



Comunion

The DAO Collaboration Network
Build your decentralized organization

V 2.0

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2019-03-08

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Abstract

Comunion is a decentralized organization collaboration network, it is designed to help businesses, organizations, and individuals create, manage, and operate the DAO organization. Our mission is to make the world a fairer place by reinventing existing productive relationships, enabling efficient allocation of global resources, and allowing labor values to circulate, trade and accumulate as freely as capital.

1.Introduction

Productive relationship in modern society are the root of all evils of inequality, the underlying logic is similar to the logic of gene competition. The selfish gene wins in the competition, making its own gene iterate and strong, until it breaks the boundary of the original environment and enters the new environment to open a new round of competition. Different types of productive relationship have their respective advantage in different environments, ultimately, a certain kind of productive relationship will win the dominant position. However, with the changing of environment, the pattern of productive relationship will also change, and the new productive relationship will gradually replace the productive relationship that have obtained the previous dominant position.

1.1. Factor of Productive Relationship

Israeli writer Yuval Noah Harari mentioned it in his book: A Brief History Of Humankind: human beings have been living on the earth for 70,000 years, but the most rapid development is only about 200 years ago, along with the development from the cognitive revolution, agricultural revolution to the scientific revolution, human is also alienation of themselves to new problems - trying to pursue happiness but be tired by means. In the long 70,000 years of human history, most of the time is fair, people rely on their own nature to fight with nature, without the burden of institutional civilization, simple cooperation to meet the needs of survival, in this process, human beings are relatively happy without the puzzlement of injustice among human society.

The production relationship in the era of hunting is more of a loose collaboration, each division of labor use their good at measure to capture prey or gather wild foods, this is the first stage of human production relations. At this time, although the productivity is low, we are healthy, happy and sensitive.

As humans continue to learn and evolve in their struggle with nature, we enter into an agricultural civilization. We conquer wheat but also being bound to the land by wheat, and forming a family-based production relationship, a mild relationship with spring planting and autumn harvest, and self-sufficiency. Except for the food shortage caused by natural disasters, there is no other forced pressure.

It was the industrial revolution that really set off mankind's structural injustices. Entering the 18th century, Britain initiated the era of replacing manual labor with machines, marking the formal entry of human beings into the industrial revolution. The steam engine is the representative of this revolution. This revolution not only raised productivity but also promoted the transformation of the family production relationship to the factory production relationship, capitalists and the working class are the products of this revolution. The revolution also gave birth to a collaborative framework for adapting to this new type of productive relationship, that is, modern management.

1.2. Factors of Modern Organizational Governance

The verb “manage” comes from the Latin Manus, the original meaning is to train the footwork of the horse for various exercises in horse shows. Like the rider who use the bridle of a horse to spur and whip, the capitalist is trained from an early age to impose his will on others and try to control them through management. Control is the central idea of all management systems, which has been outspoken for all management theorists, for example, Leffingwell says, effective management is control." the two words are interchangeable in a sense because management without control is unimaginable.

In the medieval boss's workshop, control was based on obedience, this kind of obedience is required of apprentices and employees to show obedience to those they have contracted to serve. However, with the emergence of modern industrial groups such as large factories in urban areas, the whole control process experienced a fundamental change, the owner or manager of the factory, the employer as it is called, must obtain some degree of obedience from the employee, or enable him to exercise controlled cooperation. Workers only care about the livelihood income provided by the enterprise and do not care about the success or failure of the enterprise itself, because the modern management system only makes the rights and interests of capitalists for the distribution of corporate profits, the capital gains have nothing to do with workers. The harder the worker works, the higher the return for the capitalist, while capital gains continue to rise but labor income does not, the vicious circle of the harder a worker work, the poorer, this kind of management mechanism and benefit distribution mechanism the gap of wealth has been widening.

Business capitalism invented the Italian-style system of bookkeeping, with internal checks and oversight, which was the internal cause of modern management and gave rise to the industrial boom, until now, with the exception of a few information technology companies,

large business organizations around the world still operate with modern management systems.

Kazuo Inamori's management philosophy is very popular in the east, and the core of its content is still the continuation of the control and distribution management rules in the industrial age, which is a great challenge for the new situation and new working people in the information age, accompanying the development of productivity, mankind has entered e, of which the computer revolution and Internet information are the main factors of production.

1.3. Blockchain and Productive relationship

The appearance of the Italian bookkeeping system (also known as double-entry bookkeeping) marked the beginning of the modern management system, all factors of production and relations of production operate works base on this system, which also gives birth to the operation mode of large-scale industrial organizations and modern management system designed for controlling. But as we enter the digital economy in the 21st century, of which the world is full of sensors, machines are smarter and everything is connected. In such an era, data will become the main means of production, intelligent machines will become the mainstream productive forces of the society, and the productive relationship has unprecedented change. Blockchain will become a new type of production relations.

The blockchain is the double entry ledger of the digital economy, which has the same effect, but with greater significance and value, than the double entry ledger to the industrial and technological age and the information age. we will usher in an unprecedented era, an era of fairness.

Blockchain will improve production relations and fundamentally improve productivity. The legal definition of production relation is property relation, which is the ownership relation recognized in law. The core is property authentic right, private ownership. Blockchain is inherently trusted data, which naturally helps to confirm the productive relationship of various information on the blockchain so that the owners can obtain corresponding benefits without manipulation.

The modern production relations and organizational governance structure are centered on capital, and the arbitration costs and legal protection clauses of workers are very weak. Therefore, after countless lessons, workers can only return to the most primitive state with indignant, and the relationship with capitalists is a zero-sum game.

The authentic right mechanism of blockchain locks the wealth of workers in advance and no third party can deprive it, so it is more reliable and efficient in the protection of property relations and can release more and better productivity.

Blockchain technology brings new economic combination and value combination, and some distributed corporate models are emerging-- with innovation on ownership, architecture, operation, rewards, and governance all this goes far beyond encouraging innovative workers

and inspiring collective action, which may be the long-term prerequisites for a more prosperous and inclusive economy.

In the first era of the development of the Internet, management thinkers advocated networked enterprises, flat companies, open innovation and business ecosystem. They argue that this model will replace the hierarchical structure of the industrial model, but the corporate structure of the early 20th century remained largely the same, even for large Internet companies and the like, with a top-down structure.

Today's companies still maintain a gradation structure, and managers still view the company as a good model for motivating employees and an intangible asset for organizing talent - brand, intellectual property, knowledge, culture and so on. Corporate boards still overpay executives and chief executives far more than the value they create. It is no accident that such industrial structures continue to generate wealth, but not prosperity. The truth is that power and wealth are increasingly concentrated in large corporations.

Different from existing organizational structure, DAO organizations make their source code available for free so that each participator in the network can share power and use a consensus mechanism to ensure fairness, and operate their business openly on the blockchain to achieve all-hands co-governance. In the era of data economy, under the commercial background of taking blockchain as the new production relation, the organizational governance structure suitable for this new production relation is emerging, and the new organizational governance structure brings the new production relation into reality. Therefore, Comunion comes into being.

2. Institutions and Organization

Colombian scholar selznick once pointed out that: "The system of organization is just the process by which an organization as a tool instilled with values". He believes that organizations designed as instrumental machines to achieve specific goals have been varying degrees transformed to organization throughout history. Institutionalization occurs in the historical process of an organization. The institutionalization of an organization reflects its own unique history, the group and the vested interests the organization represented, and the way the organization adapts to the environment. At the same time, the most important significance of institutionalization lies in the injection of values into the organization beyond technical requirements, by this process, organization can no longer only be seen as an expendable and expendable tool, the participants of the organization hope that the organization can be preserved, and the organization obtains a personality structure and a special identity by reflecting a special value.

Modern management and online collaboration tools allow us to build our organizations in a very short time, how to inject the system into the organization, how to form the rules of the system and then sublimate it into values are the primary issues that Comunion considers in the construction of a decentralized organization, without values and an institutional framework to implement them, decentralized organizations will fall into groupthink, Compared with centralization with clear purpose orientation and tool attribute, the core of decentralized organization lies in the construction of values and the system of guarding the values.

Therefore, before building a decentralized organization, institutions and values need to be put in place:

2.1 Organizational Institutions

Institutions include the provision of stability, normative and culture-cognitive elements of social life and related activities and resources. Different social theorists have taken regulative, normative and cultural-cognitive as the three elements of the systems.

	Regulative	Normative	Cultural-Cognitive
Fundamental rules	Expedience	Social obligation	Taken-for-grantedness, Shared understanding
Basis of compliance	Regulative rules	Binding expectation	Constructive schema
Mechanism	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, Laws, Sanctions	Certification Accreditation	Common beliefs, Shared logics of action Isomorphism
Affect	Fear Guilt/ Innocence	Shame/Honor	Certainty/Confusion
Basis of legitimacy	Legally sanction	Morally governed	Comprehensible, Recognizable, Culturally supported

The dominant difference between centralized and decentralized organizations is the difference in organizational construction patterns, the implicit difference is in organizational

systems. Different systems determine different values, and the root cause of the social dilemma brought by centralized organizations is the problem of their underlying values, let's take a look at the social dilemmas posed by centralized organizations.

3. Centralised organization and Modern dilemma

Rousseau points out: "Man is born freehand everywhere he is in chains". One thinks himself the master of others, and still remains a greater slave than they. The main source of the dilemma of modernity is the contradiction between productive relations and productive forces, centralized organization form is the main manifestation of modern production relations. Top-down hierarchical management, form of task assignment result in managers at the upper level have acquired more means of production through continuous capital accumulation, this leads to a high degree of monopoly of production factors and insufficient liquidity, and then form a lot of social problems, that is, we say the dilemma of modernity.

3.1. Capital return is too high and inequality is rising

Karl Marx's capital theory, written in German and published in 1867, argued that capitalism inevitably leads to the polarization of wealth distribution, along with the industrial revolution, the development of technological revolution and the globalization of the information age, the unprecedented release of productivity has greatly improved the living conditions and living conditions of people all over the world, which also suspended the crisis of capitalism. Angus Deaton summarizes the positive improvement of the above development in his book. "The Great Escape: Health, Wealth, and the Origins of Inequality", the foundations of human existence have indeed improved from indicators such as reduction in neonatal mortality, increased wealth and income, health improvement, economic development and other indicators, the polarization of wealth and social status is also ignored, in fact, as basic survival problems are resolved, we enter a new stage of inequality, inequality in the distribution of wealth.

Thomas piketty, a French economist, analyzed wealth distribution data from the 18th Century industrial revolution to the present in the book "Capital in the 21st century", argued that unconstrained capitalism has been led to a rise in wealth inequality, free market economy cannot completely solve this problem. He delves into the wealth of wages over the past 300 years, wealth of data on income distribution in many countries reveals that inequality has widened in recent decades and will soon get worse.

3.2. Centralized org pursue of efficiency, Unemployment wave hit

Centralized organizations pursue maximization of shareholder benefits and minimization of costs, so automation is the eternal demand of centralized organizations in pursuit of

efficiency and benefits. Automation is no stranger to replacing human work, and as technology advances, humans may be displaced far more quickly than thought. The average annual growth rate of robot shipments from 2010 to 2016 was 16 percent and high rate of growth will continue until 2020. The Deutsche bank said in a report, the labor force (15-64 year-old) in developed countries and China, which peaked around 2018 and then declined year by year, will also drive the automation wave. McKinsey published a report late last year called “workforce transitions in a time of automation”, which assessed the number and types of jobs that could be automated over the next 13 years, for about 60 percent of jobs, at least a third will be automated, according to the report - “We estimate that between 400 million and 800 million individuals could be displaced by automation and need to find new jobs by 2030 around the world”.

On the social level, since the jobs being replaced are “low-wage and low-skilled”, this means that workers being replaced by automation have a harder time finding new jobs, which can also deepen social inequality. Karen Harris, macro trends Managing Director of Bain & Company, told on the 2018 investment strategy conference that cost-effective automation and a shrinking workforce will depress economic growth and create more inequality.

3.3. The technology oligopoly is undermining competition and innovation

The International tech giants like Google, Facebook, Amazon (GAFA), these giant tech companies, most of which have been around for less than 20 years (Facebook for 14), have grown exponentially in size, wealth and influence, reach out to and control more sensitive areas, becoming the most important and core infrastructure or platform of the digital economy, as tech oligarchs grow ever larger, the downside becomes ever more obvious, People, government officials and the media are deeply worried their monopoly of information. Today these companies are accused of being BAADD—big, anti-competitive, addictive and destructive to democracy. This reflects an indisputable fact that science and technology monopoly is almost out of control, they dominate the user data, advocating to use technology to solve all problems, indulge network spread false information, seriously overdrew social resources, impact the traditional industry, tax evasion, widening the gap between rich and poor, weakened the middle class, cause harm to the interests of the whole society. China tech giant companies like Alibaba, Tencent, Baidu etc have established massive base of users, They are alert to the competitive threat posed by smaller firms in their industries, either by locking them into alliances with investments, partnerships and interests, or by stifling innovation by copying technology and colluding in exclusive agreements, large companies have absolute advantages in the accumulation of capital and resources, small teams face huge challenges in the acquisition of capital and talent, making it increasingly difficult to start a business, only a few startups are able to get financing and are still making breakthroughs, fewer than 1% are valued at \$1 billion, the environment for fair competition and innovation is undermining.

3.4. Leakage of individual privacy phenomenon is in flood

While we enjoy the pleasant experience and efficient life brought by technology, we are also plagued by data privacy leakage. In the traditional web2.0 applications built with centralized services, all user data is stored in the service provider's central server, each person is tagged with tens of thousands of tags by different service providers, and these tags have your real identity, shopping preferences, browsing preferences, daily activities, location, etc., and they know you even better than you do. A British political consultancy Cambridge Analytical filched at least 87 million Facebook users data through a question-and-answer app without consent or notification, It then sold the data to the Trump campaign, allowing it to accurately target campaign ads at Facebook users during the 2016 presidential election, Such examples abound in life. If the private data that these tech companies hold on their users falls into the wrong hands, the consequences could be dire, this is no scaremongering, privacy leakage may lead to our personal property be threaten, thoughts be bound , and may even threaten national security.

3.5. Social organizational contradiction leads to poor governance

The social organization is managed and operated by a centralized management team with funds from social welfare funds, the development of public welfare organizations faces several thorny problems, among them, the most malcontents are information asymmetry and financial opacity, which limit orgs' development and also make it difficult to achieve good governance for their purposes on social issues . Therefore, how to coordinate large-scale resources to solve social problems through social tools has become an urgent need at present.

4. Decentralized Autonomous Organization

The organizational model is mainly divided into two schools, classical organizational theory and neoclassical organizational theory, the former emphasizes human as “brokers” in the organization, this theory provides theoretical guidance for the rationalization of division of labor, activity arrangement and system construction, the common starting point of the classical organization theory is to improve the management efficiency of enterprise organization. It is built around four pillars, which are respectively the division of labor, hierarchy and the intelligent method, structure and span of control theory. The latter emphasizes human as *social man* in the organization and the importance of social group to organizational efficiency, also made important modifications to some major defects of classical organizational theory. One of the most important features of neoclassical organization theory is that it pays more attention to the role of each individual in organizations, and begins to conduct in-depth research on the behaviors of organization members, paying more attention to the value of individuals.

The former constitutes a centralized organization and the latter a decentralized organization. The organizational model is strictly dependent on its special times background, always the one with the lowest transaction costs is chosen. The centralized organization originated from the industrial revolution. With control as the core idea and efficiency as the goal, it constructs the industrial civilization of the whole human being and shapes our current organizational mode. With the development of society, both technology and ideology, the main appeal of the people is changed from fulfilment of basic survival and social needs to innovation and self-expression. In this era, the contradiction of the organization mode production relations based on centralized control is more and more obvious, the irreconcilable contradiction between the characteristics of the time when everyone pursues self-worth and the organization mode which takes control as the core idea, therefore, it is necessary to explore the next generation of organizational forms.

Compared to all kinds of social problems caused by centralized organizations, decentralized organizations have incomparable advantages in fields of activate productivity, coordinated group intelligence, exploding innovation, solving social problems etc. American writers Ori Brafman and Rod Beckstrom first proposed decentralized organizations in their book -" The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations".

When it comes to decentralized organizations, the first impression is usually there is no absolute leader, no hierarchy, open system etc. With the influence of centralized org (command and control, rules) , many people may worry about de-centered orgs may have problems like sheep without a shepherd, groupthink, prisoner's dilemma etc, one of the example is tragedy of the commons (a situation in a shared-resource system where individual users acting independently according to their own self-interest behave contrary to the common good of all users by depleting or spoiling that resource through their collective action.) Ophuls (1973, p. 228) argued, for example, that "because of the tragedy of the commons, environmental problems cannot be solved through cooperation ... and the rationale for government with major coercive powers is overwhelming." In other words, "if ruin is to be avoided in a crowded world, people must be responsive to a coercive force outside their individual psyches, a 'Leviathan,' to use Hobbes's term" (Hardin 1968).

So is Leviathan the only solution? Nobel laureate Elinor Ostrom does not endorse this approach in her book *Governing the Commons: The Evolution of Institutions for Collective Action*, She rejected this crude conclusion based on the assumption of perfection, In fact, the cost of centralized leviathan institutions is quite high, while the abundance of social tools will provide sufficient information interaction for all benefit relatives and find a way to solve the problem of maximize and balance interests of collective and individual. New productivity tools are being created, along with rapid development of new productivity tools decentralized decision-making is coming into reality.

5. About Comunion

Comunion is a decentralized autonomous organization collaboration network, helps companies, organizations and individuals all around the world to create, manage and operate their own decentralized autonomous organization (The DAO). aims to solve complex problems of org and social dilemma by establishing the decentralized collaborate org using swarm intelligence as the decision-making principle to activate each individual's creativity, reshape way of organizing to unleash productivity, make the world more efficient and fair. Do the labor value freer.

5.1. Why need Comunion?

The inequality caused by the high concentration of capital has become even more serious, and it has affected human society profoundly in many aspects, like career choice, wealth distribution, entrepreneurship, innovation, and so on.

5.1.1. Startup Company

It's easy to create a business entity by One-Click, other than the traditional tedious & high-cost way of registering in government departments, by the Comunion's IRO mechanism of creation meaning circulation to assist startups for effective fundraising and fast-start.

5.1.2. For Freelancers

Without shackles of the employment system, anyone can join several decentralized companies to make use of time and passion meanwhile get paid, enhance personal creativity, maximize your self-worth.

5.1.3. Social Orgs

Remove the hindrance brought by decision-making and financial opacity to organizational development, enlarge orgs' ability boundary, through Comunion effectively coordinate more resources for social issue governance.

5.1.4. International collaboration

Traditional transnational cooperation of talents is faced with information asymmetry, complexity of fee settlement and high cost issues etc. through the smart contracts of Token manager, the cost and complexity of cross-border settlement can be reduced.

This is not the whole story. Comunion's openness determines its potential boundaries, and the size of the boundaries depends on your imagination, expecting you to explore more of it.

5.2 What problem does Comunion solve?

There are two core issues involved in any form of organization:

5.2.1. How to motivate organization members?

Traditional centralized organizations have solutions for incentives: salaries or salaries and shares. decision making by board resolution or shareholder meeting resolution.

Salary is a means of employment payment. Traditional organizations lock the working hours of workers by paying them a fixed salary. However, with the development of society and raising competitive threats, workers are required to devote more time to their work with fixed salary, hourly wages are in fact getting lower, for example, the recent debate erupts over China programmers' '996' work schedule, 24 hours overtime in multinational companies and so on.

Paying ordinary workers in shares in traditional org: since the pricing power of the stock is entirely in the hands of the board of directors, there is a strong uncertainty about the stock incentive for ordinary employees. that means, even if the company commits to the stock option, for the sake of decision-making is done by board resolution or shareholder meeting resolution.

the board can pass a resolution to zero the value of your options when they exercise their right. This is particularly true of nasdaq-listed Chinese companies, which are not uncommon: such as 58.com Inc., Qudian Inc., MOGU Inc.etc. This deception behavior of bad money drives out good leads to the rising transaction cost of talents, makes it difficult for small and medium-sized teams to recruit excellent talents by selling shares.

5.2.2. How to make decisions?

Decision-making in centralized organizations are often too simplistic, all decisions are made by managers in the top-down hierarchy management structure, decision making is slow with multiple levels, the feedback loop is often too long and inefficient, manager is often overburdened, while employee is often in low morale motivation, top level managers devote maximum time in taking routine decisions, all others receive commands from managers, as a result, everyone focuses on their own part and fails to drive the whole team to participate and solve the problems facing the organization, especially in a fully competitive environment, it is difficult to expect managers to make correct decisions every time and to maximize the interests of the organization and individuals.

We always overestimate the value of internet, and underestimate the value of how to use technology to make the social network working better, we spend too much time solving

technical problems, rather than solving social problems about how can people collaborate better together, Comunion is to solve this problem.

5.2.3 Comunion mainly solves three problems:

1. Provides registration service to help users generate their own decentralized organization or company.
2. Provides management and operations templates to help users operate decentralized organizations or companies.
3. Provide a funding mechanism to assist decentralized organizations or companies in early fundraising.

Comunion will achieve more efficient resource allocation, more innovative pattern validation through the above three core points.

Comunion helps users create and operate decentralized organizations to enable specific business development, through voting and token helps users realize incentives and decisions within the organization. With one click, you can register your own decentralized organization or company. Compared with the traditional cost of company registration and the maintenance cost after registration, it is very simple and economical to register a company in Comunion. Moreover, Token can be issued directly to Comunion's fundraising platform for circulation after registration, so as to solve the funding problem efficiently. In addition, through decentralized organizational structure to coordinate global resource integration and innovation, and through social tools such as twitter, Facebook, WhatsApp and other social tools to coordinate the efforts of organization members, the team only needs to focus on its own business and vision, to develop the business better and faster.

6. Blockchain governance rules

As mentioned above, the two core issues of all organizations: incentives and decision-making, decentralized organizations have added another question: collaboration issues. Here's how Comunion solves the incentives, decisions, and collaboration of decentralized organizations.

6.1. Incentive

Incentives are easy to understand, mainly to reward people or organizations that contribute to the organization. Centralized organizations' incentive is realized through stocks and salaries, while decentralized organizations are mainly rewarded by Token. Token has two advantages over salary and stock:

1. Once acquired, it cannot be deprived.
2. With appreciation potential, low transaction costs.

Therefore, decentralized organizations mainly use Token as the main incentive.

6.2 Decision making

Decentralization teamwork and decision-making depends on the voting method of the whole staff. Let's take a look at the voting design of Comunion.

6.3 Core principles of Vote design

6.3.1 Get rid of the Impossibility Theorem

If there are more than two people with different preferences and more than two distinct alternatives, then it is impossible to make a decision that most people are satisfied. Therefore, it is impossible to find a whole society's preference sequence which is not logically inconsistent with the individual preference sequence when each social member has his particular preference sequence for all possible socio-economic structures.

6.3.1.1 Group rules

To make rational group decision-making, it is obvious that each of the decision-makers should first make a personal preference ranking for all alternatives, that is, each individual's preference has the following three characteristics in the alternative options:

1. Reflexivity, x is at least as good as itself.
2. Transitive, if x is preferred to y and y is preferred to z , then x must be preferred either to z .
3. Completeness, individual must have a preference relationship between any two sets of options; either prefer x to y , or that they prefer y to x , or both (indifference). Comparable.

These three properties are called the weak order or preference order on the alternative option set. However, even if every individual preference is the preference order on the alternative set, the group preference generated by a group decision rule may not be guaranteed to be the preference order on the alternative set, that is, the impossibility theorem. In order for group preferences to rank group preferences for all alternatives in the program set, we call group preference rules that make group preferences a preference order on the program set (ie, reflexive, transitive, and completeness). The groups on the program set can sort the rules.

6.3.1.2. Majority principle

The minority obeys the majority. When the group decision-making process is a process of summarizing effective information, and the judgment is based on the aggregated information, the group decision is higher than the individual; when the group decision is the judgment of the group personality formed by the individual personality. Group decision-making may lead to groupthink.

6.3.1.3. Weighted average PageRank

Google's search ranking essentially extracts valid results from a decentralized network. A weighting issue is introduced here, that is, how does the decentralized screening mechanism give professional opinions higher weight to achieve effective information aggregation.

6.4 Three conditions for a valid vote

6.4.1. Diversity of Suggestions

Diversification mainly achieves decisions hedging. When each person only considers the optimal solution to himself, the right decision-making and the wrong decision-making will be hedged, and the remaining decisions are the right decisions. In the biological world, bees, termites, and fish stocks always perform well in group decisions.

6.4.2. Independence

The core idea of the book *Psychologie des Foules* is that once the individual enters the group, individual consciousness is easy to fall into group consciousness, they concern is the disappearance of the individual, and their judgments will be interfered with and then converged while the structural characteristics of decentralized organizations ensure the independence and autonomy of each individual, each decision is relatively independent and avoids the groupthink.

6.4.3 Aggregation

The essence of group decision-making is to aggregate individual decision-making, process of group decision-making is to effectively aggregate individual decision-making, that is, to overcome the impossible theorem by realize transitivity of individual preferences.

6.5. Motivation for participation

It is necessary to increase the individual's voting participation and bring together group wisdom. Howard Margolis divides altruism into two kinds. One is pure altruism. It means that my utility is an increasing function of others' utility - the greater the utility of others, the greater my utility. The other is to participate in altruism, which means that my utility is a functioning pay. Therefore, the reason why I voted. On the one hand, I personally and all others can get the expected benefits, so despite there is a problem of probability, the expected benefits are greatly increased. On the other hand, even though my voting has a small probability of decisiveness, I am happy to vote. In short, rational behavior includes an egoism and two kinds of altruism.

1. Incentive mechanism

Incentives are not just material incentives, but also honor incentives. In addition, incentives are also divided into individual incentives and group incentives.

2. Expected income

First, we need to avoid the voter's entanglement in the Downsian Model and adopt the pattern of expected returns. That is, the voting initiator should be encouraged to explain the expected return of the voting participants.

6.6 Program goal

The final voting scheme is the balance of the following three scenarios:

6.6.1. Fair

The first principle of voting is to maintain fairness. This is also the meaning of voting. How to ensure fair voting is a key issue in design. From a fair point of view, the following small principles should also be followed:

- a. Everyone can vote;
- b. The voting process is transparent throughout;
- c. The voting result is closer to maximizing the interests of everyone, maximizing the benefits; of the majority according to the principle of "more work, more gain";
- d. Voting weight is directly proportional to interest.

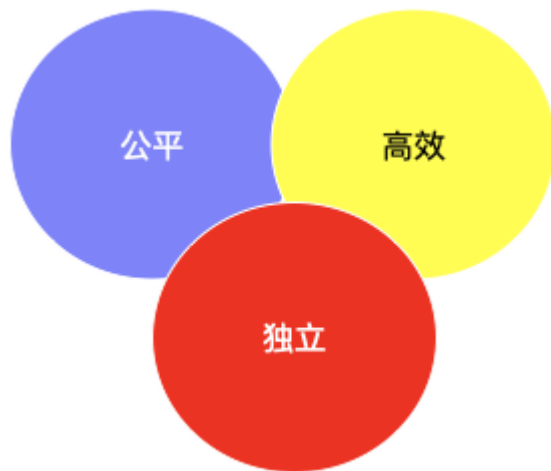
6.6.2. High efficiency

Since the purpose of this program design vote is to achieve decision-making of the decentralized organizations, the voting process needs to be as efficient as possible to achieve a fast and effective decision-making process. Under this premise, the following principles should be followed:

- a. Set start and end time;
- b. Set voting closure rules;
- c. Rolling voting mechanism to achieve multiple voting items in parallel.

6.6.3. Independent

The fact that everyone can vote is a sign of diversity, and diversity is also a way to think independently and not to get caught up in groupthink.



6.7 Similar Solution Problems

The core of the DAO is community governance, and the core of community governance is voting decisions. DAO has encountered some common problems in the process of implementing voting decisions:

Voting right depends on marketing price, so it can obtain network voting right from purchasing, which leads to the bad situation of centralized decision-making power.

Before voting, it is necessary to have proof of stake by locking positions, which is not conducive to coincide of multiple proposals and reduces the decision-making efficiency.

A large number of initial users having rights will affect the fairness of subsequent voting decisions.

Using token rights and the voting rights are not separated from each other, which causes the bad governance effect.

Comunion is designed for improving the effectiveness of network decision-making while opening transparent DAO governance, and promoting the healthy and long-term operation of resolution mechanism. Therefore, a well-designed mechanism is particularly important, so we designed the following voting scheme:

6.7.1 Designing Solution

Any holding token address can vote, each x tokens is 1 ticket, more than x tokens vote according to x multiple * alpha factor decrement, if each address according to the attenuation formula calculated more than 30 tickets, it can only take 30 tickets. Each address of companies can only count up to 30 tickets. The voting must set a strict "begin time" and "end time" + "defer time". After the voting time, if there is no new vote during defer time, the voting will be closed, if still has new vote, it will automatically postpone defer time and continue upper loop.

6.7.2 Filtration and Stimulation

In order to prevent pointless voting, which the community misuse the voting function and wasting the attention and resources of community members, when the voting is initiated, a certain amount of tokens should be mortgaged to create a vote each time. There will be a minimum amount of collateral token to filter out pointless votes, but the amount range can be freely defined by the user. In order to drive and reward the voting behavior of community members, the token of mortgage is distributed in proportion to the proportion of voting quota of all voting members.

6.7.3 Impeachment System

Comunion vote is based on consensus. Similarly, the removal of Vote authority can be done by consensus.

In order to avoid manipulating community decisions from holders of large tokens through their influence and voting rights, the community needs an impeachment system to cancel the vote right of the address, which is called "impeachment system".

If users with large tokens do something harmful to the network ecology, community members can initiate "impeachment system". The requirements for initiating an impeachment motion are as follows:

- The total amount token of initiating proposal under contract address shall be between the balance of the impeached party's token addresses 80% and 120%, and the entire amount shall be mortgaged.
- The balance of token address from any of initiating proposal shall not exceed the balance of token address from impeached person.

If these conditions can be made deals, the proposal becomes effective and a community vote is opened. The voting results have a two-way combustion mechanism, which means:

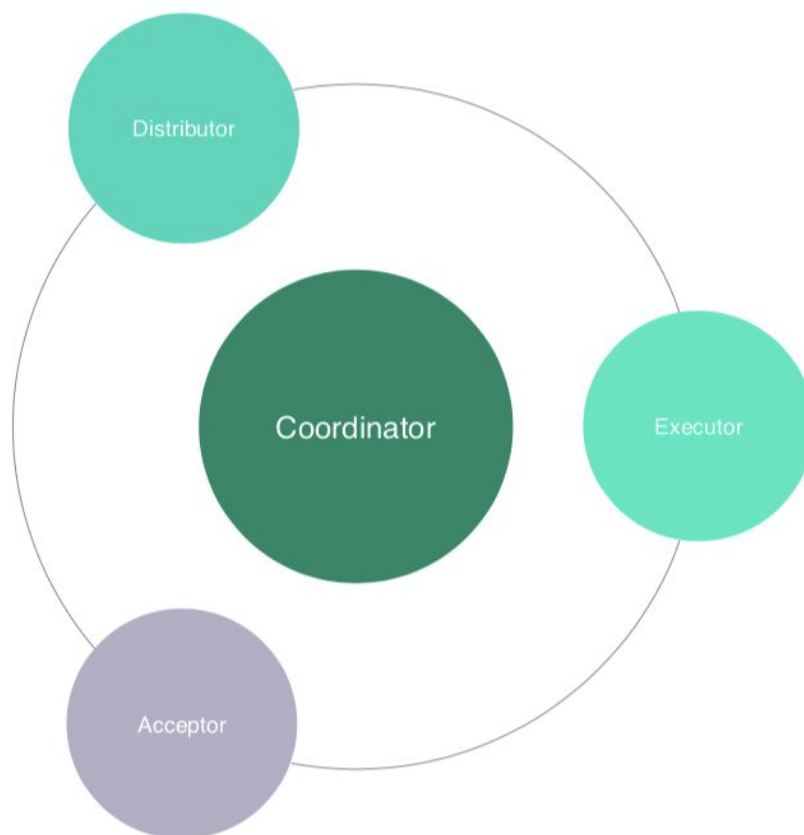
- If "impeachment succeed", the contract burns $x\%$ of the impeached token, while the proposer receives $y\%$ of the token reward.
- If "impeachment fails", each proposer is contract burned with $x\%$ of token, and the impeached gets $y\%$ of token reward.

Note: Among $x > y$, the extra token can be destroyed directly.

Not as traditional centralized organizations, which have clear managers to arrange tasks from top down as, all the members work in the same space. The relationship between employees and the organization is an employment system, with trust and punishment mechanism. Therefore, the cooperation mode of the members of the centralized organization is a kind of management work, and the leadership is responsible for it. Decentralized organizations have members scattered around the world, anonymous, and do not employ production as a penalty mechanism, so it is very difficult and complex to coordinate the output of decentralized organizations with unified goals. Currently, most of the world's blockchain teams are basically organized in a centralized, member recruitment and production mode, so the problems in collaboration are not obvious. The Comunion team itself is a decentralized operation, so we have innovatively designed solutions for the collaboration of decentralized team members.

6.7.4 Designing Principles

Indirect Collaboration



Comunion divides the collaborative decision-making roles of decentralized teams into four categories:

Distributor/Executor/Coordinator/Acceptor

Distributor

Responsible for assignment and publishing of tasks

Executor

Responsible for implementing and completing tasks

Coordinator

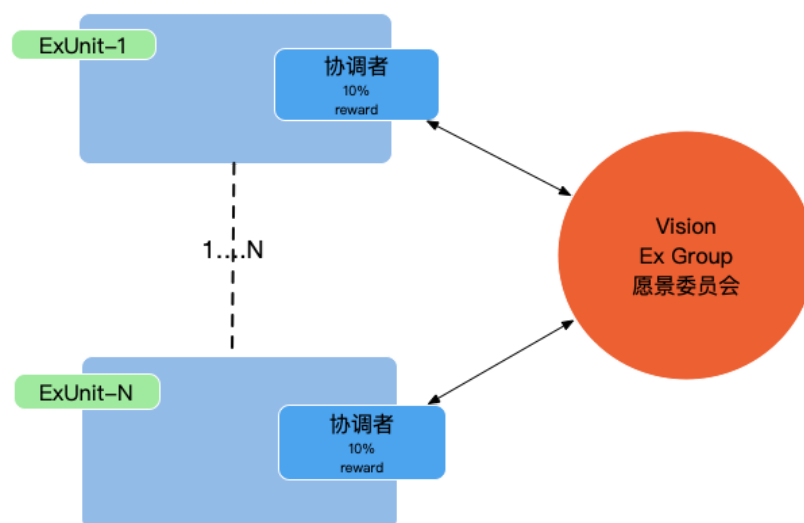
Responsible for the coordination and supervision of the implementation and promotion of the task cycle, as well as the regulation and supervision of the overall progress of the project.

Acceptor

Responsible for the evaluation and acceptance of the task, sometimes the distributor is acceptor.

Overall assignment operation mode

Find acceptor and executor through coordinators, a task team is composed of the coordinator, the inspector and the executor, who are responsible for the implementation, completion and submission of specific tasks.



Specific implementation documents can be viewed by using the Communion platform or by visiting how Comunion works label of <http://bbs.comunion.io>

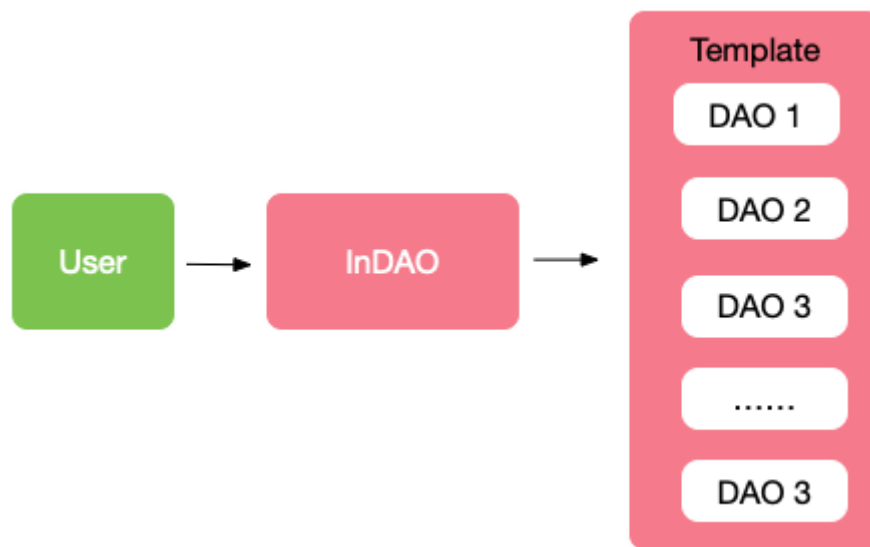
7. Module of product

Comunion mainly provides several core modules:

MakeDAO

MakeDAO module is the organizational framework of the DAO defined by Communion and it is the production of the DAO mode. With Make DAO, users can create their own organization of the DAO and set up the running rules. During initialization, Communion will

provide several organization templates about the DAO (The DAO has no fixed form, which is in line with the core concept of DAO, that is, it is better to make it decentralized) for users to choose.



The specific product flow will be presented in the actual product.

7.1 Token Manager

Token Manager is a token allocation tool organized by DAO. Through Token Manager, it allocates tokens to different roles in DAO, which is used to pay daily expenses, salaries, rewards, dividends and other matters.

7.2 Vote

Once the DAO organization enters into normal operation, all decisions of the organization are made by voting mode. In voting, time, proportion of YES vote and minimum voting number can be set. By voting will enter the stage of execution, if it involves Budgets, it is divided into the Budgets. The result of voting is written as BlockChain.

Comunion has two types of vote:

1.Yes or No type

2.Option select type

The first mode Yes or No is a common in the market, which is mainly used to record options the Yes or No.

The second option select pattern is primarily used to filter different options.

7.3 Finance

Finance is the financial management module of an organization. In Finance, users can see all token transaction records of the organization's public accounts, which are the center of the organization's account. Through Finance, users can also transfer money to other Ethereum addresses, including wallet, transaction record analysis and so on. Meanwhile, finance has also embedded the function of issuing tokens online to help the team generate their own tokens through online web forms.

7.4 Proposals

All Comunion members can submit Proposals, set the number of votes and minimum percentage of Yes votes. After passing proposals, they will be put into formal votes. The committee will make the final decision. Initiating the Proposals, it needs to consume tokens.

8. CGT Token Economy

Comunion token (CGT-Comunion Governance Token) is the token that the DAO organizes to circulate and realize governance requirements, and it plays a guiding role in the development of the Comunion economy. Meanwhile, it is also the basis for the operation of foundation accounts. The significance of CGT is that:

1. Spread the concept of Comunion
2. Increase the radiation coverage of Comunion
3. Attract more like-minded participants
4. Comunion DAO follows the common development of ecology
5. Create a fair, open and efficient DAO organization ecology
6. New productivity promotion and release of new production relations

8.1 Comunion Character:

8.1.1 Genesis Token

Comunion economic token is used as the settlement currency of the whole system. Meanwhile, other rights and benefits derived from the whole Comunion in the future will be allocated with this token as incentive.

8.1.2 Hybrid Governance

Comunion innovatively proposes a mixed governance model. Token allocation adopts POW (Proof Of Work), and interest Proof mode adopts POS (Proof Of Stake). The organic combination of the two models achieves efficient, fair and independent governance.

8.1.3 Smart GAS Price

Comunion introduced the GAS billing model into the service field for the first time, realizing the dynamic pricing of infrastructure services and effective allocation of resources throughout Comunion, and improving resource utilization rate.

8.1.4 IRO Measure

Comunion is the world's first registered issuing system. After registering an organization with one key, the tokens of organization will automatically enter the exchange for circulation, thus improving the survival of the organization and facilitating its growth.

8.2 Offering By-Law

The initial release of 1 billion CGT is as follows:

10% for decentralized fund-raising (Bancor agreed offering)

5% for private equity (holder of the secret key for private account)

15% for founder member apportion, within 2 years' release

50% for Comunion fund (to cover daily operating costs, including administrative expenses, operating expenses and other legal, and tax expenses, as well as Comunion product development and ecological construction)

10% for Comunion global marketing development

10% Comunion IRO Fund

8.3 Program of Offering

1. Each year, offering raise token and remit them to the foundation account for ecological stimulation.
2. The specific raise quota is dynamically adjusted according to the speed of ecological development.

8.4 Raising Token Principles

All raising action must be approved by community proposal and votes.

Raising detailed rules will be published by the network one month in advance.

If there is no demand for raising offer or token raising no more than 5% in the whole year, the raising offer shall be acquiescent to 5%.

8.5 Program of Destruction

The deposit deducted from the arbitration will be destroyed unity on a quarterly basis. Arbitration of disputes involving organizational governance and inter-organizational disputes, all margin deductions, shall be processed in accordance with quarterly destruction.

8.6 Using Principles of Foundation Accounts

As a common asset account of the community, the foundation account will be dedicated to expanding the ecological influence of Comunion and promoting the spread of Comunion's concept.

Its expenditures include:

- Growth incentives
- Business subsidies
- Task motivation
- Daily operations
- Media publicized
- Incentive bonus

8.7 Incentives Measurements

CGT tokens are implemented by the foundation in the incentive plan. In the early stage of development, it will focus on providing incentives and subsidies to organizations or individuals stationed in the ecology. After distributing the initial benefits, the early community members also assume the obligation of governance DAO, so on the basis of token contribution, they will also consider the incremental resources introduced for ecology.

Each incentive plan carries on according to the different amount to vote, ensure the making decision and development of the organization are carried out according to the overall will of the community.

The following actions will be the primary consideration and incentives from the foundation:

1. Directly or indirectly contribute to Comunion platform
2. Introduce new users or organizations
3. Use CGT as the payment
4. Release IRO by mortgaging CGT
5. Operate CGT social network or increase publicized
6. Vote with collateral tokens

8.8 POS Equity

Network raising token will be in accordance with the user mortgage token proportion of the whole network, as equity dividends distributed to mortgage token and participate in community governance users, the rest of the token into the fund pool.

9. Development Planning

2019

The project approval

The team formed

Issuance of CGT Token

The V1.0 version move into private beta test

The V2.0 version move into private beta test

The V3.0 version move into private beta test

2020

Product launches

The global DAO organization was convened

Product upgrade

Comunion ecological construction

10. Team introduction

The Comunion team brings together a group of Geeks from all over the world who have a strong belief in building decentralized organizations to break the capital monopoly. We do not rely on the background of the past to endorse, the work is our response to the world.

Kering

Comunion Initiator

Comunion Vision Committee Member

The man nobody who knows

Manstein

Comunion Tech Lead

A veteran who has been serving in software dev for more than ten years; a new recruit but a true believer in Blockchain.

ZiShuo

Comunion Coordinator

Comunion Vision Committee Member

I used to be a musician, filmmaker, and entrepreneur. In the past, I have been trying to make myself better. But now, I am trying to make the world better.

Cosine

Comunion Crypto Economic Designer , CGT (Comunion Governance Token)

Designer

Full stack developer, has been serving in block chain org and crypto exchange company One of the comunioners.

Alex

Comunion Designer

Designer & Illustrator Use my way to design everything.

Y

Comunion Engineer

We cannot solve our problems with the same thinking we used when we created them.

Song

Comunion Product Manager

Be honest with yourself.

Elisa

Comunion Business Developer

Be a dreamer

Abel Chan

Comunion Business Developer

In-depth knowledge of decentralized architecture, block chain and cryptocurrency
6 years' experience of business development and management in terms of consulting firm, solution team and sales organization, 10 years' experience of Management Consulting, IT Consulting and information system implementation, Industry coverage and know-how regarding Blockchain, financial service, manufacture and government sectors.

Elaine

Comunion Translators, Media Contactor

Go with your passion. It has been said that who see the invisible can do the impossible.