

Thales

# Thales

A distributed autonomous onlie society based on Polkadot.

Nico Hook, Edison

[hello@thales.network](mailto:hello@thales.network)

[thales.network](http://thales.network)

**Abstract:** A purely peer-to-peer version of system would allow online citizens to participate in the blockchain economics & society democratically,transparently.

There are three important things in Thales,the first one is a new paradigm of distributed-autonomous –economic system called Hayek,the second one is a scalable distributed-autonomous –society system called Plato,the third one is a user–based framework for common blockchain users.

We all agree that blokchain-based internet will become predominate,but there is still a long way to go.Thales is trying to simulate the real world social & economic system in a blockchain way.In Thales anyone can be anything.

Foundamental idea in Plato: Democratically & transparently are the most importnat things in a society,there is no perfect society system, Democraticy&transparently make the society iterable, It is iteration that makes the system infinitely close to ideal system.

Foundamental idea in Hayek: Asset and currency are different things, autonomous economic system neends them all,but they have different logic.Percentage is more important than amount both in Asset and currency. Fixed price is a big mistake, we need percantage price. Dis-tribution is everything,especially in a blockchain economic system.

Foundamental idea in Turing: The user experence matters. Developer-based blockchain is a big mistake that impede the development of the blockchain,users need user-based blockchain.blockchain should provide Stepped-decentralized productions for users.

## 1. Introduction

Someone argues that the so-called decentralization of blockchain is nothing more than a new center, which is recognized by the Edison. However, the new center is an open, transparent, technology-supported center for all participants.

Currently, it is still a pyramid structure, of which the top layer is a new center with technology as the core. The new pyramid is built from the bottom to up. The will of the lower level determines the shape and composition of the top. On the contrary, the traditional pyramid is a top-down one, the top level of which determines the form of the lower layer. At the same time, the new pyramid is completely created by code and performed by machines. Because the code is law, the code is always rational and the real rule of law.

On the contrary, the traditional pyramid depends on the rule of people at every level, which inevitably leads to the problem of corruption because of human nature. However, the code will never be corruptive, but only keep running in accordance with established logic.

Given such economic understanding, we designed a new paradigm DAO Social system model called **Plato, the core innovation is the Fractal Principle.**

We have always believed that Bitcoin is not a digital currency but a digital asset. Because the basic function of the currency is to serve as the transaction medium and value scale, while the basic function of assets is to maintain and increase value. People need assets as well as currency in their daily lives. We believe that the system can only be pushed forward with decentralized system currencies and assets as gas together to push the system continuously forward. However, the underlying economic logic of currency and assets is completely different and must be issued separately. Articles or charts comparing Bitcoin to gold is already very common.

Obviously, all options of Bitcoin have indicated higher value than gold. The end of the gold standard monetary system is not merely because of the difficulty of carrying higher circulation costs and cutting apart but more because the total amount of gold is limited. Although the gold trading volume in London gold trading market far exceeds the underground gold reserves, the paper gold can be manufactured at will and the precise total storage of gold is still unknown, in the public's perception, the total amount of gold is limited. Any goods with a limited total amount can only be an asset which may be used as a currency in a very short time, but definitely not in a long-term. The historical evolution of gold to credit currencies, correspondingly to the digital currency, The digital assets such as Bitcoin will inevitably transfer the functions of the

transaction medium by a new global digital currency with stable and adjustable supply, only retaining the digital assets attributes, as well as the hard currency function in critical time.

Given such economic understanding, we designed a parallel dual-currency economic system called **Hayek, stable currency ECHO** and **digital asset THALA**. This value stability is not like DAI, the anchored currency, nor USDT which is endorsed by the legal currency but achieved through a transparent issuance and destruction mechanism to strictly control the currency supply.

There is no difference between **THALA** and the ordinary digital currency. It has both use value and price value. Since the total amount is limited and there will be no issuance or destruction, THALA can only be used as a digital asset and a hard currency in times of crisis. THALA is the fuel that drives the normal operation of the system. It is also a digital asset with value storage capabilities.



## 2. Plato: autonomous society system.

### 2.1 Contract

It aims to intelligently contract the relationship between people and society. Such a system has no laws and Standardization, all constraint relationshThales are embodied in the form of smart contracts. Countries distinguished by region will no longer exist, and interest groups distinguished by chains will replace the concept of country. The contract in this system is divided into three types: global\_contract, group\_contract, and private\_contract. Global\_contract is a contract that all accounts on each chain must comply with. When users choose to join this chain, they can view the detailed information of global\_contract. This contract is used to deal with the relationship between people and everyone in society except themselves. group\_contract is only valid for accounts that agree to abide by this contract. The user of this contract deals with the relationship between a certain group. Private\_contract is similar to a normal smart contract. This contract is used to deal with the relationship between individuals. Each individual in the system can freely choose to join or create their favorite chain (country), and abide by their favorite global contract (law and ethics).

### 2.2 Fractal principle

Contracts at different levels are affiliated. The scope of application of

global contract is the entire system, the scope of application of group contract is voluntarily formed group members, and the scope of application of private contract is between individuals who cooperate with each other. There is a fractal relationship here.

The subordination relationship between contracts is realized through the inheritance of the contract on the chain. The inheritance relationship here is different from the inheritance relationship in the programming language, but the inheritance of the contract on the pure chain, so that the simplest code can be written through inheritance. The most complicated logic also makes the affiliation relationship between different contracts exist. The existence of affiliation between contracts can form a huge contract tree. The existence of the contract tree makes it possible for complex DAO governance.



### 3. Hayek: autonomous economic system.

We have adopted a completely new dual currency system because Edison, the designer of this economic system, a well-known economist and sociologist do not agree with the definition of currency in traditional economics. The most important point is that currency cannot have the function of trading media and value storage at the same time. The most essential function of currency can only be transaction medium, while the storage of value is the function that only assets can possess. Therefore, we have designed two currencies in the system. The currency used as the trading medium is ECHO. The BUT itself is a stable currency, of which the stability is not achieved by anchoring the currency but by adjusting the supply of money. The other currency, THALA, is designed for value storage. Any item that serves as value storage can only be an asset, and only items that have limited supplies (or are generally considered to have limited supplies) have value storage capabilities.

#### 3.1 ECHO

In the decentralized world, there has never been a greater need for a stable digital currency than this moment, with stability instead of fixed, which has been criticized by some of the so-called scholars for the excessive speculation of digital money, but not a global digital currency that penetrate into daily life. Fortunately, the underlying architecture of Thalesmakes it possible for the large-scale application of decentralized systems, and it is only in this case that the emergence of a universal

digital currency in the bit world becomes possible.

In the mechanism design of ECHO, we have not only designed a new currency supply adjustment mechanism but also designed a brand new credit system based on the trading day. ECHO aims to become a daily digital currency and a universal digital currency which only has transaction medium functions with self-regulate, and also has a reliable credit system. For details, please refer to our currency\_whitepaper. Believe it will give you a bright feeling.

We believe that the most essential relationship between people is exchange. The most essential function of money is the value scale and the medium of transaction. The wealth of every individual in the economic system does not depend on how many tokens he has but on the proportion of his personal wealth in the total social wealth. The reason for the existence of inflation is that the issuance of currency is not allocated to system participants in a fair and reasonable manner. The average and proportionate mechanism of this digital currency can achieve self-regulation. Based on this understanding of economics, we are prepared to build an economic system free of hyperinflation and deflation. In this economic system, a new currency allocation mechanism will be introduced to ensure the coexistence of fairness and efficiency and promote the sustainable operation of the system.

Unlike ordinary digital currencies, the number of ECHO is adjusted in real time, and the supply is adjusted according to demand. Followed is our money supply adjustment mechanism, the DMM mechanism: each transaction behavior in the system will automatically trigger currency

issuance in the amount of age number\* adjustment coefficient (coin day \* n).

For example, Alice transfers 100W to Bob, and Bob provides Alice with apple worth of 100W, then the system will automatically issue currency in the amount:  $100W * 1 = 100W$  (assuming the adjustment coefficient is 1). The already Issued and unallocated currency will be distributed with POES.

An important concept is the allocation mechanism of new distribution currency called POES, a portion (X%) of newly issued currency is allocated evenly to each period-active-receive account in the system, and the other (Y%) is allocated proportionately according to the period-active-received amount of each account ( $X\%+Y\%=100\%$ ), which is tentatively defined as  $X\% = Y\% = 50\%$ .

To achieve the purpose of the adjustable amount of money, it is necessary not only to have a mechanism for the currency issuance but also to have a mechanism for the currency destruction. Only in this way can a dynamic balance of currency supply be achieved. Behavior such as transfers and evaluations of transactions will consume a certain amount of ECHO as fuel. The fuel here will be destroyed directly. Of course, the user's transaction is free, and the unallocated currency in the money pool is destroyed. Here, the currency is issued according to  $MI = \text{transaction amount} * \text{adjustment coefficient N}$ . The decrease of currency is mainly to consume a certain proportion of the transfer transaction amount of ECHO as fuel. Fuel = transaction amount \* adjustment

coefficient M. Net increase of currency= MI–fuel consumption at a certain moment. Here you only need to adjust the coefficients N and M to control the supply of money.

### 3.2 THALA

THALA is the fuel that drives the normal operation of the Thalessystem. It is also a digital asset with value storage capabilities. Because it has both price value and usage value, and limited total amount, it will never be issued additionally.

### 3.3 THALA allocation scheme

Token name: THALA

Initial issuance of tokens: 10,000,000,000 (10 billion)

allocation plan	ratio	quantity
TRC	3%	0.4 billion
CECC	3%	0.3 billion
OPC	4%	0.3 billion
Private equity	10%	1.0 billion
Mining Award	80%	8.0 billion

10%: private equity. primarily distributed to early investors.

10%: team reserves. allocated evenly among technology, capital and operations committees.

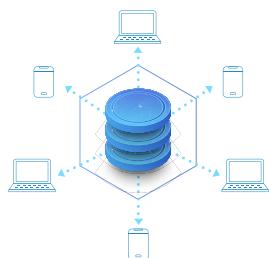
80%: mining award. used to reward miners.

## 4. Turing: autonomous application system.



### 4.1 postwallet

wallet for Tokens and DAOs for Thales.



### 4.2 postmarket

online market for blockchain based digital product.



### 4.3 postmessage

blockchian based secret message client.



### 4.4 postmoment

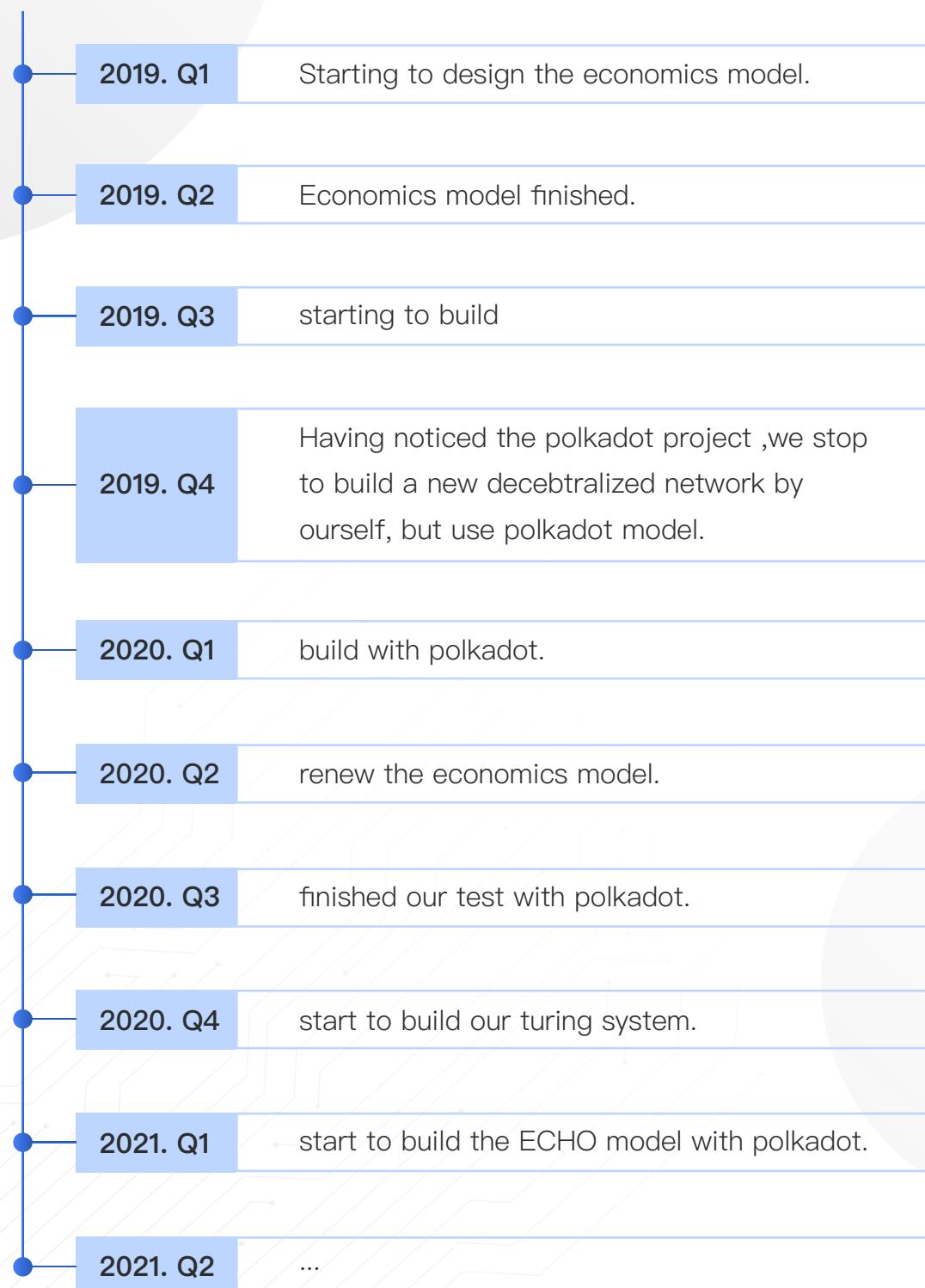
blockchian based moment-share client.



### 4.5 postworld

VR based blockchain virtual game world.

## 5. Roadmap



## 6. Governance Structure

### 6.1. Thales Foundation Introduction

The Thales Foundation has set up a technology and research committee, a capital and ecological construction committee, and an operation and promotion committee to jointly promote the Thales project.

### 6.2. Technology and Research Committee

The main responsibility of the Technology and Research Committee is to provide full technical support for the Thales project and to be responsible for the development, testing, and iterative development of the Thales project.

### 6.3. Capital and Ecological Construction Committee

The main responsibility of the Capital and Ecological Construction Committee is to provide capital operation and ecological investment support for the Thales project, and the committee is responsible for the fundraising of Thales projects, capital planning, market value management, and ecological investment.

### 6.4. Operations and Promotion Committee

The main responsibilities of the Operations and Promotion Committee are to provide operation and promotion support for the Thales project, and the committee is responsible for brand building, community operations, and marketing of the Thales project.





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