the total market value of digital cryptocurrencies currently circulating on various trading platforms worldwide is not comparable to that of an Apple company. From this point of view, the total size of digital assets at this stage is still very small. Relying solely on digital asset collateral is far from meeting the market demand for stablecoins liquidity.

At present in the stablecoins market, the largest issue is still Tether's USDT. Despite being questioned, USDT still has a market share of over 96% with a circulation of \$2.5 billion. There will be more projects like Tether after optimization and improvement. We believe that the issuance of stablecoins through the fiat reserve will be most easily realized and most widely accepted mainstream solution in the stablecoins market in the next two years.

Therefore, Alchemint has positioned itself as stablecoins issuing platform based on a hybrid model. In addition to providing a digital asset mortgage model, it also provides stablecoins issuance function based on the fiat reserve for institutional users.

### **1.5.3 From The Real World To The Ideal World**

The positioning of Alchemint is not a simple integration of various models. We have a global vision for the development path of stablecoins from short to long term. We believe that with the continuous advancement of blockchain technology, traditional currency-denominated physical assets will be mapped to blockchains in the form of encrypted digital assets. We boldly expect that in the next three to five years, more than 10% of the world's GDP will be preserved in the chain.

When this era comes, the current dilemma of the digital asset mortgage model will be solved naturally, including the volatility of the collateral itself, the insufficient collateral market value and inability to resist systemic risks. Let the wealth that you own pass through the magic pool of Alchemint and become a currency that everyone can accept and exchange, use and circulate. It will become an important way of issuing money under the global context.

In this process, in addition to making Alchemint the most popular stablecoins issuing platform in the world, the Alchemint team will also utilize its own experience from the financial industry and the Internet industry for many year to promotes global payment and settlement based on stablecoins, as well as the development of blockchain financial ecology based on stablecoins.

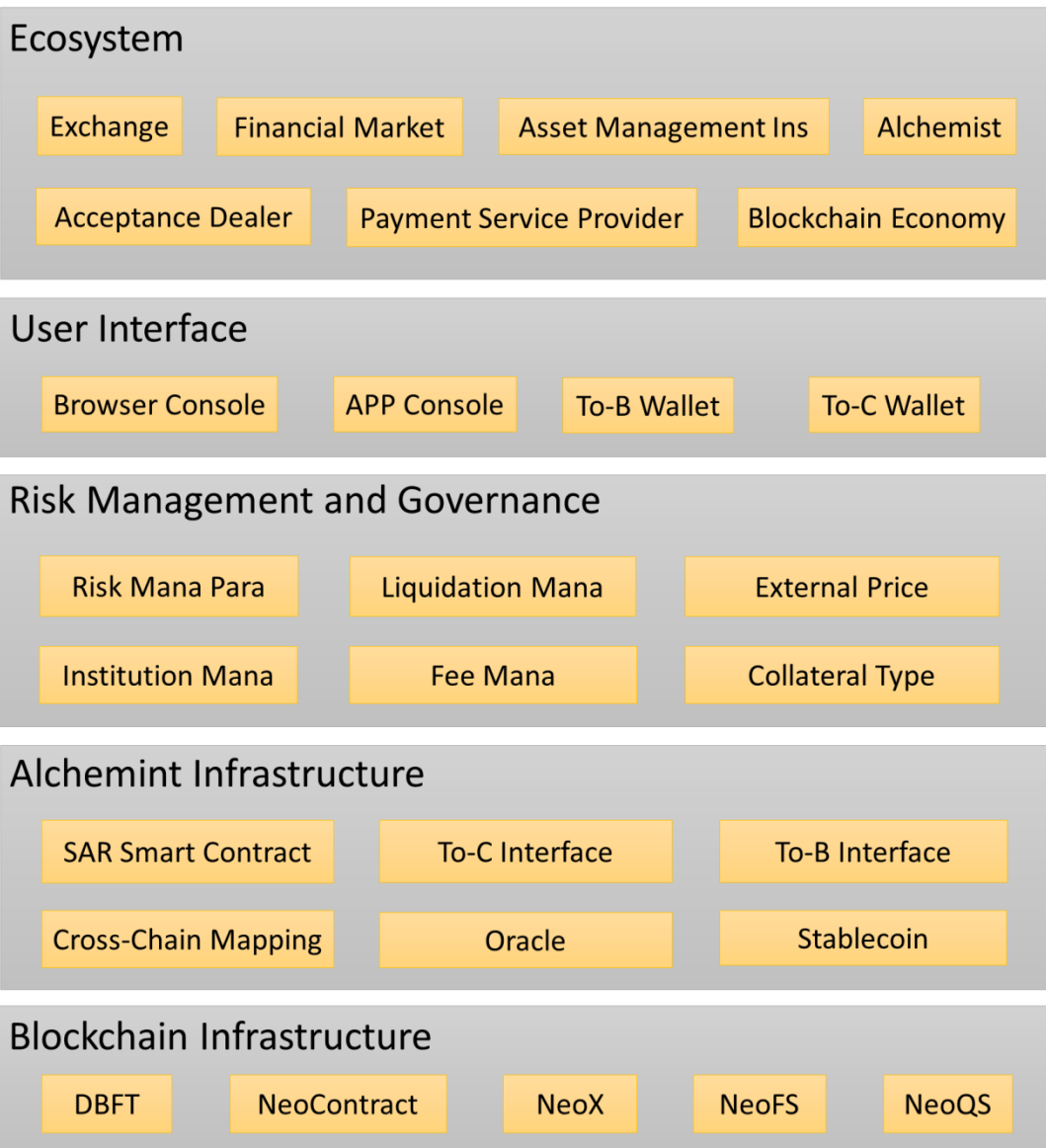
## 2 The Implementation of Alchemint

### 2.1 The Architecture

Alchemint is a stablecoins issuing distribution platform based on a hybrid model. Alchemint runs on NEO and aims at creating a decentralized, open and transparent stablecoins issuance system. Alchemint creates a high-performance application-level encrypted digital currency and carries out a series of activities such as the mortgage of digital assets through smart contracts, the issuance of stablecoins and the management of collateral risk.

Alchemint is not controlled by any organization or individual. It does not require an audit company or needs to regularly disclose reserve assets. Anyone can view the real-time market value of the collateral and stablecoin circulation on the public blockchain to evaluate the overall health of the system at any time.

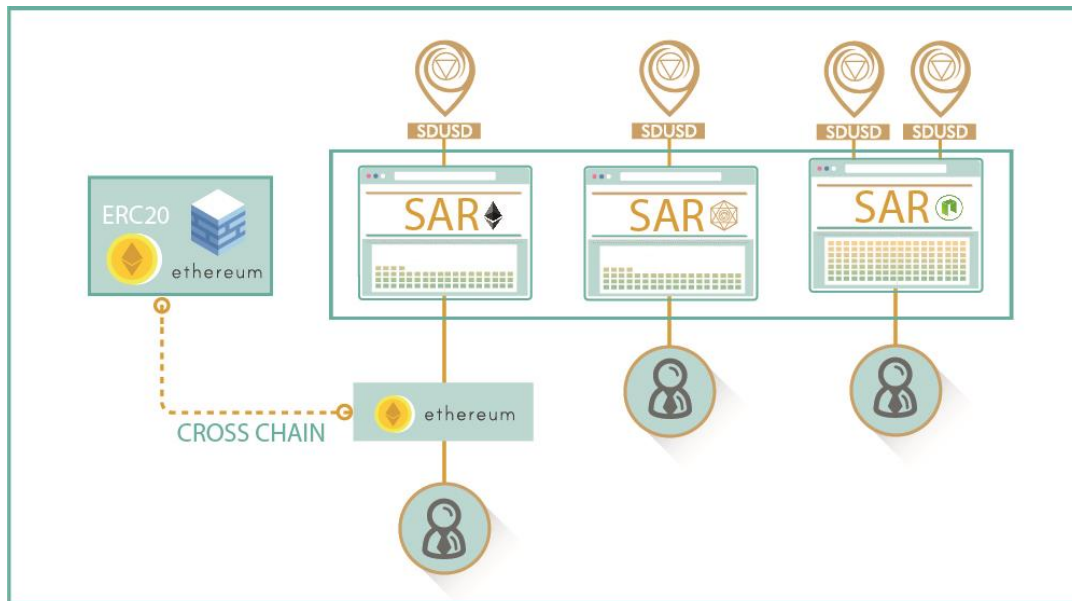
The Alchemint platform itself will not touch any form of funding including digital assets locked in smart contracts and legal currency assets that are kept in third-party accounts. There is no need to worry about the running of the Alchemint platform including the failure of execution and the freezing of asset accounts, etc. Because smart contracts guarantee that all collateral cannot be misappropriated. At the same time, stablecoins holders do not have to worry about the market value of the collateral because Alchemint has a set of risk control measures to manage the market value of collateral ensuring that volatility does not trigger a crisis in the entire system.



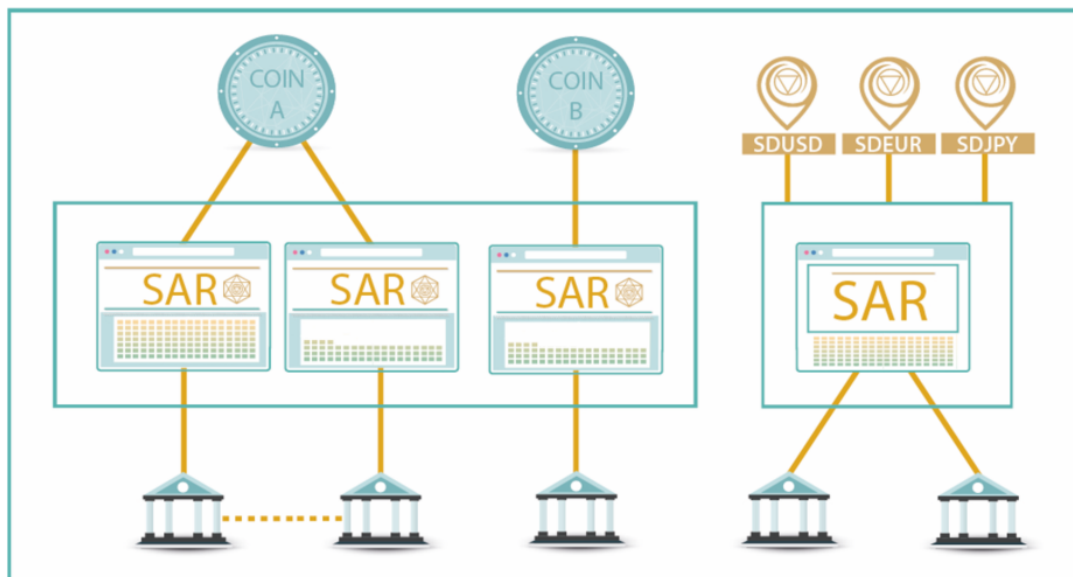
### **Alchemint's Overall Architecture**

In terms of the user end, Alchemint not only supports individual users to issue stablecoins by collateralizing digital assets, but also supports institutional users to issue stablecoins through legal currency reserves and SDS margin. In terms of the diversity of collateral assets, Alchemint will use the cross-chain technology to map assets of each public chain. This technology will not only map assets from the other public chains to NEO blockchain for mortgage, but will also map stablecoins to other public chains.





In terms of diversity of stablecoins, Alchemint allows stablecoins to be anchored at any asset. As to the same anchored asset, Alchemint will also allow stablecoins issued by different issuers with different credit to be isolated. The issuance of different types of stablecoins also promotes market competition among stablecoins. It allows the market to choose the best.



## 2.2 The Function and Value of SDS

SDS (Standards) is the utility token issued by Alchemint.

### 2.2.1 Use of the Alchemint Platform

- In addition to the fiat reserve, commercial institutions need to lock a certain amount of SDS in the SAR as a margin. There will be a minimum margin ratio required. When a commercial institution issues stablecoins, it needs to pay SDS as a handling fee. The handling fee is determined by the amount of stablecoins issued. The amount of SDS payed is calculated according to the SDS market price. These SDS will be destroyed.
- Individual users issue stablecoins through mortgaging digital assets. When the redemption of collateral is required, a certain amount of SDS needs to be payed as a handling fee. The handling fee is determined by the amount of stablecoins issued. The amount of SDS payed is calculated according to the SDS market price. These SDS will be destroyed.
- When the market value of SDS reaches a certain scale, individuals will be able to mortgage SDS to issue stablecoins.

### 2.2.2 Operation of the Alchemint Platform

In the beginning of the Alchemint platform development, Alchemint community is not yet mature. Platform **operation** will be carried out by the Alchemint **Operation** Committee which is consisted by finance and technical experts.

In the later stage, SDS holders will able to participate in the platform operation through voting when community and ecological development is mature. The **operation** issues will grow along with the expansion of the Alchemint platform, including but not limited to the following important issues:

- Adjustment of the key risk control parameters of the system, such as debt mortgage rate, debt ceiling, liquidation ratio and clearing penalty rate, etc.
- Add or modify the types of mortgage assets. The Committee will select reasonable digital currency assets and physical assets. After conducting a series of professional ratings, the relevant risk control indicators and parameters will be given and newly selected assets will be added onto Alchemint's collateral list.
- Choose a trustworthy oracle. Alchemint uses a decentralized approach to obtain the external

market price of digital assets. This basic setup includes a wide range of predictor nodes and multiple market price sources.

- Determine the rate at which Alchemint charges the stablecoins issuers.

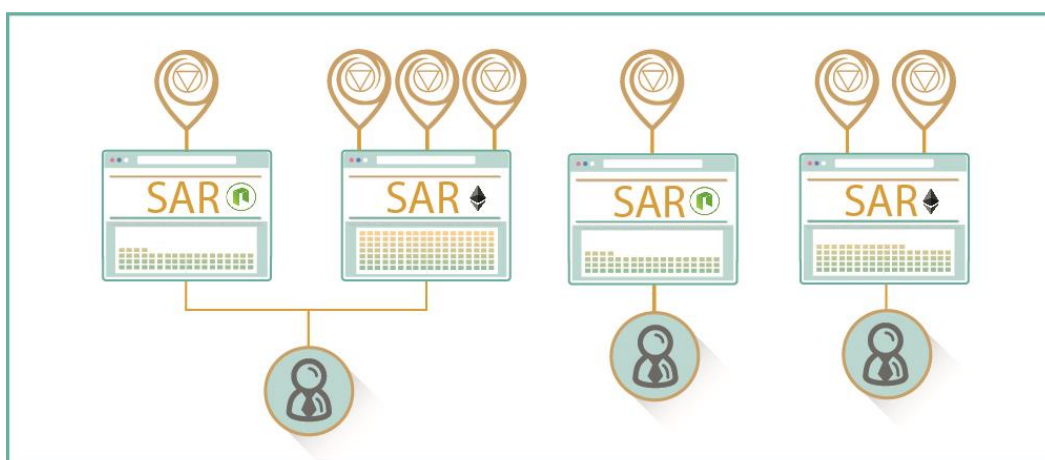
Alchemint Committee has the final explanation right as to the issues that can and cannot be voted.

## 2.3 SAR-Intelligent Digital Asset Reserve

SAR is an important technical component of the entire Alchemint system. It is a smart contract based on Neo Contract. We use SAR to complete the lock of collateral and the issuance of stablecoins. Because smart contracts are open and non-tamperable, the entire stablecoins issuance is completely transparent and publicly auditable.

In the Alchemint system, the SAR will be divided into two modules, namely SAR-C and SAR-B. Their logic and risk control models are different. SAR-C is mainly for individual users who issue stablecoins by means of over-collateralized digital assets. SAR-B is mainly for commercial users who issue stablecoins through a 100% fiat reserve off the chain and SDS margin which will be locked by smart contracts on the chain.

In the SAR-C module, each individual can open multiple SARs. Each SAR requires a lock of collateral. The maximum amount of stablecoins can be issued is determined by the market value of the collateral and related risk control parameters.



In the SAR-B module, institutions can open SAR on Alchemint. Each SAR requires a lock of

SDS as margin. The amount of stablecoins that can be issued is determined by the market value of the locked SDS and the minimum margin ratio.



## 2.4 Commercial Institutional Mode (SAR-B)

Any institution can issue stablecoins on the Alchemint platform. In this whitepaper edition, it is designed that institutional users are mainly referred to exchanges, asset management institutions and stablecoins issuing organizations. These institutions issue stablecoins mainly to meet the needs of the users of their own platforms or ecologies. Therefore, institutional users are not suitable for issuing stablecoins through digital asset collateral but be based on legal currency reserves.

### 2.4.1 Stability and Marketization of Stablecoins

Commercial institutions mainly issue stablecoins through the fiat reserve model. Different institutions can provide different credit endorsements. The risks of stablecoins issued are also different. From the perspective of marketization, we believe that the market should determine the acceptance of various stablecoins. As a platform, its first function should be to empower institutions to meet the stablecoins issuance needs; its second function should be to fully disclose sufficient information through technical means, so that stablecoins can be reviewed and chosen in the context

of a symmetrical information. Thus for the SAR-B model, Alchemint's positioning is a decentralized open platform. We believe that stablecoins need to be diverse and market-oriented. Alchemint allows any qualified institution to issue different stablecoins that are risk isolated. Through market competition, those high quality stablecoins will stand out.

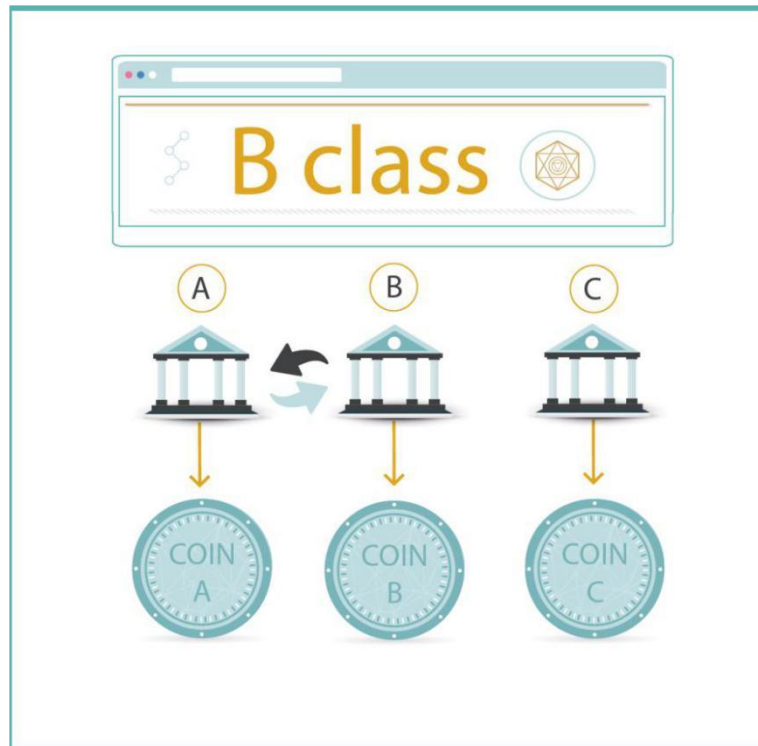
The diversity of the Alchemint platform's stablecoins is reflected in two aspects:

1. In the case of anchoring the same asset, there can be different stablecoins issued by various agencies.
2. There will be stablecoins anchoring to different assets. The exchange rates among them will exist.

### **2.4.2 Institutional Customers' Intelligent Digital Asset Reserves**

Any institution can open a SAR on the Alchemint platform and issue a stablecoin with SDS locked in SAR as a margin. However, most organizations are not able to own a legal or licensed third-party escrow accounts or able to provide the most rigorous third-party audits. Therefore, the stablecoins issued by these institutions has a certain credit risk. In response to these risks, Alchemint requires institutional users to use SDS as a margin to secure the amount of stablecoins issued. At the same time, stablecoins issued by different institutions will be marked as different asset types for risk isolation. The size of each stablecoins, the amount of the SDS margin and the margin ratio are recorded, open and transparent on the blockchain.

The stablecoins issued by Institution A, B and C are defined as three different assets within the system. Exchanges and individual users can make a choose. These different stablecoins competes in the market and the competitiveness comes from the issuer's brand, credit, legal currency reserve disclosure, SDS deposit ratio and other factors.



## Issuing Stablecoins

The process of issuing stablecoins by an institution can be described as follow.

- 1) Create a SAR, specifying the name of the stablecoins and the anchored assets.
- 2) Lock any number of SDS to SAR and SAR will determine the maximum amount of stablecoins that can be issued based on the minimum margin ratio. (for example, 50%)
- 3) Within the scope of the quota, the institution can issue any number of stablecoins and the new stablecoins will directly enter the institutional account.
- 4) The organization can determine the use of the stablecoins at its discretion. The general use scenario is that the institution accepts the customer's legal currency and gives the customers corresponding stablecoins. There is a legal currency behind the stablecoins as a support and it is also a source of confidence for the stability of the stablecoins.
- 5) If the quota has been used up, the institution will not be able to continue issuing stablecoins. At this point, the institution can lock more SDS and get more credit.

6) There will be a minimum SDS margin ratio such as 50% but the organization can increase the actual margin ratio according to its own ability and willingness. It can be 100% or even above 100%. A higher margin ratio means that the issued stablecoins has a better value endorsement and is therefore more acceptable by the market. If the SDS margin ratio is constantly above 100% but the organization is unable to produce the audit report of the legal currency reserve, it will not affect the confidence of the value of the stablecoins.

## **Destroy Stablecoins**

- 1) Generally speaking when a user redeems the legal currency with the stablecoins, the issuer needs to destroy that amount of stablecoins in the SAR so that the total amount of the stablecoins will match the legal currency reserve.
- 2) When the actual margin ratio is higher than the minimum margin ratio, the organization can retrieve part of the SDS from the SAR.

## **Credit Default**

When the legal currency account is frozen or the institution is bankrupt which leads to institutional default, the issued stablecoins cannot be redeemed. At this time, all the holders of this particular stablecoins can freeze the SAR through joint voting and can exchange stablecoins with the equivalent amount of SDS. If the institution's SDS margin ratio exceeds 100%, the stablecoins holder will not suffer any loss. However, if the margin ratio is below 100%, then all the holders of this stablecoins will exchange stablecoins for their respective shares of SDS and will suffer some loss. Since other stablecoins issued by other institutions belong to different assets, the credit risk of the defaulted stablecoin will not be transmitted to other stablecoins.

In this case, the institution can endorse the stablecoins through 100% or higher SDS margin ratio or through the institution's own credit to gain market recognition. This is a completely market-oriented behavior.

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## **2.5 Personal Client Model (SAR-C)**

### **2.5.1 SDUSD**

SDUSD is a digital currency issued on Alchemint platform with a target price anchored to US dollars (1USD=1SDUSD). On the Alchemint platform, the stablecoins issued by any individual through the mortgage of different digital assets are all SDUSD. Unlike the stablecoins issued by the institution, the value behind each SDUSD is not the legal currency reserve but the excess digital asset collateral.

At this stage, because the US dollar is of the world's largest liquidity and of the best credit, Alchemint designed a dollar-pegged stablecoins with the digital asset mortgage model. As digital asset collateral becomes more mainstream, Alchemint will gradually anchor to other assets in SAR-C model.

### **2.5.2 Intelligent digital asset mortgage for individual users**

Any individual can issue stablecoins by mortgaging digital assets on the Alchemint platform. The entire process can be described as follows:

- 1) The user creates a SAR and sends NEO to the SAR for mortgage. The SAR will create a certain amount of SDUSD based on the current value of NEO and the mortgage rate. For example, under the conditions that a user deposits 10 NEO (100 USD/NEO) and the mortgage rate is 200%, the SAR will generate 500 SDUSD.
- 2) When the user wants to redeem the NEO asset that is originally mortgaged, the user needs to return 500 SDUSD to the SAR and pay the corresponding handling fee to redeem 10 NEO. Before redemption, the user can no longer use the NEO that has been mortgaged. In fact, no one can misappropriate these collateral.
- 3) If the mortgage value of NEO in the SAR falls below the warning line for clearing (for example, the 150% clearing rate is set and the value of 10 NEO mortgages falls to 750 USD), the mortgagor needs to add NEO asset to make the collateral value returns above the warning line. If the mortgagor does not take the initiative to perform additional collateral operations, any user has the right to impose a mandatory liquidation on the SAR and charge an additional clearing fee. At this point, the mortgagor will suffer additional losses due to inaction.



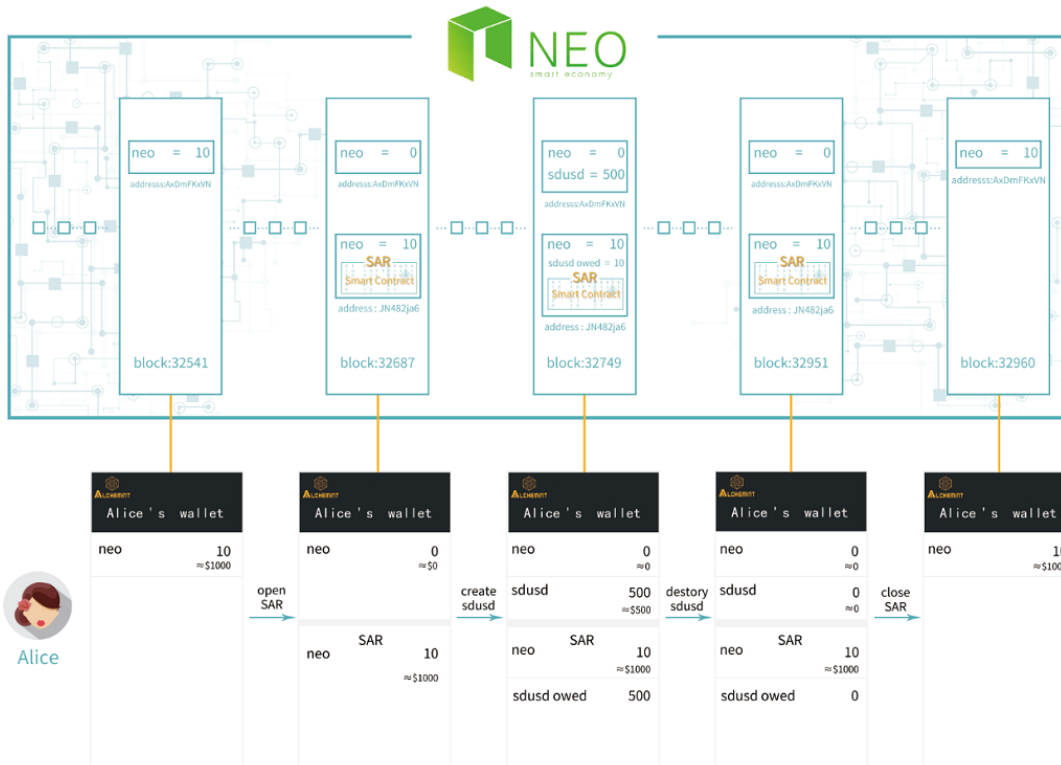
Let's use a simple metaphor to illustrate. Suppose you go to the bank to mortgage your house to get a loan. When your house value drops close to the amount of loan you borrow, bank will ask you to repay the loan. At this point if you are unable to repay the loan, bank will force your house to be auctioned. The proceeds from the auction will be used to repay the loan you borrowed and the rest will be returned to you.

Below we further illustrate this mechanism from the perspective of the account on the blockchain and the personal wallet. Of course, it should be reminded that SAR does not exist in the personal wallet but in the blockchain. The personal wallet is only the application of the account data on the blockchain and the application of the corresponding instructions to the blockchain network.

## Case

Anyone, such as Alice, can easily create a SAR by using the web console or mobile app wallet by mortgaging their NEO asset in the SAR. She can then issue/borrow SDUSD within the mortgage rate set by the system.

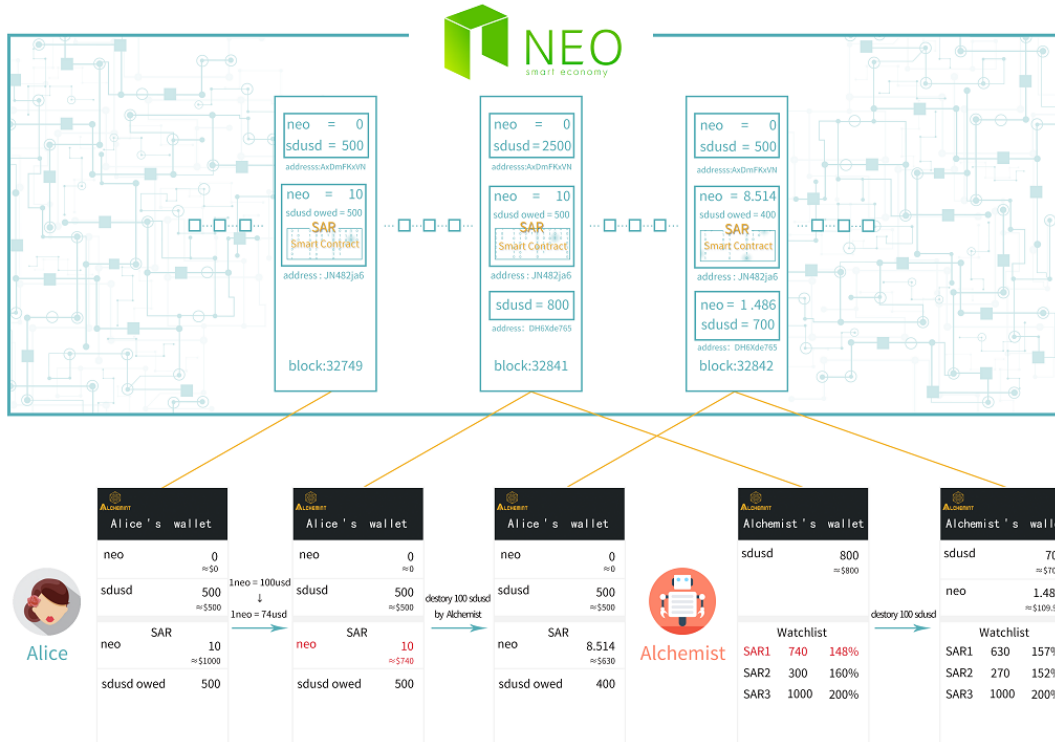
If the NEO feed price is \$100 and the mortgage is 10 NEO, then Alice can issue 1-500 SDUSD with the current mortgage rate of 200%. The feeding mechanism will be described in detail in subsequent chapters. After Alice gets SDUSD, she can do whatever she wants. For example, she can recharge to the exchange to buy other digital currencies such as NEO, BTC and etc. It can be used for payment directly. Of course, she can also sell at the acceptor to obtain the US dollar. When Alice wants to retrieve the 10 NEO, she only needs to return all the SDUSD that being borrowed.



Like other digital assets such as Bitcoin and Ethereum, NEO has price fluctuation. When Alice mortgages NEO to borrow the stablecoins SDUSD, she needs to shoulder the risk of NEO price fluctuation. If the NEO price rises, the market value of the collateral will be higher and the mortgage rate will be higher. The risk will drop and there is no worry about default.

But if the price of NEO falls and the value of NEO as collateral is not sufficient to support the borrowed SDUSD, then the price of SDUSD may fall below 1 US dollar which could lead to the collapse of the whole system. To solve this problem, Alchemint designed an automatic clearing and auction mechanism. When the value of the collateral in the SAR falls below a certain threshold set by the system (assuming 150% as the clearing warning line). Suppose the price of NEO falls from \$100 to \$74 resulting in a mortgage rate falling from 200% to 148%, Alice needs to immediately increase the amount of NEO to return the mortgage rate to be over 150%. If Alice does not do this, NEO in the SAR will be automatically cleared and auctioned by the system. Alchemist repays the SDUSD borrowed from the SAR on Alice's behalf and gets an extra benefit while Alice will suffer an extra loss. Therefore, if Alice does not repay SDUSD that SAR lends to her in time, the system will liquidate Alice's collateral. Alchemint ensures that SDUSD has sufficient collateral support in this way.

### **SAR Is Forced To Liquidate and Being Auctioned**



### 2.5.3 Price Stability Mechanism

Unlike the stablecoins issued by the B-end agency, SDUSD is not backed by 1:1 legal currency reserve but by over-collateralized digital asset. Alchemint anchors SDUSD to the USD through the following mechanism.

#### Target price

The target anchor price of SDUSD which is 1 USD is built into the Alchemint platform. The target price has two important roles. 1. Calculate the SAR mortgage rate. 2. Calculate the amount of collateral available during the liquidation process.

#### Forced liquidation

Suppose the value of the collateral in the SAR continues to fall, the mortgage rate is below a set threshold (such as 150%) and the SAR owner does not take any measure, in order to prevent further decline in the value of the collateral, forced liquidation will be triggered. When forced liquidation occurs, the opportunist will use SDUSD to purchase the collateral in the SAR. Alchemint will determine the amount of collateral that can be purchased for this settlement based on the target price and quantity of SDUSD. Since the target price set by SDUSD is 1 USD, one SDUSD can only

purchase the collateral that worth 1 USD in the liquidation.

Alchemint's target price and mandatory clearing mechanism have softened the market expectation of SDUSD to be around 1USD.

## **2.5.4 The Opportunist**

The opportunist is an external participant in the Alchemint ecosystem which consists of individuals and automated programs. Since the system generally sets a penalty ratio for forced clearing (for example, 10%), the opportunists will constantly look for SARs that trigger forced clearing and arbitrage by repaying SDUSD.

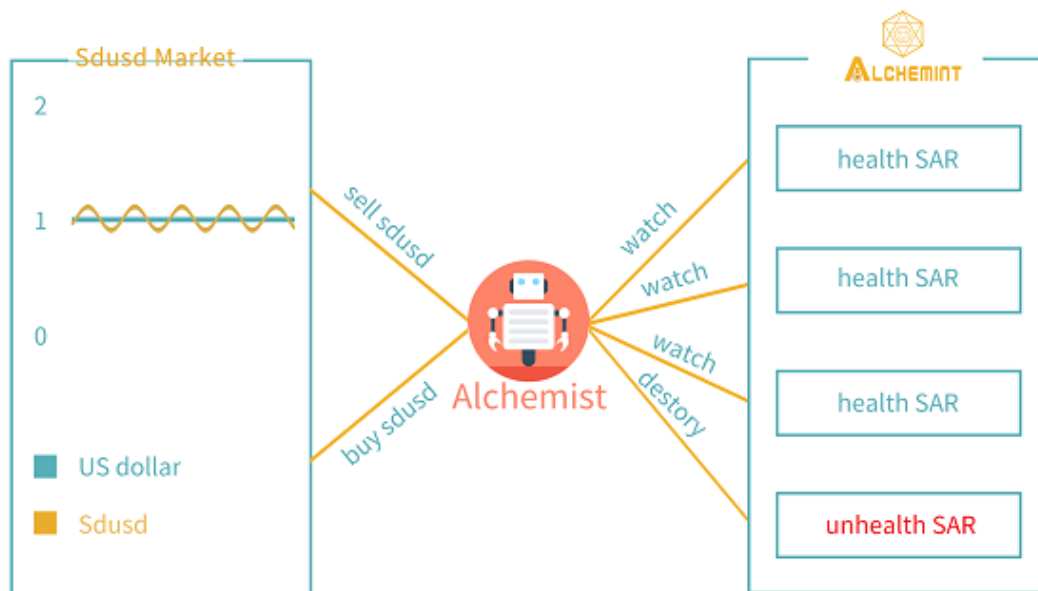
At the same time, the opportunists will also trade SDUSD around the target price. Since the price of SDUSD and the US dollar are soft anchored, the price will also fluctuate slightly following the changes of market supply and demand. When the market price of SDUSD is higher than the target price, the opportunists will sell SDUSD. Similarly, when the market price is lower than the target price, the opportunists will buy SDUSD.

Although Alchemint has set up a series of risk control measures and the opportunists have the willingness to actively do “maintenance” under the incentive mechanism, the collateral behind SDUSD still has the risk of value fluctuation. In the market situation where the collateral price plunges rapidly, the opportunists may not be able to raise enough stablecoins in a short period of time or they may not be able to sell the collateral obtained in time. It makes the opportunists unable to deal with unhealthy SAR in a timely and effective manner. This risk may lead to a large area of SAR falling below the net value, resulting in the destruction of the value of the stablecoins. Therefore we must introduce the ultimate opportunist so that the ultimate opportunist can provide the ultimate guarantee.

The ultimate opportunist must have two abilities. Firstly he must have a large or even unlimited amount of stablecoins liquidity and secondly having the ability to quickly sell collateral. We believe that only large digital asset exchanges can meet the requirements of the ultimate opportunist. The exchange has sufficient market depth and can lock the price at the same time when handling the SAR to obtain collateral and selling collateral. Moreover because large exchanges have a certain ability to redeem, Alchemint can prefabricate the asset type of SDBOND in smart contracts and the exchange can obtain a 1:1 stablecoins by mortgage SDBOND. Alchemint will give different SDBOND credit

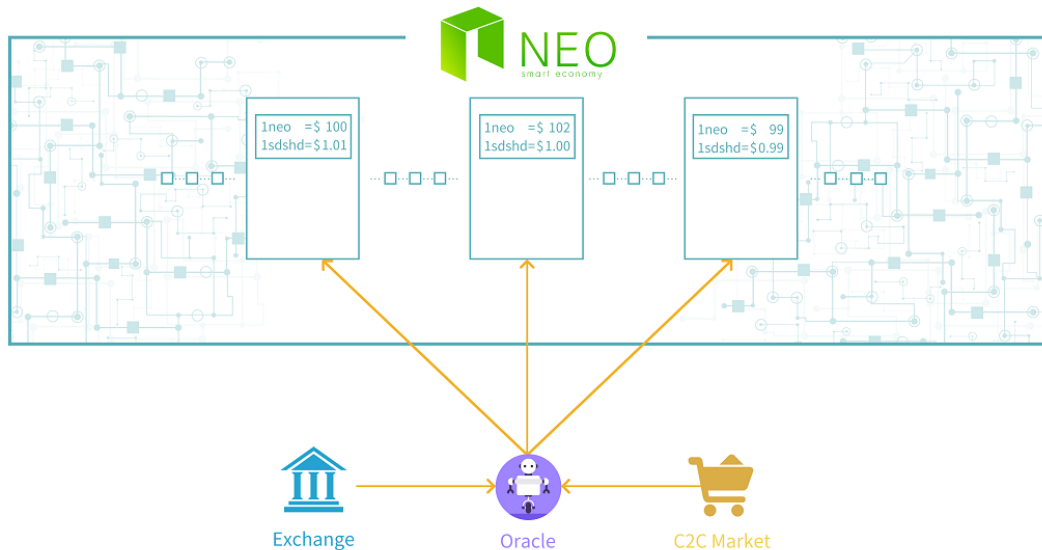
lines depending on the exchange. These mechanisms ensure that the opportunists will have incentive to conduct maintenance behavior, while also ensuring that Alchemint's risk control mechanisms are ultimately and effectively implemented.

The Alchemint team has always maintained a close working relationship with large exchanges. We will invite quality exchanges to be Alchemint's ultimate opportunists and grant them a certain amount of stable bonds. At the same time, this effective final safeguard will also enhance the exchange's confidence in Alchemint's stablecoins, enabling Alchemint's stablecoins to be quickly promoted on the exchange.



## 2.6 Oracle

In Alchemint's system, a large amount of information must be input from outside the blockchain, such as the market price of digital asset collateral and the market price of SDS. The blockchain



cannot actively perceive the outside world, so it is necessary to obtain price information through an external participant and then pass the information into the blockchain. In the technical system, this external participant is generally referred to as the predictor Oracle.

In order to avoid the risk of centralization, the predictor is also composed of distributed nodes. SDS holders can choose the trusted predictor node to feed the Alchemint platform.

## 2.7 Systematic Risk of Blockchain Applications

Alchemint is built on smart contracts and there may be potential vulnerabilities or bugs in smart contract code. So the biggest technical risk in the early days of the system was the failure caused by bugs and attacks from malicious technicians on code vulnerabilities.

A system bug is a logic error in the code that causes the system failure. It can generally be solved by a test case that is fully covered during the development process. The Alchemint technical team will follow the most rigorous software test specifications to ensure the correctness of the system code and logic. But since the test can only prove that the code is wrong and cannot prove that the code is error-free, the development phase test does not guarantee that there will be no problems after the system is put online. In order to cope with the fact that some bugs may not be detected, Alchemint

will set a public beta period and only set a lower debt ceiling during this public beta period. The purpose is not to put into production, but to have the public test the system. After beta period, the Alchemint team will decide when to open the debt ceiling based on the number of transactions during the beta period and the stability of the system in order to get the system into the formal stage of production.

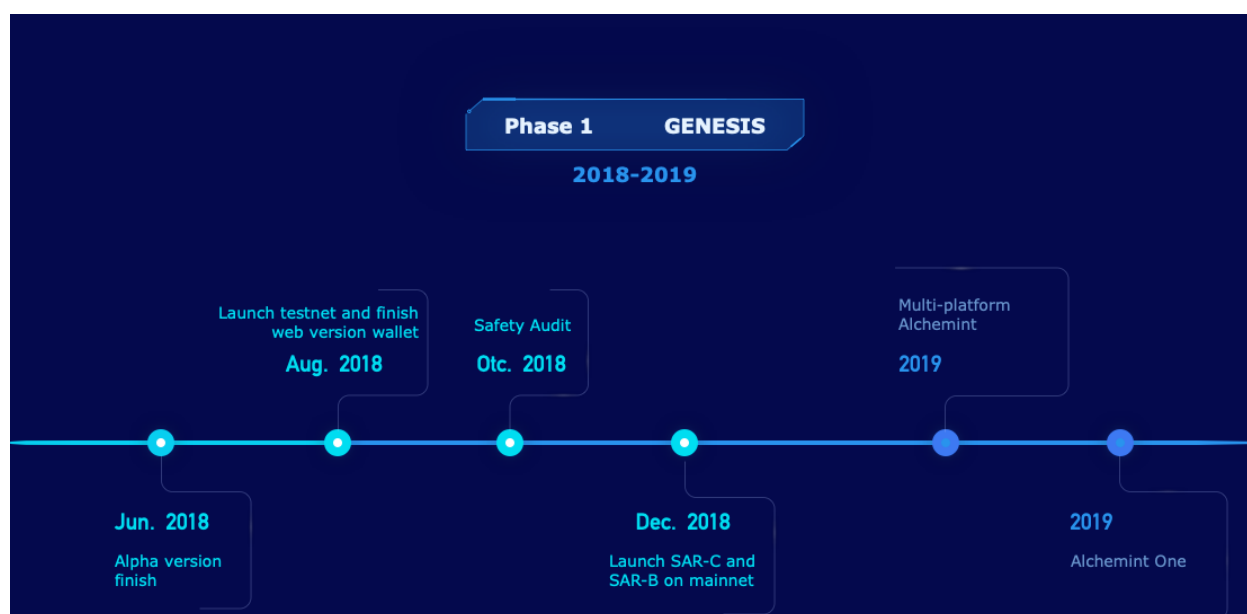
A greater risk in the early stage is the attack by malicious technicians. Attackers will look for and exploit system vulnerabilities to launch attacks. The worst case is the users' assets being stolen or lost. Because the consequence of the exploit is so serious, the Alchemint technical team treats the security of smart contracts as the most important thing. During the development process, developers will follow the strictest code specifications and conduct internal audits for code increments. Before the system is put into production, Alchemint will hire a professional external security team to independently audit the code of the smart contract. During the beta period, Alchemint will organize a white hat team to conduct offensive testing and reward the vulnerability.

Although Alchemint has very comprehensive technical measures to ensure that there are no bugs and loopholes, there is no perfect system in the world. Even if there is only one in ten thousand probabilities, we need to anticipate precautions to deal with possible problems. Therefore, Alchemint designed a mechanism for system freezing and global clearing. We call it "system restart". Once the system restart is triggered, the whole system will be frozen. No one is able to create a new SAR or to issue stablecoins. The system will initiate a period of stress, at which point the SAR holders will be able to proactively end the SAR and retrieve the collateral. After the stress time is over, the system will automatically redeem the corresponding collateral for the holders of the stablecoins based on the locked feed price, thereby restoring the system to its initial state. After the bug is fixed, the system will be reopened. The system restart authority will be controlled by the AlchemintCommittee. When the committee believes that the system is under serious attack or failure, the mechanism will be activated to avoid the deterioration of the situation and restore the normal use of the system as soon as possible.

## 2.8 Roadmap

We are very clear that the management and distribution of stable currencies is a very complicated project. If we only focus on stabilizing the digital currency itself instead of its application scenarios and its positioning in finance and commerce, the market for Alchemint will become very narrow and the changes Alchemint brings to the world will be limited. Because of this, we divide the evolution of Alchemint into three phases.

The first stage (2018-2019) is called the “Genesis”. The main task of this stage is to quickly build a stable open-architecture stablecoins issuance platform to solve the problem of the lack of stablecoins. Firstly, Alchemint will empower the commercial organization to meet the market demand for stablecoins liquidity in a specific market segment. Secondly, Alchemint will build the basic functions based on the digital asset mortgage stablecoins issuance module.



The second stage (2020-2021) is called the “Expedition”. At this stage, the issued stablecoins based on the legal currency will reach a huge scale and there will be stablecoins anchoring to a variety of legal currencies. Global payment and settlement will use a large amount of stablecoins as a medium. In this process, Alchemint will further enhance its capabilities in the blockchain infrastructure and restructure the blockchain + financial formats through incubation or self-construction. At the same time, a multilateral interoperable stablecoins network facility is formed to form a currency payment

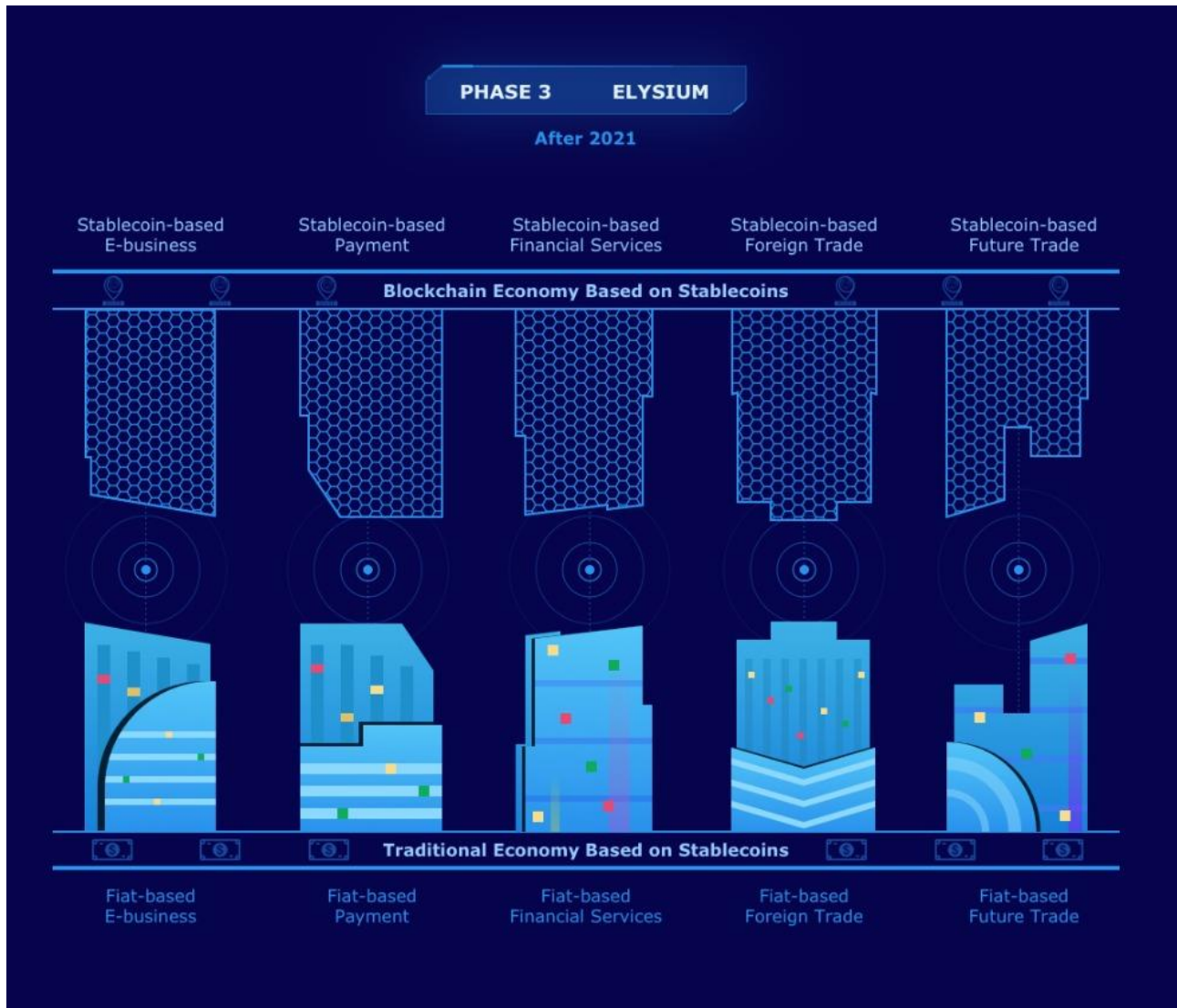


agreement on the Internet and thus a financial ecosystem based on stablecoins is established.



In the third stage, we call it the “Elysium”. At this stage, the ecology based on blockchain technology has gradually matured and blockchain economies have already had a certain scale and formed a closed loop. Digital assets have become the only form of asset existence in blockchain economies. Stablecoins will play an important role in the blockchain economy and become the blood of the economy. At this time, the real world economy will also generate a more convenient

commercial civilization due to the establishment of stablecoins and the entire business ecology will be reconstructed on the basis of stablecoins. Blockchain economies and real-world economies will generate broad and close connections through stablecoins and Alchemint will become a ubiquitous infrastructure at this stage.



## 2.9 Development of the Alchemint Ecosystem

In Kevin Kelly's view, the development of technological elements to symbiosis drives us to pursue and build a value network: while maximizing individual autonomy and collective capabilities are also maximized.

Whether it's a value network or any other network, there are two elements: nodes and connections. Today, the basic unit of the Internet of Everything becomes “flow.” This structural change has led people to re-recognize these two elements, re-recognize their individual values as nodes and rethink how they collaborate with other forces in the community. Through community autonomy, the purpose of sharing wisdom and creating value can be achieved.

The blockchain opens the prelude to the value of the Internet, enabling users to achieve simultaneous arrival of information and value, products and brands in the community. We hope that in the Alchemint community, the entire feedback process of rapid verification and intelligent collaboration among the participants will build the inner core of smart business and the digital economy.

### **2.9.1 Digital Financial Ecology: Digital Currency Is the Anchor in the Sea**

If Alchemint's entire distributed financial ecosystem is likened to a sea, then the blockchain infrastructure is the continental shelf and the various application services are the creatures in the ocean. The seawater is the Alchemint's token - SDS which is the basis of the normal operation of the entire financial community system.

Based on our observations on the blockchain industry and the development of digital currencies, we plan to take the following path for ecological promotion:

- 1) Work closely with major international exchanges to actively promote the convenience and efficiency of stablecoins;
- 2) Cooperate with various commercial organizations with stablecoins demand to promote the use of SDS;
- 3) Expand smart contract service providers and choose one or two projects as key breakthroughs to demonstrate the great value of stablecoins in credit, cross-border trade, gaming and other services;
- 4) Help and promote the centralized entity assets such as gold, real estate and standardized funds to be mapped on the NEO chain, enrich the varieties of smart asset reserves, so as to achieve relative stability of mortgage assets and stabilize price fluctuations;
- 5) Extend and penetrate into the traditional real economy. Select some payment institutions and

offline merchants who have high acceptance of digital currency. As project partners and pilot organizations, they will enrich the application scenarios of stablecoins.

In the ecological development tactics, the focus will be first on a few potential areas in order to reach a demonstration effect. Let the blockchain practitioners and users first have a good experience in using stablecoins and gradually establish a financial service system in the digital currency world.

## **2.9.2 Archimedes' Views on Blockchain and Stablecoins**

### **1) Seeking a viable path between ideality and reality**

Since the introduction of Bitcoin, blockchain technology has been developed for nine years and the practice path from ideas to concepts to various fields has become clearer.

We believe that the prelude of Internet value opened by blockchain technology and the revolution of artificial intelligence will profoundly affect the overall development of the entire society. It includes the financial sector and ultimately change our way of life and gradually erase the boundary between the physical world and the virtual world.

There are also stablecoin projects on the market similar to Alchemint and there are many ideal project designs. But what is important is that we believe any technological innovation, especially in the currency sector, must be based on pragmatism rather than being a castle in the air. Stablecoins should start with solving the problem of the currency stability, payment and settlement, becoming a bridge between the real economy and the digital economy.

### **2) Landing needs promote market synergy**

There is no doubt that the application of stablecoins is huge – stablecoin has a huge application space in the creation and construction of financial systems in the digital economy. The creation of a digital financial system is a vast ecological project which certainly cannot be completed solely by Alchemint.

In the recent US Senate Digital Currency Hearing, the US CFTC chairman mentioned in his testimony that “blockchain technology can ultimately save financial institutions up to \$20 billion in infrastructure and operating costs each year.” Blockchain technology can reduce the transaction settlement cost by 1/3 and reduce the capital requirement by 120 billion US dollars.

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In the process of traditional financial institutions participating in the transformation of economic activities, we will call for and encourage more traditional financial industries to actively embrace blockchain technology. There is value in the field of securities settlement, property rights records, network security, records trading and data analysis. We believe that Stablecoin, as part of the financial system infrastructure, will play greater role in future financial services such as securities trading, credit, futures contracts, payment and settlement.

## **3 Community Operation Methods and Architecture**

How to maintain the sustainability of the community and the team has always been a question for the Alchemint team to about. We can learn from the experience of corporate governance structure to improve the synergy efficiency of blockchain communities and standardize community operational activities.

### **3.1 Establishment of the Alchemint Foundation**

The Alchemint Foundation (hereinafter referred to as the “Foundation”) is a non-profit entity established in Singapore in January 2018. The Alchemint Foundation will serve as an advocacy entity for the Alchemint, be dedicated to the development and governance of Alchemint and promote open source eco-communities.

### **3.2 Foundation Operation Principles**

The goals of the Alchemint Foundation's structure are set from the respective of the sustainability of the Alchemint open platform, the effectiveness of strategy development, risk management and efficient operation of the platform economy. The Alchemint Foundation relies on the following principles in its structure:

#### **1) Integration of centralized operation and distributed architecture**

The Alchemint Foundation absorbs the core ideas of a centralized **operation** in the management structure, including the highest decision-making authority of the strategic decision-making committee and the centralized deliberation power of major issues to improve the efficiency of the entire community operation.

#### **2) The functional committee coexists with the functional unit**

Under the daily affairs, the Foundation will set up resident functional units, such as R&D department,

market development department, operation department, finance and human resources department, to handle daily affairs.

At the same time, we will set up a professional functional committee to make decisions on important functional matters of the foundation. Unlike functional units, functional committees exist as virtual structures. Members of the committee can come from all over the world and do not need to work full-time, but they must meet the requirements of the committee's expert qualifications and can promise to attend and express their opinions when the committee needs to conduct deliberations. The functional committee will also set up a regular meeting system to ensure the effective advancement of major decision-making matters.

### **3) Risk-oriented operation principles**

Risk management will be the first important element in the research to determine the strategic development and decision-making of the Foundation and the Alchemint blockchain.

As a technology with great revolutionary significance, the development of blockchain is still in its infancy, so it is especially important to grasp its development trend. The risk management principle ensures that when the foundation makes important decisions, it fully considers the risk factors, risk issues and the possibility and impact of its occurrence, and formulates corresponding response strategies through decision-making.

### **4) Technology and business coexist**

The Alchemint Stabilization Coin project is based on the ideal and is closely aligned with the business. The setting of the Alchemint Foundation also follows this aim. The Foundation exists as a non-profit organization, and the Foundation hopes to do its utmost to gain recognition from the business world, and to feed back the benefits of future business applications to foundations and communities to further advance Foundation development and Alchemint.

### **5) Transparency and supervision**

Referring to the experience of the traditional business world, the Alchemint Foundation also plans to set up a special monitoring and reporting channel (Whistle-Blower). The designated personnel in the Strategic Decision Committee will serve as a window to welcome community participants to

participate in management, participate in supervision operations, and report major issues quickly and confidentially. These include but are not limited to new breakthroughs or recommendations that have a significant impact on the foundation or blockchain technology, community operations issues, crisis information, reporting fraud or fraud.

The Foundation will also disclose and report on the operation of the Foundation and the progress of Alchemint to the community participants through regular reports and occasional press releases. At the same time, the contact information of the main management personnel of the Foundation will also be fully disclosed and the supervision and liaison of all participants will be accepted.

### **3.3 Foundation Organizational Structure**

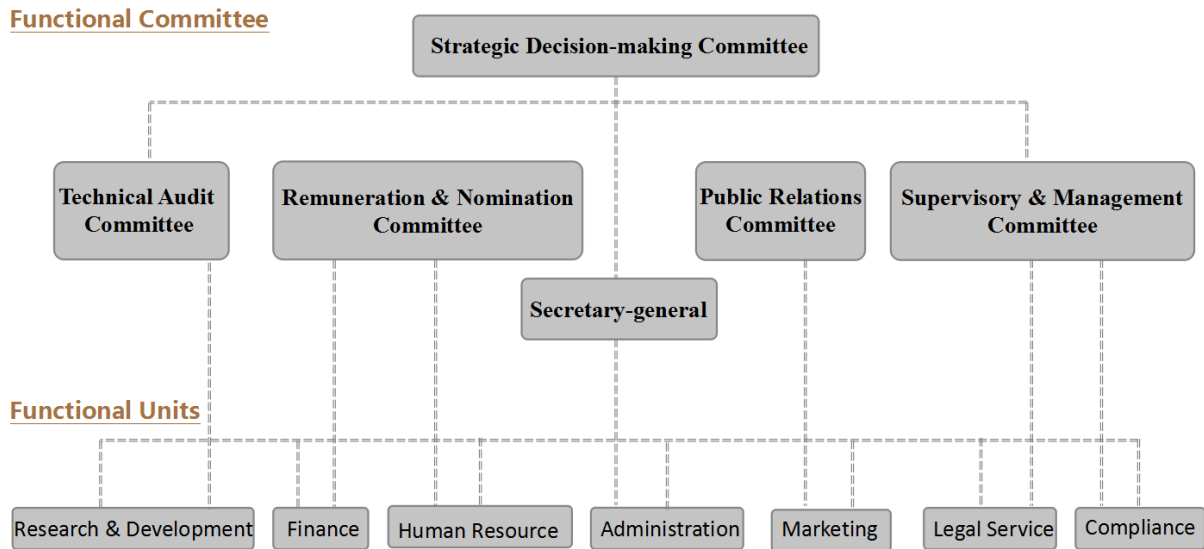
The Alchemint Foundation responds to day-to-day work and special issues through a combination of professional committees and functional departments.

The foundation is established with reference to the operation of traditional entities, and various functional committees will be established, including strategy committees, technical committees, remuneration and nomination committees, and public relations committees.

The organization structure of the foundation includes (as shown below):



**Figure 13: Organization Structure of the Foundation**



### 3.3.1 Strategic Decision Committee

The highest decision-making body of the Alchemint Foundation is the Strategic Decision Committee. Its main objective is to negotiate and address important decision-making issues in the development of the Alchemint community, including but not limited to:

- 1) Modify the foundation structure;
- 2) The formation and rotation of the decision-making committee;
- 3) Appointment and rotation resolution of the Secretary-General of the Foundation;
- 4) Appointment and Exemption Executive Officer and responsible person of each functional committee;
- 5) Review and revision of the Foundation's charter;
- 6) Development strategy decisions for the Alchemint blockchain;
- 7) Changes and upgrades to the core technology of Alchemint;
- 8) Emergency decision making and crisis management agenda.

The above important matters need to be voted by the decision-making committee by a registered vote. Each decision-making committee member has one vote and the chairman of the foundation has two votes. The decision-making committee must make a resolution and must obtain a majority of the members of the incumbent committee.

The decision committee meeting shall be attended by the members of the committee. If you are unable to attend for any reason, you may entrust a representative of the other committee members to attend the meeting. If the representative is not entrusted, it is deemed to have waived the right to vote at the meeting.

The members of the decision-making committee and the chairman of the foundation are appointed for a term of two years and the chairman of the foundation may not serve for more than two consecutive terms.

After the expiration of the term of the decision-making committee, the community voted for 50 community representatives based on the consensus mechanism of the next-generation Alchemint blockchain, and then voted to select the core members of the five decision-making committees. The core staff will make important and urgent decisions on behalf of the Alchemint Foundation and will be subject to credit investigations during the tenure and public pay.

### **3.3.2 Secretary General**

The Secretary-General is elected by the Strategic Decision-making Committee and is responsible for the day-to-day operation and management of the Foundation, the coordination of the work of the subordinate committees, and the chairmanship of the decision-making committee.

The Secretary-General is the chief executive of the Alchemint Foundation's administrative affairs, providing unified guidance and coordination of the Foundation's day-to-day operations, technology development, community maintenance, public relations, etc., and the various business units and structures. The functional committees at the level are connected.

The Secretary-General regularly reports to the Policy Committee on his work.

### **3.3.3 Technical Review Committee**

The Technical Review Board consists of core developers in the Alchemint development team

responsible for decision making, block technology development, open port development and review, technical patent development and auditing of blockchain technology.

In addition, members of the Technical Review Board regularly learn about the dynamics and hotspots of the community and industry, communicate with participants in the community and hold technical exchanges from time to time.

### **3.3.4 Compensation and Nomination Committee**

The establishment of the Remuneration and Nomination Committee is responsible for determining the selection and appointment of key management personnel of the Foundation. The committee sets the rules of procedure, assesses the competency of managers, and authorizes appointments. At the same time, the committee sets a compensation system to motivate people who have made important contributions to the foundation.

The Remuneration and Nominating Committee regularly evaluates the performance of all members of the Foundation, proposes adjustments to the human resources structure, proposes different incentives, and recruits and retains talented experts.

### **3.3.5 Public Relations Committee**

The public relations committee set the goal to serve the community, to be responsible for Alchemint technology promotion, Alchemint's partnership with partners to establish, maintain and exchange resources, and the commercial promotion of Alchemint. And publicity as well as community crisis public relations and social responsibility. The committee is responsible for regular press conferences, public announcements and inquiries for important matters. In the event of an incident affecting the reputation of the Foundation, the Public Relations Committee will act as a unified communication channel to issue an authorized response.

### **3.3.6 Supervisory Management Committee**

As a highly independent and autonomous organization, the Supervisory Management Committee is set up within the Foundation and is responsible for independent supervision and risk management of the overall operation of the Foundation.

The Supervisory Board provides daily guidance to the Foundation's Legal and Compliance

Department. At the same time, the Foundation establishes a transparent and open reporting mechanism, and the Supervisory Committee directly accepts internal and external reporting matters, and takes corresponding investigations and improvements to ensure that the entire foundation operates in a sound and legal environment. Advance progress within acceptable risk levels.

The Supervisory Board reports directly to the Strategic Decision Committee and does not conflict or overlap with other Foundation functions.

### **3.3.7 Other Operating Departments**

The Foundation refers to the corporate system structure and establishes daily operational departments such as human resources, administration, finance, marketing, research and development (or laboratory) units.

## **3.4 Alchemint Human Resource Management System**

Alchemint is committed to building the world's most influential open source community ecosystem. To ensure the smooth development of technology and the continued effectiveness of foundation operations, the Foundation is committed to recruiting outstanding technology developers and management talent.

### **Recruitment**

Based on the characteristics of the blockchain without borders, the Foundation does not have geographical restrictions on the recruitment requirements and welcomes talents from all over the world to join. In addition to individual positions that must be recruited locally (such as logistics managers), there are in principle no restrictions on work locations and forms of work.

At the same time, the Alchemint Foundation will continue to develop its human resources plans, recruitment procedures and review procedures in accordance with best practices in human resource management to ensure that the Foundation attracts the right talent.

As an open source community, Alchemint not only recruits full-time developers, but also employs well-known technical consultants. Relevant hiring and payroll payments require discussion and

resolution by the Remuneration and Nominating Committee and sign cooperation terms.

## **3.5 Foundation's Economic Operations**

The Alchemint Foundation promotes the following key principles in economic operations:

- 1) Non-profit;
- 2) Sustainable development;
- 3) Collaborative mutual assistance, resource sharing

Economically, the Alchemint Foundation strives to break even while promoting the growing community. In addition to the initial funding obtained during the ICO period, the Foundation will obtain income from digital assets through community ecological operations, and transparently and publicly distribute the proceeds to the various operations of community development under the arrangement of third-party trust institutions.

The Alchemint Foundation will set up a full-time financial management team to maintain and standardize day-to-day finances and manage the digital assets owned by the foundation. The financial management team reports mainly to the Foundation's Strategic Decision Committee and regularly completes the duties of the Foundation's financial management reporting and disclosure.

### **3.5.1 Source of the Fund**

The Alchemint Foundation's funding sources and main income are divided into two areas:

- 1) Non-recurring operating income, including start-up assets acquired by the initial ICO, and income from digital asset investments;
- 2) Recurring operating income, including R&D product sales, patent transfer or authorized use, academic exchanges and contributions;

The following is a detailed description of the main sources of income.

## a Initial start-up assets

A total of 1 billion tokens () are planned for the Alchemint token. The distribution plan is as follows:

**Table 1: Alchemint SDS Distribution Plan**

| Proportion | Distributed plan           | Details   |
|------------|----------------------------|---|
| 20 %       | Public sale                | The proceeds from the public sale will be used for the operation of the Alchemint Foundation, including development, marketing, finance and legal advice.   |
| 15%        | Private investor           | Private equity investors are investors with significant influence both inside and outside the industry. They will have great guidance and help on Alchemint projects in terms of technology and business development. |
| 10%        | Cornerstone investor       | Cornerstone investors provide important incubation and resource support for project development and promotion at Alchemint.   |
| 10%        | Founding team              | The founding team and the development team made contributions to human, resources, material and technology during the development of Alchemint, so the issue of tokens was rewarded.                                  |
| 30%        | development team           | Maintain the ongoing operations and development of the Alchemint team and community   |
| 10%        | Community development fund | Screening the right industry, strategic deployment, project support and token replacement in the industry   |
| 5%         | Commercial promotion       | Consultant and legal compliance   |

## b Digital asset investment

In the ongoing process, the Alchemint Foundation will allocate approximately 5% to 10% of capital or digital assets to invest in the blockchain industry, such as incubating start-ups, angel investments, and emerging research technologies. The input and so on. The proceeds from the investment will also be used for community development.

### **3.5.2 Fund Use Principles**

As mentioned above, the Alchemint Foundation's use of funds mainly includes daily operations, technology development, business development and investment.

The use of Alchemint's assets is based on the principle of openness and transparency, with separate accounts and digital asset wallet addresses for use, and the committee oversees the flow of digital assets and reports to the community on a regular basis.

Principle of use:

The use of assets worth more than 1 million RMB or equivalent digital assets is subject to approval by the head of the financial unit and the Secretary General; the use of more than 5 million RMB or equivalent digital assets is subject to approval by the decision-making committee.

### **3.5.3 Financial Planning and Periodic Reporting**

The financial planning is prepared quarterly by the Finance and Personnel Management Committee and the financial performance of the previous quarter is summarized and the financial report is submitted to the Decision-Making Committee for review.

### **3.5.4 Digital Asset Management**

The digital assets belonging of the Alchemint Foundation are used and arranged by the full-time financial staff authorized by the Strategic Decision Committee. Both digital asset transactions and legal currency transactions are arranged for independent and timely financial accounting. The Alchemint Foundation's digital asset management will follow the most stringent financial internal controls. The Foundation uses multiple signatures to ensure the security and accuracy of assets. All the legal currency collected will be converted into digital assets in time and deposited in the digital wallet. Foundation assets may not be deposited in personal accounts.

#### **Digital wallet management**

Based on the principle of independence, the wallet of the Alchemint Foundation takes multiple signatures. If the signature is added, it must be authorized by the Strategic Decision Committee. Large amounts of tokens will be put in cold storage; small amount of tokens be safeguard by

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multiple signatures.

## **Disclosure**

Each year the Foundation will disclose to the community the development, operation, promotion and operation of the Alchemint. For the financial status of the Foundation, the financial report will be produced on a quarterly basis and the work of the annual report audit will be disclosed.

The Foundation established the Public Relations Committee as an external window to hold regular and irregular meetings to announce important news items of the Foundation to the public.



## 4 Team Members and Advisors

Alchemint is the first stablecoin project based on the NEO public-chain which first exposure has gained highly market attention and support. The consultancy team is included experts and veterans across multiple industries such as numerous blockchain, internet and financial industry

### 4.1 Founding Team Core Members

Alchemint team members mainly from the financial, Internet industry, combination between senior industry experts and enthusiastic blockchain lovers with adhering to a common ideal to come together.

#### **Zhang Ting, CEO & Founder**



Zhang Ting has extensive experience in the securities, media and internet finance industries. She is liberal and a serial Internet entrepreneur. She has served as investment advisor of China Merchants Securities, editor of media finance, COO of P2P Collection Wealth and CEO of Community Finance Platform. She has extensive experience in Internet financial product innovation, supply chain finance, asset securitization, risk control system and Internet platform operation and management.

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#### **Qi Feng, CTO & Co-founder**



Qi Feng has over 10 years of experience in information technology and management in the financial industry. He has served as the general manager of Zhongke Soft E-commerce Division, senior consultant of Neusoft Group's Financial Business Department and CTO of Renhe Zhiben Group. In 2017, he cooperated with Bitpoint who holds a Japanese license and opened a digital asset exchange in mainland China.

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## **Zhang Wei, Product Director Master of Economics**



Zhang Wei holds a bachelor's degree of Accounting and a master's degree of Economics. Since 2007, he has been engaged in derivatives investment management and risk control business in the futures industry. From 2008 to 2016, he was the product manager and investment consultant of a large internationalized state-owned bank in China. He has extensive management and practical experience in futures trading, stock pledge, debt collateral, risk hedging and derivative product R&D design.

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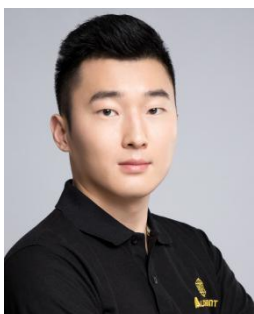
## **Steel Chen, Core Development Engineer**



He has been an IBM senior engineer for 8 years and a technical expert in the financial industry. He has the experience in architectural design and project management in multiple large financial systems projects. He has led the overall architecture design of the digital currency trading system and the development of a high performance matching engine.

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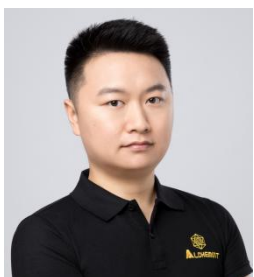
## **Lei Geng, Core Development Engineer**



Lei Geng is a full-stack engineer and a senior engineer in smart contract development. He participated in multiple digital currency exchange projects and specializes in the development of wallet applications and digital asset management.

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## **Joe Wu, Core Development Engineer**



He has more than 8 years of development experience in mobile applications and network instant messaging systems. He is an expert in the P2P communication technology at the bottom of the blockchain.

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### **Cheng Maoyong, Business Manager**



Cheng Maoyong holds an accounting degree from the Beijing Normal University. He has served as a tax consultant for PWC in Guangzhou and has extensive experience in assisting companies in completing tax compliance and foreign exchange control. Cheng Haoyong began investing in Bitcoin in 2013 and actively participated in the Bitcoin community. He has an advanced view on the application of blockchain and community management.

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### **Musk Zhou, Product Manager**



In 2012, he founded Hangzhou Non-stop Network Technology. In 2015, he was responsible for the No. 1 truck products and got the B round financing from DCM and Sequoia Capital. In 2017, he was the product manager of the Joint Finance with over 50 million users and a cash flow of over 70 billion. He has extensive experience in operating and managing Internet products.

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### **Neowo Xu, Operation Manager**



Neowo Xu holds a bachelor degree of Chemistry from the University of California and a master of Chemistry from Waseda University. He has a pioneering vision and rich experience in digital currencies investment. He has participated in community operations and ICO in multiple blockchain projects. He is good at community operations, media cooperation and user management.

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### **Harvey Xu, Business Manager**



Harvey Xu holds a bachelor degree of Optical Information from Shandong University and a master degree of Banking from Queen Mary University, London. He worked for China Merchants Securities mainly responsible for the expansion and docking of financial channel resources, such as public and private funds and institutional clients in the secondary market. He has extensive experience in business development and customer relationship maintenance.

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### **Stephen HU, Community Manager**



Stephen Hu holds a bachelor degree of Computer Science from Carleton University in Canada. He is a blockchain enthusiast and did early research on Bitcoin, NEO and other public chain projects. In 2015, he started a business in the field of de-cryptification certification in Silicon Valley. He has extensive experience in blockchain community operations.

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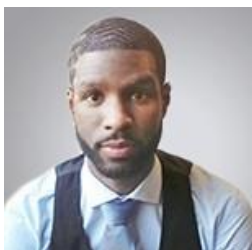
### **John Rawls, Operation Manager**



John Rawls holds a master degree of Finance from Hunan Agricultural University and a bachelor of Law from Nanjing University of Science and Technology. He studied overseas in Chinese Culture University (Taiwan) as an exchange student in 2013. He holds the China Qualification Examination Certificate and had interned in Nanjing Intermediate People's Court. He has made active research on cryptocurrencies and stablecoins.

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### **Wendell Maclean, Creative Director& Marketing Manager**



Wendell Maclean holds a bachelor degree of Economics from Rotterdam University. He has been a Bitcoin enthusiast since 2013. He holds the qualifications of Google Analytics and Adwords. Maclean is versed in market research and social media. He has extensive design and marketing experience to build the brand of Alchemint.

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### **Jonathan Quali, Leader of Alchemint Europe Communities**



Jonathan Quali holds a business management degree. He has worked in the telecommunication and insurance fields for many years in Paris. He has founded and been running his own consulting firm for over 8 years. He is an early investor in cryptocurrencies. He is good at docking resources, finding talents and managing communities. Currently he is actively expanding the European market for Alchemint.

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**Yoon Jae Chung, Leader of Alchemint Korea Communities**

Yoon Jae Chung holds an economics degree from the University of Massachusetts. He was the former international business manager of Korea Telecom, former international business director of Moum Corp, former CEO of PurpleBee Corporation and former CEO of TrueBlocks LLC.

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## 4.2 Advisors

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### **Sun Ming, Legal Advisor of Fenbushi Capital**



Sun Ming graduated from the Law School of Fudan University in 2002. He has been a partner of Chezoo Law Firm and acted as a Fenbushi Capital legal advisor since 2011. He is mainly engaged in mergers and acquisitions, banking and trust, digital currency, blockchain and distributed ledger technology. Mr. Sun has extensive experience in foreign investment and corporate mergers and acquisitions and is also the earliest researcher and legal expert in cryptocurrency and blockchain technology in the world.

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### **Professor Wang Yanming, Ph.D. in Mathematics**



From 1990 to 1992, Wang Yanming was a postdoctoral fellow in Peking University and a visiting scholar in universities of 16 countries such as MIT, the University of Minnesota and the Australian National University. He is currently a professor and doctoral tutor of Faculty of Mathematics and Finance at Lingnan college in Sun Yat-sen University and also is a part-time professor at Macau University of Science and Technology and Nanchang University. He is also a comment expert of the National Natural Science Foundation and National Natural Science Award. Professor Wang Yanming's research interests include financial engineering, financial markets and investment, risk management, algebra, information security and cryptography. He has published over 40 research papers in the SCI index source journal.

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### **Chen Yu, Juxiu Capital Founder**



Chen Yu is a famous angel investor. He has invested over 200 internet companies. The "Pay Revolution" and "Wind within Jiangnan of Internet Finance" are among the best-sellers in the field of finance in China. He has been selected as top 50 internet finance influencer for five consecutive years and got listed on the Hurun Fortune Magazine in 2016 and 2017.

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## NEO Council



NEO is an internationally renowned non-profit community blockchain project that uses blockchain technology and digital identities to digitize assets and make automated management to digital assets through smart contracts in order to achieve an "intelligent and economical" distributed network. NEO officially launched in 2014 and then realtime opened source in Github in June 2015. NEO is recognized as one of the most successful public chain projects, known as "China Ethereum."

Currently, the market value of NEO is about 70 billion yuan, ranking sixth in the global digital currency market.



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### **Pauline Xu, Hayek Capital Founder**

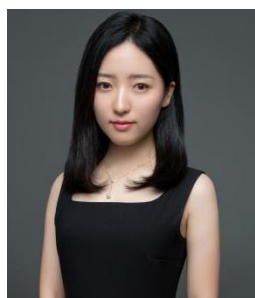
Pauline Xu is the Founder of Hayek Capital. She has been doing blockchain research for many years. She is also a liberalist.



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### **Liu Ming, MAGGIE CSO**

Liu Ming studied philosophy in Peking University. He is the former COO of Tron and currently the Chief Strategy Officer of MAG and the founder of BPA. BPA is the first to use DAG technology in Bitcoin to try to solve the scaling issue in payment.



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### **Cindy Fang, BK Fund Co-founder**

Cindy Fang has a master degree of Accounting in the City University of Hong Kong. She worked for Baker Tilly Hong Kong and PKF Hong Kong, participating in many annual audits of main board listed companies. She has experience in formulating and analyzing the valuation and turnover rate of the secondary market of the cryptocurrency, developing and adjusting relevant investment strategies.

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## 4.3 Main Investment Institutions





## 5 Contact Us

Alchemint official website: <http://www.Alchemint.io/>

Alchemint official Twitter: [https://twitter.com/Alchemint\\_SDT](https://twitter.com/Alchemint_SDT)

Alchemintofficial Telegram: <https://t.me/Alchemint>

Email: [service@Alchemint.io](mailto:service@Alchemint.io)



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