

LifeWow

Global Healthcare Ecosystem

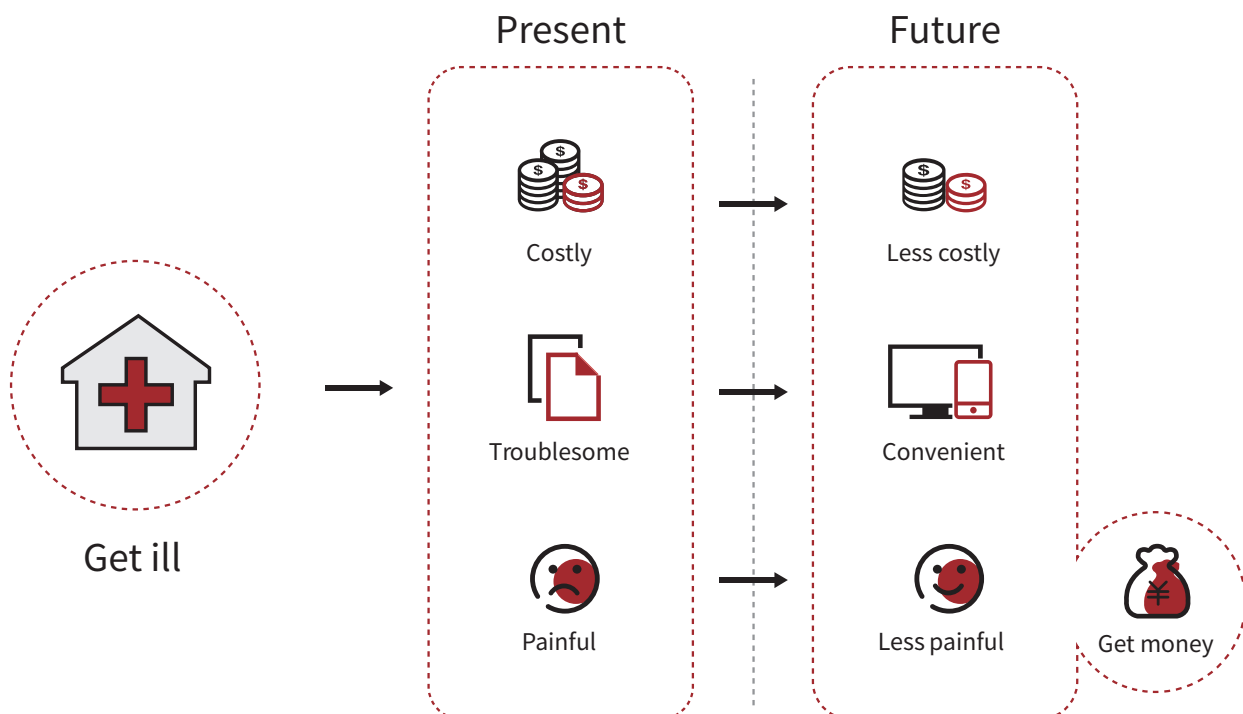
LifeWow's Proposition & Vision

LifeWow, using blockchain technology and Token economy model, helps everyone to link personal health records, medical health service plans and personal digital assets to form a security protection. And with the aid of certification and collaboration system, medical service resources are added to the LifeWow ecosystem to promote efficient and accurate matching of medical service resources and demand resources, ensuring Token's convenient transactions and asset security. LifeWow will help everyone to get a complete medical care from a family doctor and a team of doctors nearby, and will provide medical and health services around the world based on geographical location subsequently.

Let everyone get the stable quality of health care services conveniently with a limited budget.

Let the global demand for medical and health services and supply of resources be more effectively matched, reduce the industry cost by 50%, and make the global medical service industry "cheap, easy and good"!

Let more people be happier because of healthier.



■ 1 Problems

The global medical market is expected to reach \$9.59 trillion by 2018, but it still faces severe challenges. Whether it is the United States, China or other countries, the medical system faces difficulties and suffers criticism. Among them, the common problems include: the growth of medical expenditure exceeds the growth rate of GDP, the quality of medical services is poor, and the failure of the medical payment system leads to the bankruptcy of individuals and the state.

There are five common problems in the global medical and health industry:

- Supply and demand mismatch. The patient's medical treatment was disorderly, resulting in inefficiency, and the payment is not consistent with the patient's illness, resulting in waste of expenditure.
- Medical information island. Each medical institution has its own affairs, and the information is not circulated, resulting in the fragmentation of medical records and repeated inspections.
- Missing health record. Patients do not have complete health records and do not have the actual ownership and control rights of health records that cause repeated medical care, over-medical care, and loss of equity in information ownership.
- Supply-driven model. The entire consumption behavior is determined by doctors and institutions. They benefit from more medical services, resulting in more expenditure than the actual demand, and the growth of expenditure exceeds economic growth, causing a heavy burden on the government and individuals.
- Industry benefits solidified. In the long industrial chain, the interests of all aspects are solidified, so that local innovation and technological breakthroughs have to adapt to the existing rules and processes, and innovation value is difficult to reflect.

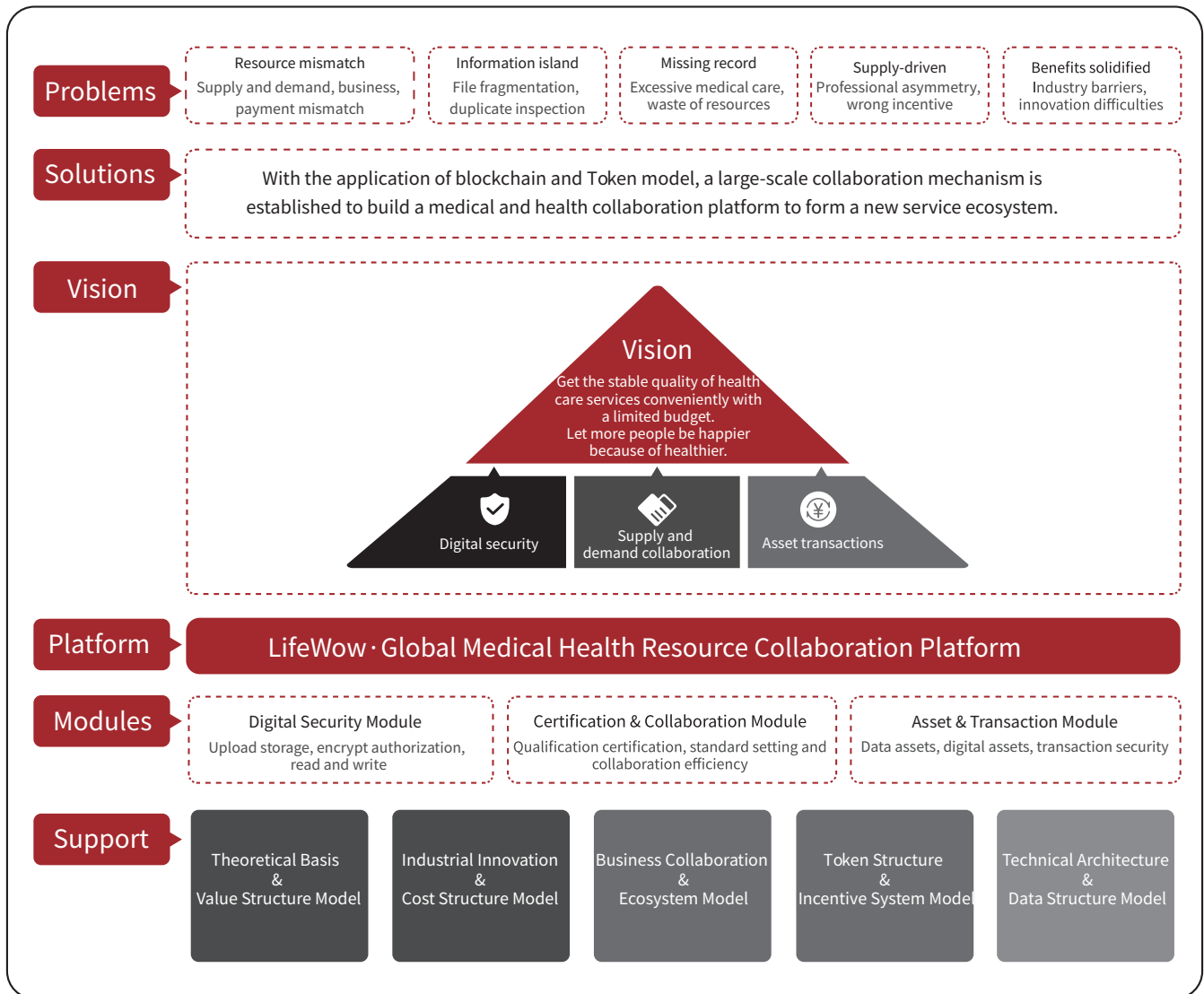
■ 2 solution

With the aid of the new cooperative relationship and Token economy model supported by blockchain technology and innovative medical service process structure:



- Aiming at the basic industry model problem - from the "supply-driven" model to the consumer demand-driven model, forming LifeWow's tetrahedral value structure model "C-CQA" based on the "cost - quality - accessibility" of medical services.
- Aiming at the professional asymmetry problem - with the help of professional knowledge base, precision medical service, AI technology and consensus authentication scheme to solve the problem of disadvantaged status caused by the asymmetry of consumer professional information.
- Aiming at the industry value - breaking up the cost loss problem caused by the unreasonable business process of the industry and innovating the cost structure model. "Comprehensive Diagnosis Service Center" + "Distributed Convenient Service Network" (Online + Offline)
- Aiming at systematic innovation - with the help of blockchain applications to support business restructuring, process optimization and new collaborative modes of participants.
- Aiming at service dynamics - with the help of Token model to solve the incentive problems of rapid market development, ecological establishment, large-scale cooperation and multi-role ecological construction.
- Aiming at individual value security - each user can create their own Life ID on LifeWow, including Life Account, Life T-Wallet, Life Record (PEHR), Life Solution and Life Service. It is a complete personal account system that includes encrypted personal information, health records, medical solutions and medical service resources.

The overall business structure is as follows:



- The core of the whole systemic innovation lies in the systematic innovation brought about by the collaboration of industry cost structure optimization, business model optimization, blockchain application and Token model.
- Through the new system incentive scheme, the interests of all parties are guaranteed. Because of the optimization of the structure and shape, the cost structure will be reshaped, and the waste of industry will be greatly reduced, thus bringing the value and benefit sharing of all participants.

■ 3 Scenarios & Value

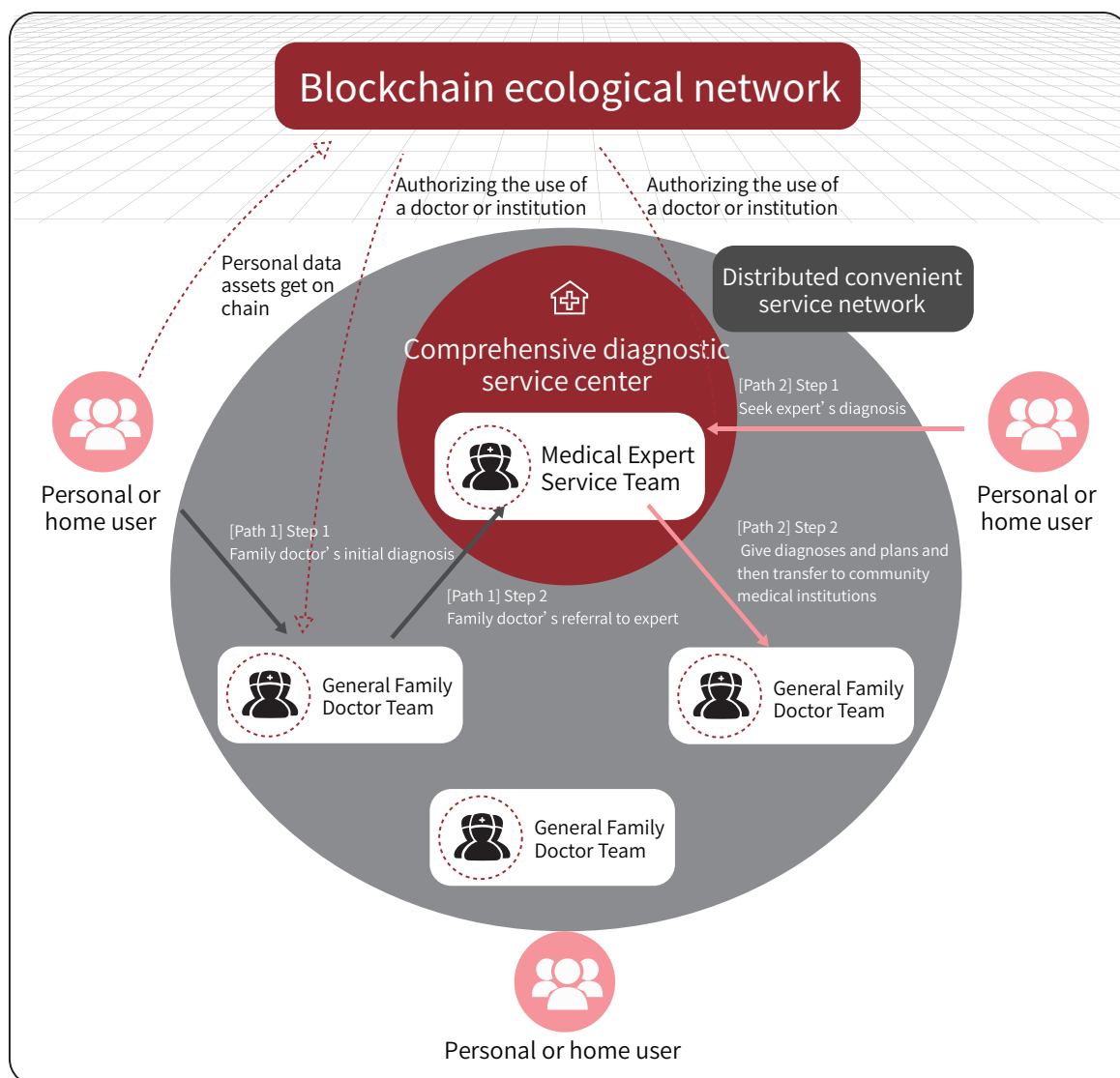
The new health care collaboration service ecosystem will become a new form of global healthcare:

The global medical and health service resources join the LifeWow network through the certification system, allowing service provision information to be more open, with more tag attributes to be displayed in the ecological network, more precisely matching local and global needs, realizing supply and demand optimization of the medical and health service resources.

- Based on the home address, the user chooses the family doctor nearby for the family. By establishing a trust relationship with the family doctor and the doctor team, the professional services, such as the first medical treatment, health consultation, and chronic disease management, gets simpler and more convenient.
- In the case of leaving home, the user, based on the real-time geographical location and according to the needs, quickly match the surrounding professional medical and health services certified by the ecosystem, including doctors, clinics, pharmacies, Chinese medicine centers, massage parlors, health supplies, and other health supporting services.
- In case of physical discomfort or in need of consultation, you can access general family doctors and doctors' assistants in the LifeWow "Distributed and Convenient Service Network" at any time to obtain convenient medical services, and rely on a team of general practitioners to provide assessable medical services covering all diseases and whole process.
- In the face of the complex condition, when the local medical services fail to provide effective treatment options, we can use the LifeWow Medical Network to connect with the "Comprehensive Diagnostic Service Center" organized by experts from various medical departments. The expert team provides diagnostic services and treatment plan through cross-professional collaboration, then the user can connect LifeWow's "Distributed Convenient Service Network" according to the treatment plan to have convenient, low-cost and procedural treatment services.

LifeWow assists everyone in the assetization of personal health records and medical service plans to form an asset authorisation management system within the ecosystem, together with Token's digital assets, to form value-added, circulation and transaction service systems within the ecosystem.

LifeWow's three system function modules form the following ecological business map:



The execution of LifeWow's medical services, on one hand, is the basic steps of routine high-frequency medical services - from the daily service of convenient service network to the connection of medical expert teams when necessary.

On the other hand, when local medical resources cannot solve a certain problem, diagnosis and treatment can be provided by expert teams after expanding the scope of medical services, and then the standard treatment process will be implemented back to local convenient medical service, significantly improving the quality of treatment and convenience and controlling costs.

Everyone can obtain readily available standard certified medical and health services based on geographical location.

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1. Global Healthcare Industry Dilemma

With the ever-increasing demand for health, the healthcare industry has already become an ultra-trillion USD market. The healthcare industry mainly includes medical institutions and medical related institutions. Medical institutions are mainly hospitals, health centers, nursing homes, out-patient departments, clinics, care homes, health clinics, infirmaries, and first-aid stations; medical related institutions mainly include medicine organizations (factories, pharmacies, etc.), medical device companies, and healthcare and fitness industry¹.

The global healthcare market is expected to reach \$ 9.59 trillion in 2018 (with an annual growth of about 4.1%), of which \$ 6.53 trillion derives from medical institutions (with an annual growth of 3%), \$ 1.17 trillion from medicine organizations (with an annual growth of 1.9 %), \$ 400 billion from medical device companies (with an annual growth of 5.2%) and \$ 1.49 trillion from the healthcare and fitness industry (with an annual growth of 9%)².

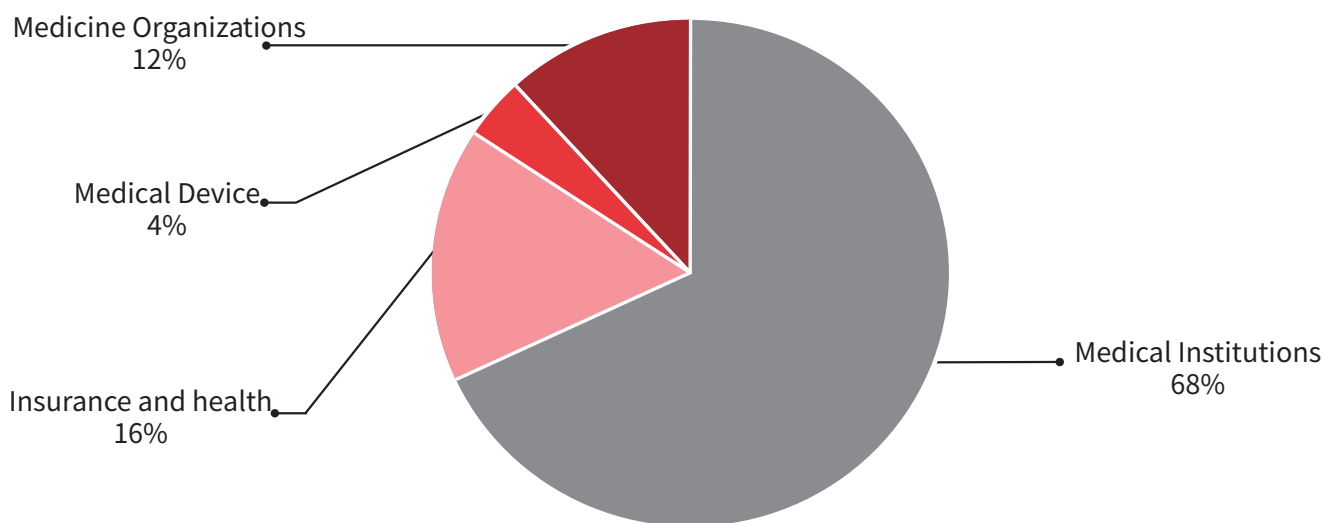


Fig. 1: Distribution of the Global Healthcare Market (total \$ 9.59 trillion in 2018)

In the above sub-fields, the healthcare and fitness industry shows the fastest growth. The market mainly includes nutrition, sporting goods and apparels, weight loss industry, mobile health apps, alternative medicine, medical tourism, wearable devices, data management, telemedicine and fitness market.

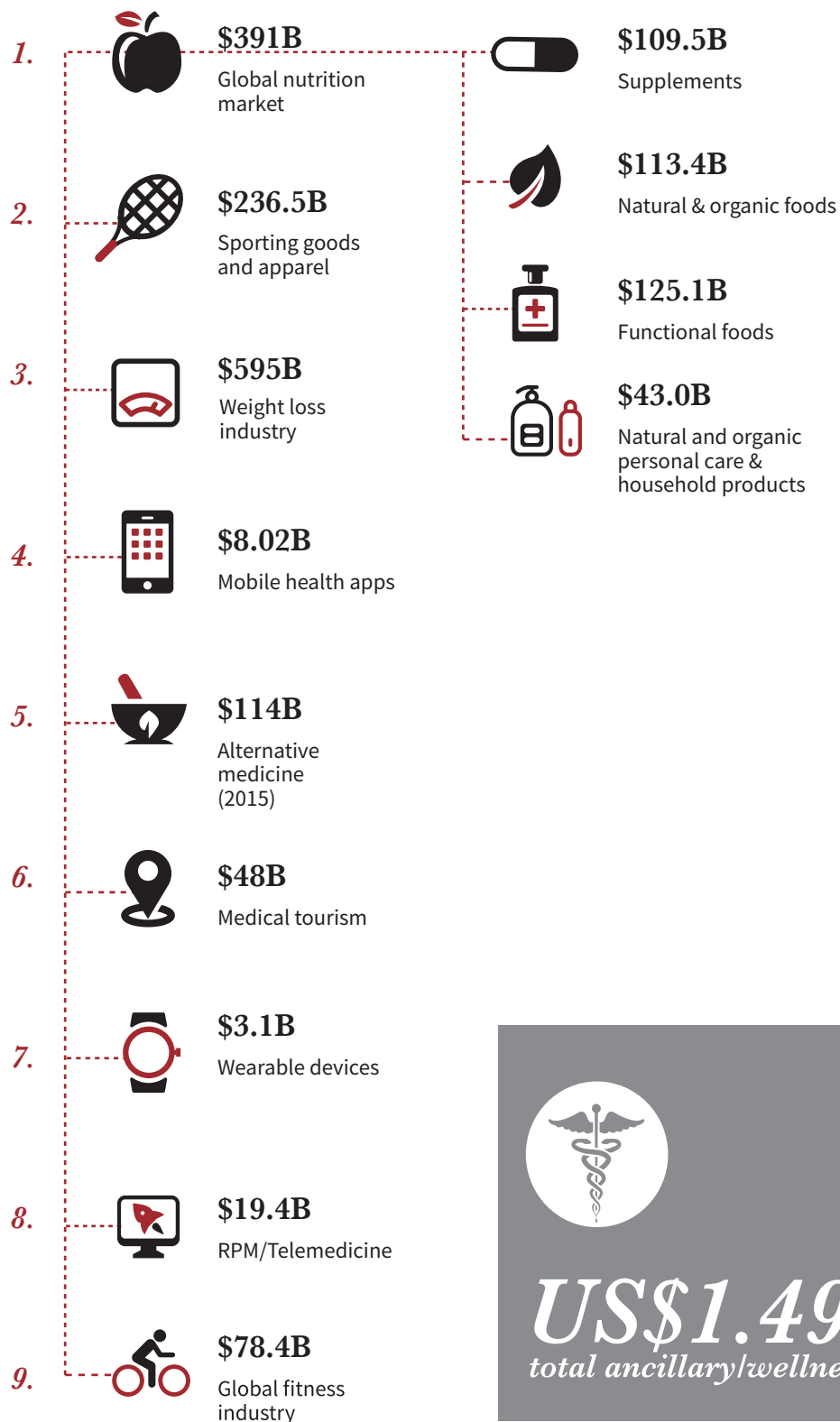
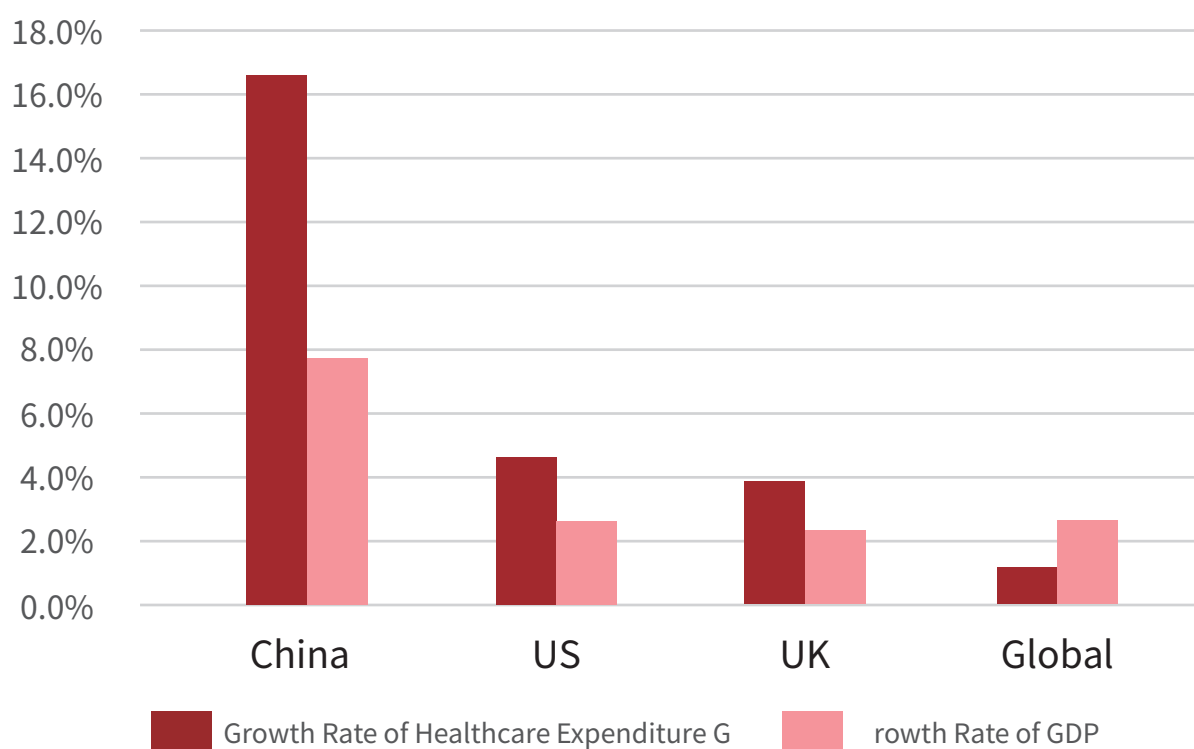


Fig. 2: Global Healthcare and Fitness Market Pattern (total \$ 1.49 trillion in 2018)

At present, countries across the world are facing the problem of excessive growth in healthcare expenditures. In most countries, the rate of growth in medical costs has exceeded that of GDP. The figure below shows the comparison of medical market data among China, US, UK and the global. It indicates that the rate of growth in healthcare expenditures in most countries exceeds that of GDP.



Data Types (2017)	China	US	UK	Global
Healthcare Market Size (trillion USD)	0.5	4	0.33	9.59
Healthcare Market Size as % of Global Market	5.21%	41.71%	3.44%	100%
CAGR of Healthcare Market Size	10.20%	3.00%	4.20%	4.82%
Healthcare Expenditure as % of GDP	6.10%	16.90%	9.80%	12.75%

Fig. 3: Comparison among Healthcare Markets Worldwide³Fig. 3.1: Comparison of the Growth Rate of Healthcare Expenditure with the Average Growth Rate of GDP Worldwide (2011-2015)⁴

The global healthcare expenditures are expected to increase at a rate of 4.1% per year between 2017 and 2021, while the growth rate between 2012 and 2016 growth was only 1.3%⁵. On one hand, the growing and aging populations, the expansion of developing markets, advances in medical technology and rising labor costs will further drive growth in healthcare expenditures. On the other hand, the health system across the world are faced with various other problems. The table below shows the medical conditions in China, US, Europe and North American countries.

			 
Status	1) The citizens prefer general hospitals for medical treatment 2) The number of national medical visits per capita is large 3) Public hospitals are operating in a profitable manner 4) The phenomena of over-treatment and over-medication widely exist in medical institutions	1) The growth of healthcare expenditures is higher than the overall economic growth 2) The Medicare spending will result in the reduce of all other expenditures in government budgets other than national defense 3) The medical costs has become a heavy burden on major companies 4) Government debt may cause bankruptcies in towns	1) Implement the National Healthcare System 2) Most people can easily enjoy routine healthcare services 3) The budgetary constraints make people wait a long time before getting specialized services and high-tech treatment
Causes	1) Implement One-Card medical treatment for citizens 2) Lack of orderly multi-tiered diagnosis and treatment 3) The information isolated island of various hospitals	1) High costs are derived from fee-for-service; 2) Supply-driven development leads to over-treatment; 3) The long-standing benefits pattern inhibits innovation	The national healthcare system is highly dependent on the financial input from the government. If the economic growth slows, the improvement of healthcare services will be very limited
Consequences	1) Over crowded general hospitals 2) Excessive medical treatment 3) Huge waste in the industry 4) Bankruptcy of social insurance in local areas 5) Citizens' immune systems are weakened	1) The financial pressure of the government is huge 2) It is hard for citizens to receive comprehensive medical care 3) "Healthcare becomes an incurable disease for the U.S. government and businesses"	1) The patients have to wait for a long time 2) The increase in production efficiency cannot offset the steep rise in costs
Latest Measures	1) The government promotes family doctor system 2) Implement a multi-tiered medical system 3) Implement medicare payment-for-disease	1) Introduce private insurance to compete and provide citizens' other options 2) Promote "consumer-driven" healthcare via innovation 3) Innovate mode of charging and operating	Promote more diverse payment and security system

Fig. 4: Status of Medical Market in China, US, UK and Canada

Take China, US and Europe for example, the medical systems of all countries are facing severe challenges and dilemmas, which have been heavily criticized.

A. China

- **Difficult to Receive Medical Treatment:** It is a nightmare to seek medical treatment in any hospital. First is the difficulty in hospital registration. Sometimes, one has to pay thousands of yuan to register to see expert doctors via illegitimate or privileged access. After all that trouble to register, the doctors often take a few minutes to ask about basic conditions before sending the patients to take various medical examinations and drugs. Sometimes the disease is still not cured after all that trouble. Most citizens get a headache when mentioning medical services. So it is in first-tier cities.
- **High Cost of Getting Medical Treatment:** China's per capita income is low and regional disparity is growing wider. For example, in many mountainous areas of Guizhou, the average annual income of residents is only about RMB 10,000 yuan. In Beijing, the per-capita annual salary in 2015 is RMB 100,000 yuan. As medical resources are concentrated in first-tier cities where price of commodities is higher, the foreign patients (usually without medical insurance) seeking medical treatment can hardly afford to pay for medical expenses ⁶.
- **Great Pressure on Medical Workers:** A three-year survey of the work pressure on medical workers showed that 60% of the medical workers experience a high level of occupational stress and 90% of them expect to receive mental care and guidance from the hospital. Medical workers face a variety of pressures, including poor doctor-patient relationships (70% of the doctors believe that their pressure is mainly caused by medical disputes), heavy workload, long working hours, education and scientific research, professional title promotion and work-life balance ⁷.
 - The workload of Chinese medical workers tops the world, with nearly 70% of the doctors working 9 to 12 hours a day on average and almost all doctors have had worked continuously for 24 hours ⁸. In a real case, a doctress suddenly left the room while writing a medical record and said: "I will come back later, I am going to give a birth." The news of sudden death of doctor arising from continuous work have been reported from time to time.



- Ironically, the Chinese medical workers appear to have a higher risk of getting sick and suffer more from poor health. Some scholars compared the health examination results of medical workers from a first-class hospital with that of the staff from a public institution, and found that 61.1% of the medical workers have abnormalities in their health examination, exceeding that of the public institution. Some studies show that the total morbidity rate of medical personnel is as high as 74%, which is worse than that of teachers and civilian police, and also higher than other research results of the medical personnel ¹³.
- **Low Incomes of Medical Workers:** In 2015, statistics on doctors' starting salary showed that 28% were less than 3,000 yuan, 49% between 3,000 and 5,000 yuan, 18% between 5,000 and 7,000 yuan, and only 1% over 9,000 yuan. A pay survey of 30,000 doctors was conducted by DXY in 2015. The results showed that the average annual income of doctors in 2015 was 77,000 yuan (an average of 6,400 yuan per month), indicating that the income of most doctors barely grow as compared to 2014. 15 % of the doctors said that their income has decreased and nearly three-quarters of them were dissatisfied with their income⁹.
 - This has also led to the undesirable phenomenon of "drug-maintaining-medicine" and "getting red packets and commissions". Some doctors get commissions from pharmaceutical companies by prescribing high-priced drugs. Giving red envelopes to doctors before major surgery has become a social convention.
- **High Risk for Medical Workers:** In China, medical workers face grave risks of medical disputes. Medical disputes including doctors and nurses being forced to pillory while carrying corpses, or being insulted or beaten¹⁰ by families of the deceased and even slashed by patients have been reported. In many hospitals, doctors are required to take anti-riot training and keep anti-riot cushions beside their seats to prevent sudden injuries. In addition, medical workers are also faced with risks such as virus infections. About one hundred medical staff members have lost their lives during the outbreak of SARS ¹¹.
- **Serious Brain Drain in Medical Industry:** In Hong Kong, the top scorers in the college entrance exam unanimously say that their dream is to study medicine. According to the report of iResearch, in the Mainland, only 1.31% of the provincial top scorers in the college entrance examination chose to study medicine between 1977 and 2016; in 2016, none of such students chose to study medicine¹². Tensions between doctors and patients, low incomes of doctors and high risks for medical personnel are all significant causes leading to brain drain.



- **Medical Insurance Deficit:** According to Development Report on Medical and Health Services in China 2014, it is predicted that the basic medical insurance fund for urban workers is falling short of the expenditure in 2017. There will be a deficit of accumulated fund shortfall of 735.3 billion yuan by 2024¹⁴.

B. US

- **Increasing Healthcare Expenditures:** In 2017, healthcare expenditures in the United States accounted for 16.9% of its GDP, topping the world and being far above the second by 3%-4%. It is estimated that by 2022, the US healthcare expenditures will reach \$ 5 trillion, accounting for 23%¹⁵ of its GDP. By that time, more than one dollar out of five dollars will be spent on medical treatment. The overuse of high-priced medical technology (especially high-end medical equipment) is an important reason.
- **Among the Lowest Average Health Conditions in Developed Countries:** Statistics show that while Americans' life expectancy is much longer than it was 20 years ago and the healthcare expenditures are far higher than those of other developed countries, most of their health indicators are still lagging behind and the life expectancy is ranked lower in OECD countries; Among the total 34 member states, the life expectancy of people in the US has dropped from 20th in 1990 to 27th in 2010, and the active life expectancy has dropped from 14th to 26th¹⁶. Countries with long-term low GDP and low per capita health expenditure, like Chile, Portugal, Slovenia and South Korea, have lower mortality rates than the US.
- **Healthcare Expenditures Leading to Individual Bankruptcy:** According to statistics, more than a quarter of American adults are exhausted from paying off their medical bills. This data covers people with medical insurance, whether it is individual medical insurance paid separately or employer-provided medical insurance. In fact, medical debts have become the primary cause of individual bankruptcy in the United States. In 2014, about 40% of Americans were heavily indebted due to medical problems; In 2016, the New York Times reported that 20% of the Americans under 65 years old who have medical insurance can't afford to pay their medical bills, 63% of them have used up their savings and 42% need to pick up an extra part-time job to cover such spending¹⁷.
- **Healthcare Expenditures Leading to National Bankruptcy:** According to the report of the US Congressional Budget Office, the US national debt will rise dramatically in the next 10 years and is expected to reach 91% of its GDP in 2017, twice the historical average of 50 years¹⁸. This unsustainable debt will seriously affect the US economy and even lead to the bankruptcy of the state. Among the ever-increasing expenditures, the largest share is the healthcare expenditures borne by the government.



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Healthcare and Social Security are the major drivers of the projected growth in federal spending over the next 10 years

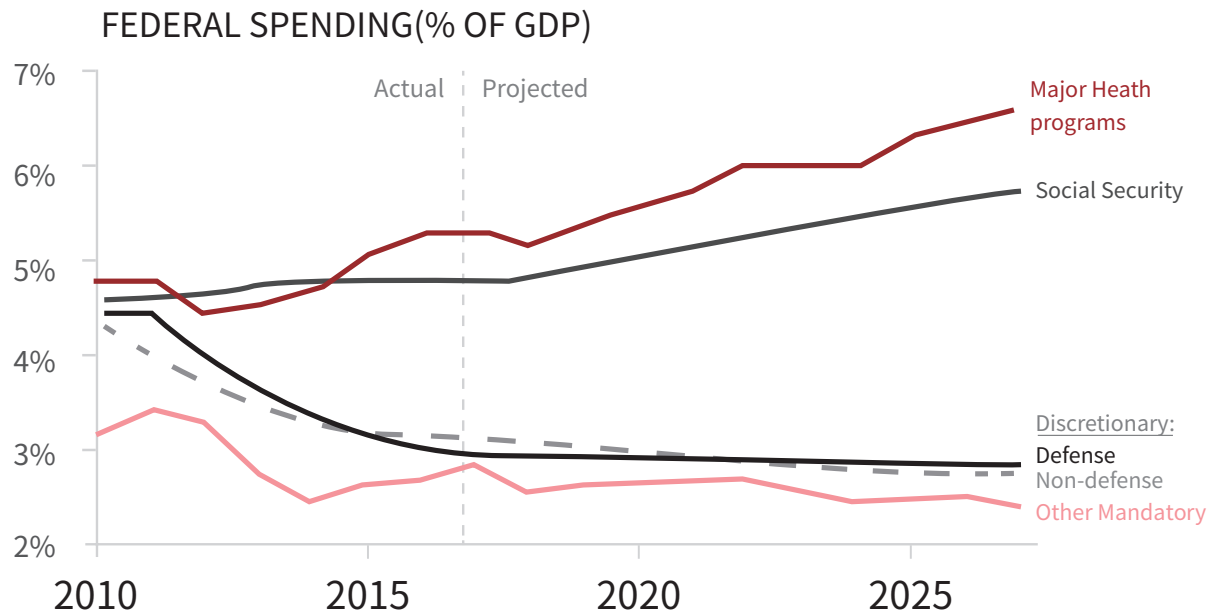


Fig. 5: US Fiscal Expenditure Forecast

- Coverage without Care:** Many local governments mandate that everyone shall participate in health insurance, which forces the poor to high-minimum-amount-of-pay insurance. (Relatively cheaper, but useless in most of the case). However, for most ordinary people, the larger end of the healthcare expenditure is not spent on hospitalization but on common acute infection and routine treatment, but these are not covered by the insurance. Therefore, it is very expensive for the poor to get routine¹⁹ medical services. Marcia Angell, former editor of the New England Journal of Medicine, called it "coverage without care".
- Fragmentation of Medical Services:** Since many hospitals in the United States are operated by individual doctors and lack capital investment, the doctors, pharmacies, imaging departments, test departments and examination departments are usually independent in respect of physical location and not close to each other. When a patient visits a doctor, he or she often goes through the following procedures: talk with the doctor for about one hour; make an appointment for medical tests in another institution; take a CT in another institution and wait for the results; make another appointment with the doctor and take the prescription to the drugstore. The diagnosis of some common diseases averagely lasts for months.



- **Shortage of Medical Personnel:** According to the report of the American Association of Medical Colleges (AAMC), the shortage of doctors in the United States will get worse. At the current population growth and aging, the gap in American doctors will reach 34,600 to 88,000 by 2025, and even 40,800 to 104,900 by 2030. Besides, the uneven regional distribution of doctors exists. In some states, there are more than 400 doctors per 100,000 population, but only a few in other states, even though high-risk areas are in these states²⁰. The group of American doctors is aging fast. In 2014, 29.4% of the American doctors were over 60 years old and about to reach retirement age over the coming years²¹. The training of American doctors is high-cost and time-consuming, making the shortage of qualified personnel difficult to be made up.

C. UK

- **A Desperate Shortage of General Practitioners:** Compared with the United States and China, the shortage of doctors in UK is even worse. The proportion of patients who were unable to get an advice from a general practitioner rose from 8.85% in 2011 to 10.91% in 2017. One in four patients had to wait one week or more before seeing a doctor.²²
- **Long Waiting Time for Emergency Treatment:** The low rate of visits by community doctors resulted in the overloading operation of Emergency Departments in UK hospitals. Only 91.8% of the patients can be treated within 4 hours (the standard set by the government is 95%). Sometimes the emergency waiting time can be as long as 12 hours²³! The British patients often complained that "in case of abrasion and bleeding, even when the blood clots or the wound heals, I have not seen the doctor!"
- **Medical Deficit:** Despite of the fact that the healthcare expenditure in the UK account for nearly 10% of the fiscal budget, the deficit reached 1 billion pounds at the end of 2014. About 75% of the hospitals operate with deficit²⁴, which aggravates the loss of medical workers and leads to a further decline in the quality of medical services. On the other hand, although the government investment has increased year after year, its input cannot keep up with the increase in demand under the influence of various factors including the population aging.

Conclusion: Common problems prevail in the medical systems of countries across the world.

- **Higher Healthcare Expenditures:** Healthcare expenditures (including individuals, the private and public sectors) has generally increased, and the growth of healthcare expenditures in most countries has exceeded their GDP growth.

- **Poor Medical Service Quality:** Shortage of medical resources, great work pressure on medical workers and excessive medical service links. All these results in long waiting time for medical treatment, high medical expenses and low efficiency in seeking medical care.
- **Failure of Medical Payment System:** The rapid increase in medical expenses has brought great pressure to individuals, governments, and the society. The current payment system is insufficient. Individual payment, private insurance and national social security all face significant challenges. For the current trends, it will inevitably lead to a long-term bankruptcy of individuals, medical insurance and governments.

1.1 Core Reason behind Today's Global Medical Treatment Dilemma – Collaboration Failure

A. Ethical Dilemma of Medical Service Providers - Benefit from Treatment of Disease

It is the goal and original intent of the healthcare industry to help people regain and maintain their health. However, the current global medical industry is designed as a split model: providers of medical services and payers for medical services often have very different motivations.

Payers for Medical Services: Despite of the slight differences among countries, usually the payers for medical services include individuals (at one's own expense), employers (enterprise medical insurance), insurance institutions (commercial health insurance) and government (social security funds). The payers for medical services (payers) all benefit from the health of residents. In other words, the above-mentioned payers will benefit by helping and encouraging the residents to maintain health or to recover from illness.

Providers of Medical Services: Usually include medical institutions (large general hospitals, specialized hospitals, clinics, etc.) and medical workers (doctors, nurses, etc.).

- In most countries and regions, providers of medical services benefit from the medical services they provide. In other words, providers of medical services have automatically gotten into an ethical dilemma: they have no choice but to benefit from the treatment of residents' diseases.
- In particular, under the current health system, most medical services are charged in the manner of pay-for-service²⁵ (rather than pay-for-effect), which further worsens the ethical dilemma of “deriving benefit from the treatment of disease”. Medical institutions and workers are inclined to provide more and higher-priced medical services to gain more benefits.

- The models of "deriving benefit from the treatment of disease" and "pay-for-effect" inevitably lead to over-treatment and high-priced medical care as well as the formation of a "supply-driven" (not demand-driven) medical practice.

B. Mismatched Medical Business Models and Disease Categories

Another essential cause of the existing medical dilemma is the mismatch between disease categories and business models of medical institutions. The current ineffectiveness of the global medical system is ultimately caused by the incompatible medical institution business models are forcibly adopted in large general hospitals, resulting in poor effects, high rates and poor experience.

a) Background Analysis of Diseases and Models

It can be roughly divided into the following three groups according to the variety and characteristics of diseases:

- ① **Serious Illnesses and Severe Diseases:** Humans are not yet fully aware of the cause and/or treatment for such diseases. Therefore, the best solution is the intuition based on expert experience.
- ② **Specialized Diseases Whose Challenges Have Been Overcome:** Humans have extensive knowledge of the causes and treatment for such diseases and can implement precision medical treatment.
- ③ **Chronic Diseases:** Humans have knowledge about the cause and/or treatment of such diseases and they are not immediately fatal in the short term. Therefore, the best solution at this time is the patient self-care with a high level of involvement.

The business models can be broadly divided into three categories accordingly:

- ① **Expert Consultation Model:** Analyze unusual problems and recommend solutions. For example, consulting companies, advertising agencies, R&D institutions and law firms²⁶. In the medical field, it is suitable for serious illnesses or difficult and baffling diseases.
- ② **Value-added Chain Model:** Transform the input of resources (manpower, raw materials, energy, equipment, information, capital, etc.) into higher value output in a repeatable manner²⁷. For example, automotive manufacturing, petroleum refining, catering services and retail. In the medical field, it can be applied to specialized diseases whose challenges have been overcome.
- ③ **Assistance Network Model:** Network platforms whose operation depends on the transactions conducted by customers within the system and transactions with other players (in kind, financial, information, etc.). For example, commercial banks, Internet platforms and on-line games. In the medical field, it can be applied to the management of chronic diseases.

b) Mismatched Business Models

However, these three business models and the category of diseases are forcibly incorporated into large general hospitals in today's health system, which has led to various value misplacements: senior experts are dealing with minor illnesses; general practitioners are not capable of treating major illnesses, and hospital resources are consumed to treat chronic diseases. The essence of a large general hospital is to “deal with all diseases in one hospital” , which inevitably results in unreasonable resource allocation, price distortion, inefficiency and poor experience.

The table below lists the dilemma of mismatched disease categories and medical models faced around the world:

Category of Diseases	Suitable Model	Ideal Medical Service Institutions	In-use Medical Service Institutions	Consequences
Serious Illnesses, Severe Diseases	Expert Consultation Model	Large General Hospital	Large General Hospital	Unable to cover cost
Specialized Diseases Whose Challenges Have Been Overcome	Value-added Chain Model	Specialized Diseases Medical Service Provider		High price and low efficiency
Chronic Disease	Assistance Network Model	Patients Self-care Network		High price and low efficiency

c) Mismatched Modes of Payment

Different diseases should be treated with different medical models and adopt matching modes of payment. However, as large general hospitals have become the primary provider of medical services, all diseases are "paid-for-service", resulting in over-treatment, overpriced medical care and low efficiency.

The table below lists the dilemma of mismatch between diseases and modes of payment faced around the world:

Category of Diseases	Suitable Model	Ideal Mode of Payment	In-use Mode of Payment	Consequences
Serious Illnesses, Severe Diseases	Expert Consultation Model	Pay-for-service	Pay-for-service	Too low fees
Specialized Diseases Whose Challenges Have Been Overcome	Value-added Chain Model	Pay-for-effect		Over-treatment, high cost
Chronic Disease	Assistance Network Model	Fixed-rate Membership Fee		Overpriced, low efficiency

In particular, the treatment of serious illnesses and difficult and severe diseases in large general hospitals has consumed too much resources. But it is impossible for reasonable charge and effective compensation. For example, there are extremely unreasonable circumstances in Chinese hospitals: The registration fee is very cheap (including seeing a specialist, expert consultations and so on, the charges are significantly lower than the real cost). Therefore, large general hospitals can only resort to other ways to subsidize the low fees for treatment of serious illnesses, as well as difficult and severe diseases, including:

- Charge higher fee for treatment of minor illnesses (i.e., medical services for specialized diseases whose challenges have been overcome)
- Charge higher fee for drugs
- Charge higher for the hospitalization expense and bed fee

Medical insurance and commercial health insurance are also designed to pay for service, which leads to another serious problem: no party in the medical system (except insurance companies) has the motivation to reduce costs.

- Patients: Excessive medical care by requesting the best resources
- Doctors: Over-treatment through the most expensive ways
- Pharmaceuticals and R&D institutions of medical devices etc.: Having no incentive to reduce costs; the key motivation is to have their products and services included in medical insurance

C. The Problem of Information Island and Centralized Operation

a) Currently, most medical-related establishments adopt centralized operations and lack the motivation for information sharing.

Although it has become a consensus in the medical industry that "information sharing can improve the efficiency of the entire industry", the implementation seems difficult. The main reason is that information sharing may impair the potential interests of centrally operated medical institutions. For example,

- Under the centralized operation model, medical institutions are inclined to regard information (such as the patient's medical history, treatment history, etc.) as their assets which can bring them competitive advantages and benefits. Therefore, they have no intention to share such information with other institutions.

- Under the “pay-for-service” and supply-driven business model, the benefits of medical institutions derive from providing more services. Therefore, they have no desire to use the data from other institutions at the cost of losing revenues from re-examination. For example, when a patient visits hospital A with a CT scan done by hospital B, hospital A is likely to refuse to use the scan and requires a re-examination to obtain additional benefits.

b) All aspects of the medical industry are highly modular and adopt different information and data standards, making it difficult to share information. The generation of value from shared data requires it to meet the usage patterns and habits of different institutions. In other words, only structured, categorized and standardly formatted data can be used in different service sections. It is difficult to achieve under the current system.

- Medical industry consists of many aspects, such as hospitals, medical devices, pharmaceutical companies, medical education, insurances and so on. They are independent of each other and have different business models so that the data collected by them and the format of data are very different.
- Even different institutions of the same aspect, such as different hospitals or different departments of a same hospital, may have great difference in daily data recording, data flow, structure and format, making it difficult to achieve standardized sharing.

c) Lack of upstream and downstream cooperation and cross-institutional cooperation leading to failure in data sharing.

There is few cooperation among different institutions within the current health system. For example, in the health system dominated by large-scale general hospitals, there is no cooperation between hospitals; "transferring to another hospital" is more about passing the buck than win-win cooperation. The cooperation between pharmaceutical companies, insurance companies and hospitals is mostly superficial and there are few in-depth products or services jointly developed. Since there are few substantive cooperation among institutions in reality, the absence of data sharing becomes undoubtedly logical.

d) Information Island Leading to Cooperation Failure.

- Repeated collection of information results in waste of resources, data deviation and low efficiency, which in turn leads to higher average medical costs. For example, the lack of trust between hospitals and unwillingness to use each other's examination results may result in repeated examination.
- Cross-sectoral and cross-institutional cooperation failures caused by blocked information. Only hospitals where the patient sees a doctor hold the patient's core data and information; however, when the patient

seeks medical service in other hospitals for reasons, it is difficult to obtain information quickly and may lose the optimal treatment time. For example, when an accident occurs in travel, local hospitals may miss the optimal opportunity for treatment or have the risk of medical malpractice as they are unaware of the patient information (such as blood type).

- In remote or less developed areas where medical resources are limited, the absence of information and data can easily lead to misdiagnosis and missed diagnosis.
- The development of diagnosis approaches and new drugs rely heavily on medical records and clinical data. Information barriers between research institutions and medical institutions can severely impact the efficiency of research and development, leading to the slow, costly and inefficient development of medical technology.
- Lack of information security and individual privacy. As storage centers for patient information, hospitals and other large institutions lack the IT technology strength to protect privacy, thereby giving rise to information leakage and infringement of the privacy of residents.

D. Established industry barriers and solidified benefit models make it difficult to innovate

The deficiencies of the global health system were not formed overnight. Individuals, institutions and governments show a strong desire to improve the health system. In the past few decades, a large number of innovations have emerged around the globe, including new technologies, new hospitals, new types of insurance and technology startups in the medical field. However, it seems that most of the innovations have failed to address current medical problems.

The main causes include historical backgrounds, the poor supervision of policies and laws, and the huge unshakable ecosystem formed under the current health system. All aspects (hospitals, doctors, pharmaceutical companies, insurance companies and medical information companies) are highly interconnected and a slight move may affect the situation as a whole. Any innovation in part is difficult to succeed as it is difficult to be compatible with the rest and thereby forced to adapt to the existing system for survival, and eventually become part of the existing “monster” .

- New Drug R&D Companies: Change only the treatment of a particular disease and it cannot shake the overall health system; adapt to the existing system for survival (e.g. seek to be included into social security).



- New Medical Device R&D Companies: Change only the diagnosis or treatment of a particular disease and it cannot shake the overall system.
- Traditional Internet Platforms: Forced to adapt to the existing system for survival and unable to change the healthcare system (for example, only reduce the information barriers of a specific sector).
- Medical Data Companies: Forced to adapt to the existing system for survival and unable to change the health system (in the end they still need to serve the existing aspects of such health system in order to turn assets into cash).
- Blockchain-based Innovation: Most blockchain medical programs cannot survive or address medical problems.
 - Most of the medical-related blockchain projects are essentially enhanced versions of traditional medical data companies. They make traditional medical data more reliable, trusted and secure through the features of blockchains such as encryption, irreversibility and decentralization. Although its goals and courage are laudable, it is unable to solve the current medical problems.
 - The medical data' getting on the chain is still a single aspect innovation. As mentioned above, eventually it is destined to adapt to the value chain of the existing system and become part of the existing health system. In other words, the core issue of the current health system is not the medical data.
 - Blockchain projects that do not have established platforms (such as massive users) face enormous challenges in the implementation.

The existing health system has long been solidified and the highly interconnected system between different aspects is formed, making it hard for a single aspect innovation to change the present situation. Subversion rarely occurs in part, and individual subversion would drown in existing value network of the industry²⁸. Only when thorough and new value networks arise, can the old network be overturned.

2. Visions and Strategies of LifeWow

2.1 Vision of LifeWow

A. Maintain Individual Health: Help more people regain and maintain health with necessary, controlled and measurable individual health expenditures through LifeWow's distributed healthcare service network. Enable every LifeWow user to

- Accurately know about his/her physical conditions (a definite diagnosis of the disease);
- Get the most reasonable solutions (treatment);
- Receive accessible, high-quality and low-cost healthcare services

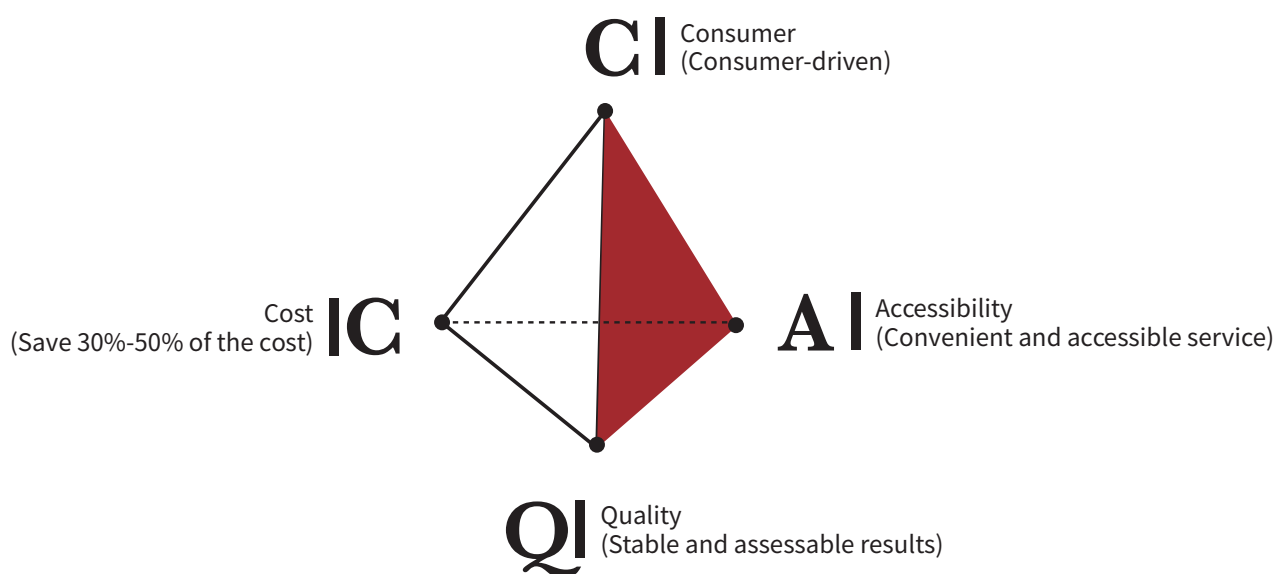


Fig. 6: Distributed Medical Care Service Network Model Built by LifeWow Based on the Idea of People-centered and Three Core Values of Cost, Quality and Accessibility

B. Significantly Reduce Medical Costs: LifeWow is working on the reconstruction of the health system and addressing the "supply-driven" and "pattern mismatch" issues within the industry so as to dramatically increase efficiency and reduce costs (LifeWow intends to reduce the spending on most medical scenarios by more than 50% and save 30%-50% of the total medical costs).

In order to systematically reconstruct the medical service procedures, LifeWow will match and distribute patients to the most efficient medical business model and payment mechanism according to the different categories of diseases.

Category of Diseases	Suitable Model	The Most Suitable Medical Service Institutions Recommended by LifeWow	The Most Suitable Mode of Payment Recommended by LifeWow
Serious Illnesses and Severe Diseases	Expert Consultation Model	Large General Hospital	Pay-for-service
Specialized Diseases Whose Challenges Have Been Overcome	Value-added Chain Model	Specialized Diseases Medical Service Provider	Pay-for-effect
Chronic Disease	Assistance Network Model	Patients Self-care Network	Fixed-rate Membership Fee

In order to successfully and effectively implement the matching and distribution in the above table, LifeWow is building a new ecosystem of "Integrated Diagnostic Center" & "Distributed Convenient Medical Network" based on family doctor platform, including:

- **Health Service Portal:** When residents are sick or suffer from health problems, they first seek help via LifeWow's portal. The portal platform is currently composed of family doctors (in the future, it may include an online intelligent expert system, etc.).
- **Comprehensive Diagnosis and Treatment Service Center:** Family doctor's help or direct diagnosis (common diseases), or referral to a large general hospital for diagnosis (serious illnesses, difficult and severe diseases)
- **Distributed and Convenient Service Network:** After diagnosis, patients will get personalized treatment schemes and corresponding treatment depending on the category of diseases in LifeWow's distributed and convenient medical service network.
 - **Serious Illnesses and Severe Diseases:** Obtain follow-up customized treatment schemes in large general hospitals
 - **Specialized Diseases Whose Challenges Have Been Overcome:** Visit specialized medical service providers to get streamlined, standardized and convenient services
 - **Chronic Diseases:** Join the patient self-care network to conduct self-care. Re-visit and track progress through the family doctor platform at regular intervals.

C. Ensure Sound and Collaborative Industry Development: Plan and promote systematic and disruptive innovation models in consideration of the industry dilemmas and challenges, as well as the attributes of healthcare and rules of business innovation; build a new value-network collaborative model with the support of new technical structure and promote "low-cost, convenient and favorable " healthcare service that can serve the quality of life and living of more people around the world.

LifeWow will establish a forward loop ecosystem with three foundations:

- LifeWow's Medical Service Resources (doctors, hospitals, medical groups) Integrate the best service resources to provide users with borderless medical and health services.
- LifeWow's Medical R&D Resources (laboratories, technology companies, prospective technologies, new drugs and specific medicine) Provide a perfect matching for R&D needs and user data, and design new incentives based on the authorized use of data.
- LifeWow's Medical Financial Management Resources (insurance companies, trust funds and personal wealth management solutions) Provide targeted financial planning for the user's life quality management.

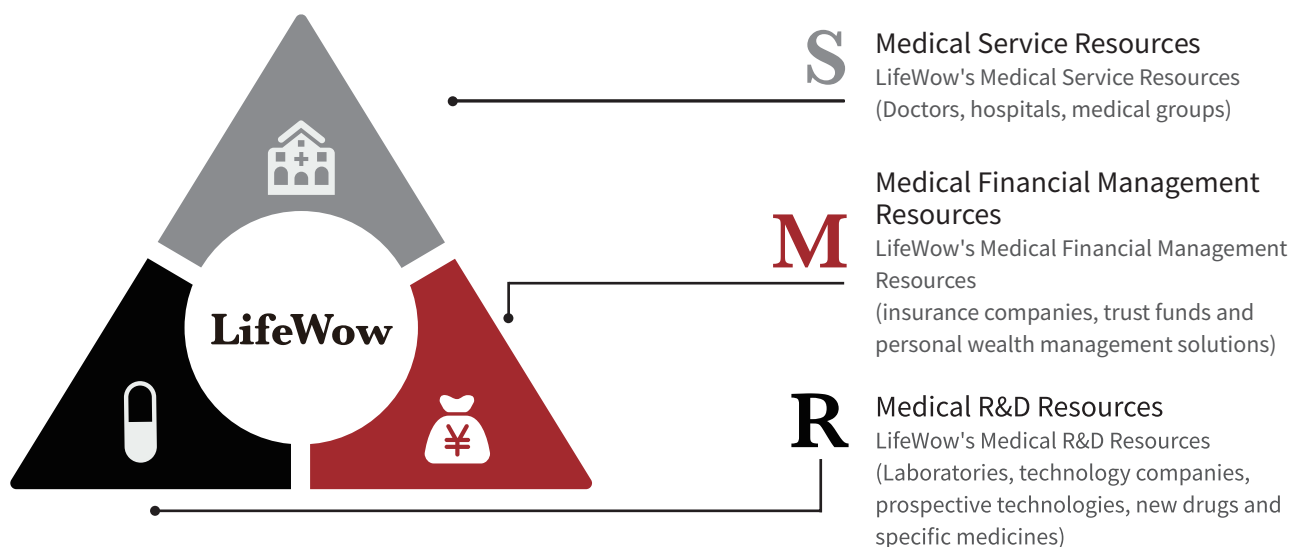


Fig. 7: Three Foundations Model of LifeWow's Ecosystem

2.2 Strategy & Path of LifeWow

A. Implement Systematic Innovation through Blockchain & Token Economy

Any isolated and single-point product or technical innovation in part has been proven inefficient to improve the current medical system. Only systemic innovation can give rise to a new cost structure, a new service model, as well as new transaction ways, and ultimately change the pattern and ecology of the healthcare industry.

To realize complex systemic innovations, LifeWow needs to build an ultra-large multi-party collaboration system. The traditional corporate form cannot be easily removed due to the extensiveness of the healthcare industry. With the birth and popularity of blockchain technology, there has been a possibility of distributed cross-regional and cross-cutting hyperscale collaboration for the first time in human history. LifeWow will exploit the blockchain technology and its Token economic system to mobilize different aspects and achieve systematic and multi-part simultaneous innovation in the healthcare industry.

The section below will further introduce the blockchain technology and the analysis of LifeWow's application.

B. Beginning with Family Doctors

"A journey of a thousand miles begins with a single step" - a grand and ambitious plan is built on a quick and effective first step. The first move of LifeWow's new medical ecosystem is to bring in the family doctor platform and establish partnership with Medishare, the largest family doctor platform in Asia.

The group of family doctors is of great significance to the establishment of LifeWow's new ecosystem:

- a) Currently, family doctors are the most capable resources to provide extensive, universal and timely medical services around the globe.
- b) The family doctor is the key link to the realization of medical cost structure innovation and the hub for the distribution of medical services by categories of disease. In the future, the family doctor, supported by precision medicine and comprehensive diagnosis, will become the main force of the distributed service network (including online and offline).
- c) In the future, the collaborative healthcare team, including nurses, care workers, nutritionists, specialist physicians, physician assistants and community volunteers, will be introduced via family doctors to form a family medical service team and community service network.

C. Taking Medical Data Assets as the Core

Although medical data were derived from patients, its ownership is undefined as it were held by centralized institutions such as hospitals. These data are often in different formats, non-standard and non-structured, making it hard to call them and tap their corresponding value. The information barrier between different institutions also leads to inefficient data flow and interactions. Therefore, for a long period of time, medical-related data has not been turned into a general asset. The absence of asset attribute has made it impossible for the market economy to maximize its leverage.

With the integration of blockchain technology, LifeWow is able to effectively solve the above problems by storing the medical data of the residents on its blockchain and turning it into digital assets. Residents can gain value by trading their own digital assets. Besides, the unsophisticated and fragmented personal health information is consolidated into a complete health record and becomes truly capitalized.

- For each participant, its personal information (including identity, health data, medical records and medical data) will be decentralized and uploaded to public accounts for use by individuals and other authorized institutions.
- Individuals can give authorization to the use of such data and gain revenue from transactions without disclosure of their private information through the Zero-knowledge Proof mechanism under the LifeWow Blockchain. Data flow and privacy protection are balanced.
- For patients or patients who have been cured, their privacy and information security can be protected on account of the intrinsic property of block-chain distributed accounting: if a patient does not personally authorize his/her digital assets, other institutions or individuals will not be able to see such information. Similarly, if a patient wants to use or observe the specific medical data when he/she visits an institution, he/she needs to grant authorization to the institution.
- Medical institutions within the LifeWow ecosystem can learn about the patients' medical information, treatment and other data after obtaining user authorization. If any individual or organization finds such information valuable, it will directly request to use or purchase, and the owner of the information will also receive a certain economic return.

- When doctors in the LifeWow ecosystem encounter difficult-to-diagnose illnesses, they can request the system to search for a large number of similar medical records for comparison analysis so as to make more accurate diagnoses and propose better treatment. Individual patients also have the motivation to upload valuable treatment experience and methods, jointly improving the entire digital asset database, and authorizing the use of their data for economic return.
- Various laboratories, insurance companies and medical service organizations can all become members of the LifeWow ecosystem and pay for authorized data, thereby forming a closed-loop integrating reasonable demand-consumption-R&D-payment-transaction.

Medical data will be transacted within the LifeWow ecosystem via token after been capitalized through LifeWow Blockchain, which will increase collaboration efficiency, reduce waste caused by middle segments, and effectively curb the over-treatment brought by asymmetric information.

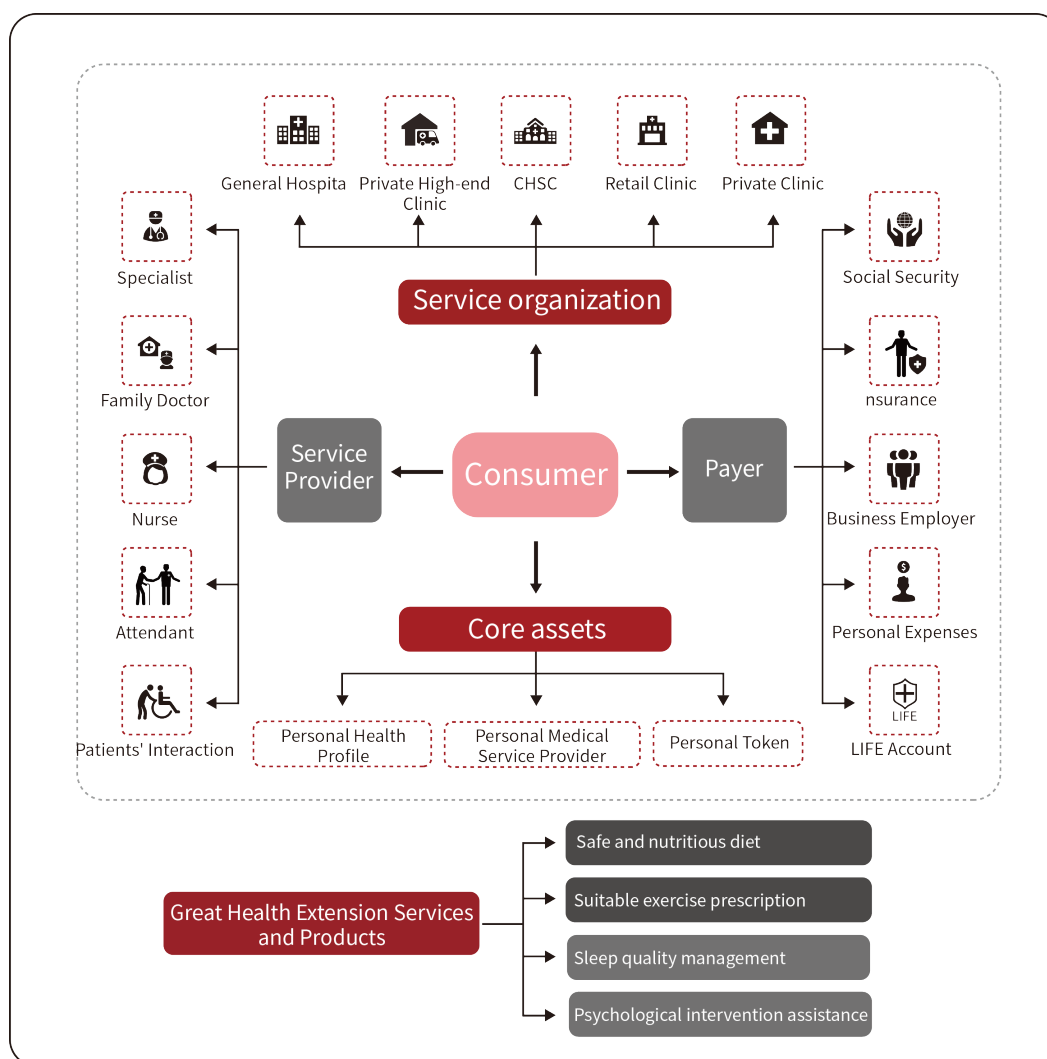


Fig. 8: Digital Assets and Token-based LifeWow Ecosystem Collaboration Network

3. LifeWow's Application of Blockchain Technology

3.1 About Blockchain

a) Definition of Blockchain

Blockchain is essentially a new database technology that specifically addresses specific challenges. Throughout history, database has been primarily used as a central data repository by centralized institutions to support transaction processing and computing. However, databases are rarely shared among different institutions or organizations out of various technical and security concerns. Blockchain is a multi-party shared distributed transaction database (or "Ledger") designed to improve transparency, security and efficiency.

The composition of the blockchain can be described by the following process:

Blockchain is:

- Connected by blocks (each block stores transaction information, including buyers, sellers, prices, contract terms and other relevant information);
- A transaction (involving two or more parties);
- Database (storing its copy through multiple addresses or nodes);
- Each new block is verified through the entire network (the node in the network encodes and encrypts the transaction information and the unique signatures of the two or more sides of the transaction; only if all the nodes have the same encoding result, the transaction is considered valid);
- And being added to the previous blockchain. (Only after the block is verified. If the block is verified to be invalid, the "consensus" of each node will be used to correct the result of the non-matching node)²⁹.

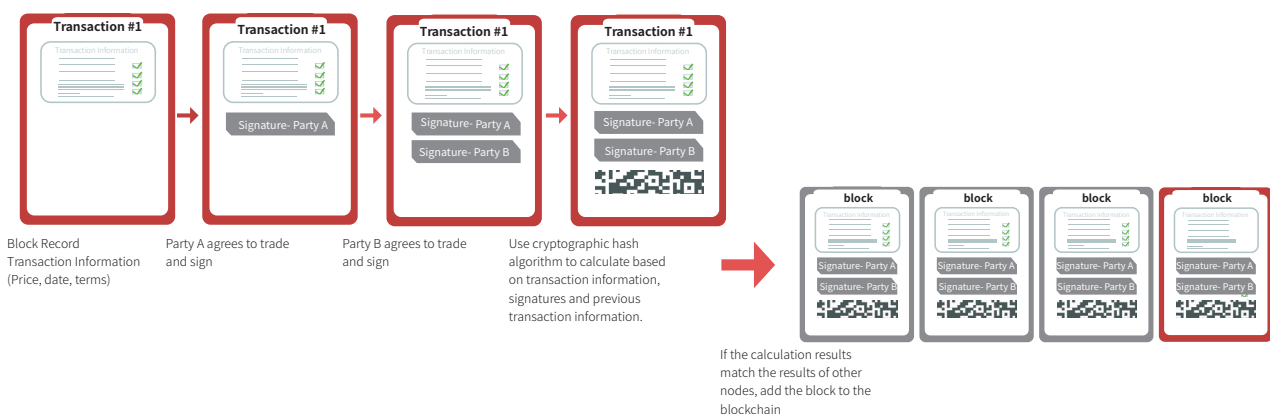


Fig. 9: How a single block is generated and added to the blockchain



b) Compared to the traditional centralized databases, the blockchain has the following advantages

Decentralization, trustfree (transaction transparency), collective maintenance and reliable databases are the four core features of the blockchain.

- **Security:** The blockchain verifies the identities of parties involved in the transaction by cryptographic algorithms. This ensures that "false" transactions cannot be added to the blockchain without the consent of parties concerned. Each transaction can only be added to the blockchain after a complex mathematical algorithm (hash algorithm), which depends on the specific transaction information, the identity of various parties concerned and the results of previous transactions. As the current state of the blockchain depends on the previous transaction, it can be ensured that the transaction history cannot be maliciously modified. Because once the transaction history data is changed, it will affect the current hash value and cannot match the Ledger copy of other node.
- **Transparency:** Blockchain is essentially a distributed database that is maintained and synchronized through multiple nodes (for example, multiple parties that often trade with each other). In addition, transaction data must first be consistent across all parties before it can be added to the blockchain.³⁰ This means that all parties can access the same data by design (may be stored within or outside of their organizations), thus greatly increasing the level of transparency compared with traditional databases. Traditional databases may rely on multiple isolated "siloes" databases within an organization and are often protected by firewalls, making it difficult to be accessed from outside.
- **Efficiency:** Theoretically, maintaining a distributed database with multiple copies via a blockchain seems to be less efficient than a single and centralized database. But in most of the real-world examples (including the cases below), the parties involved in the transaction all have their own duplicate database records containing certain same transaction information. And in many cases, data related to the same transaction is also conflicting, leading to expensive and time-consuming reconciliation between organizations. The use of cross-organizational distributed database system can greatly reduce the need for manual reconciliation, thereby significantly reducing the cost arising from cooperation among organizations. Besides, the blockchain provide the potential for "collaboration" among different institutions in many cases, which can avoid duplication of labor.

c) Smart Contract

Smart Contract refers to an agreement that the blockchain automatically executes according to rules pre-determined by the parties concerned in the transaction.

The concept of smart contract can be traced back to 1995. It was proposed by interdisciplinary legal scholar Nick Szabo³¹: "Smart contract is a set of digitally defined promises, including an agreement, based on which the contracting parties can execute such promises."

From the user's point of view, smart contract can be an automatically secured account: When certain conditions are met, the program will release and transfer funds. From a technical point of view, smart contract can be taken as web servers, except that these servers are not set up on the Internet by using IP addresses, but rather on the blockchain. Therefore, one can send information to these contracts and get feedback (depending on the coding rules and their internal state).

Unlike Internet servers, but more realistic, smart contract is visible to everyone because their code and internal state are on public blockchains. Moreover, blockchain technology-based smart contract does not rely on a specific hardware device.

The execution of the code is automatic and "atomized": either it is executed successfully or all state changes are withdrawn (including information sent to or received from the current cycle of the failed contract). This is important because it avoids the partial execution of the contract (for example, in the securities purchase transaction, the owner of the securities has transferred the ownership of the securities, but the payment via token money has failed). This is particularly important in a blockchain environment in consideration of the adverse consequences brought about by the execution errors which cannot be easily revoked (if the counterpart refuses to cooperate, it may not be able to reverse at all)³².

3.2 Technical Framework of LifeWow Blockchain

The core of LifeWow is an Ethereum-based distributed database that protects data within the LifeWow network via encryption and conducts signature verification of data via multi-signature technology. Due to the limitation of blockchain storage, the data on the chain mainly stores transaction information for data access, including the HASH value of the data, the timestamp and the address of the transacting parties. LifeWow's data entities will be mainly stored in distributed databases in the future (such as IPFS, CouchDB or other distributed databases, or

database that may be independently developed by LifeWow ecosystem). The data from the upstream DAPP application layer has been encrypted by the data holder's public key. Therefore, only the person with the corresponding private key can decrypt it and nobody else can restore the original data. The database of the chain can record the HASH value with real-time information features on the chain by algorithms so as to ensure that the untamperability and integrity of the data stored in the chain; the distributed multi-node storage of the off-chain storage system ensures that the data will never be lost. The multi-channel support of the LifeWow Blockchain enables the independent running of the business data under different modules and strengthens the support for private transactions.

The LifeWow Blockchain platform architecture model is as follows:

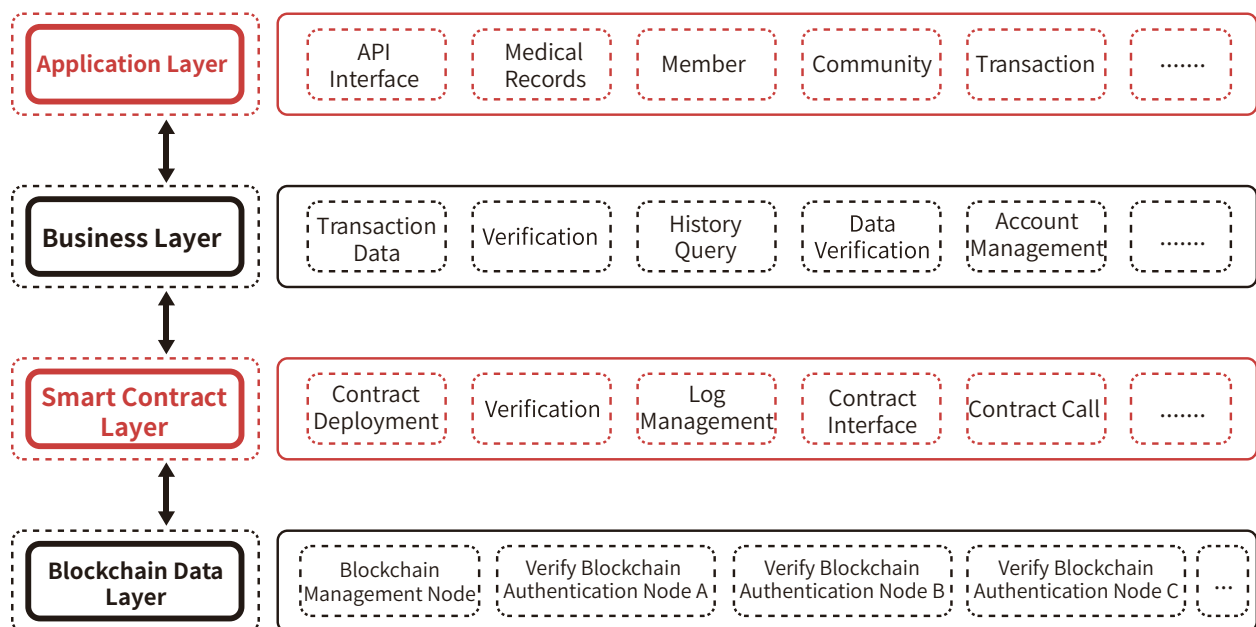


Fig. 10: LifeWow Blockchain Platform Architecture Model

- **Application Layer:** It is a general term for front-end applications that perform various operations on the LifeWow platform, including Mobile APP, PC applications and Web applications. In addition to direct access through open protocols, LifeWow will provide SDKs to facilitate the development of various applications.
- **Business Layer:** It is the part of the system architecture that embodies core values. It contains the business logic of each aspect within the medical system and continues to increase and develop with time, ecological scale and business complexity.

- **Smart Contract Layer:** It is a set of digitally defined promises, including the agreements that the contracting parties promise to perform. The smart contract layer encapsulates the business logic of the business layer in the manner of "code is law".
- **Blockchain data layer:** includes the basic components of a blockchain, such as storage node, consensus algorithm, Ledger services, etc.

3.3 Datamation and Getting on the chain of Personal Health Assets

Based on the various reasons as mentioned above, medical data failed to be a kind of general asset for quite a long time in the past, which had affected the cooperation and running efficiency of the health system.

Through combining the blockchain technology, LifeWow stored and recorded the personal medical and health data of residents on the blockchain of LifeWow, and realized assets capitalization. Meanwhile, LifeWow would further improve the personal aggregate health data of residents, summarize them into a complete health archive, and realize the datamation of personal health assets. Properly using data assets would increase the health assets of users; properly maintaining health assets would generate more digital assets. By promoting such virtuous circle, LifeWow would constantly improve the efficiency of the medical system.

Specifically, in the blockchain of LifeWow, each user would have his/her own exclusive "LifeWow ID", which includes:

- a) **LifeWow Account**, covers the personal LifeWow Healthcare Points (LHP), associated accounts, life quality financing proposal, basic personal information with encryption, etc.
- b) **LifeWow Record**, covers the personal lifecycle health information, dynamic update, sustained accumulation, and finally forms the self-analyzing health data system
- c) **LifeWow Solution**, covers mature service programs for the existing disease, and planning programs based on future life quality demands
- d) **LifeWow Service**, covers comprehensive diagnosis and treatment service center, and the distributed convenient service network

3.4 Transaction and Circulation of Medical Data



Fig. 11: Transaction process of medical data in the ecology of LifeWow

Capitalization of medical data could be realized through the LifeWow network, i.e. transaction and circulation. For example,

- If a certain scientific research institution (a consumer of medical data, such as the drug discovery institution that needs clinical cases) needs medical data in a specific dimension, it could make a request for data purchase through the LifeWow network (smart contract A — network data reward)
- Such request would be broadcast to relevant nodes in the network (mainly various medical institutions). Each node would implement another group of relevant smart contracts (smart contract B — local data retrieval), to inquire for the eligible data
- The node would neglect such request if no relevant data found
- If relevant data found, the node would make further judgment whether such data require authorization from the owner. If authorization is required, the node would notify the data owner of the authorization request (smart contract C — data authorization request): such data could only be purchased with authorization; otherwise, no purchase of or access to such data would be available
- Upon the success of a transaction, the smart contract would automatically implement settlement by token money (smart contracts A, B and C are implemented respectively)

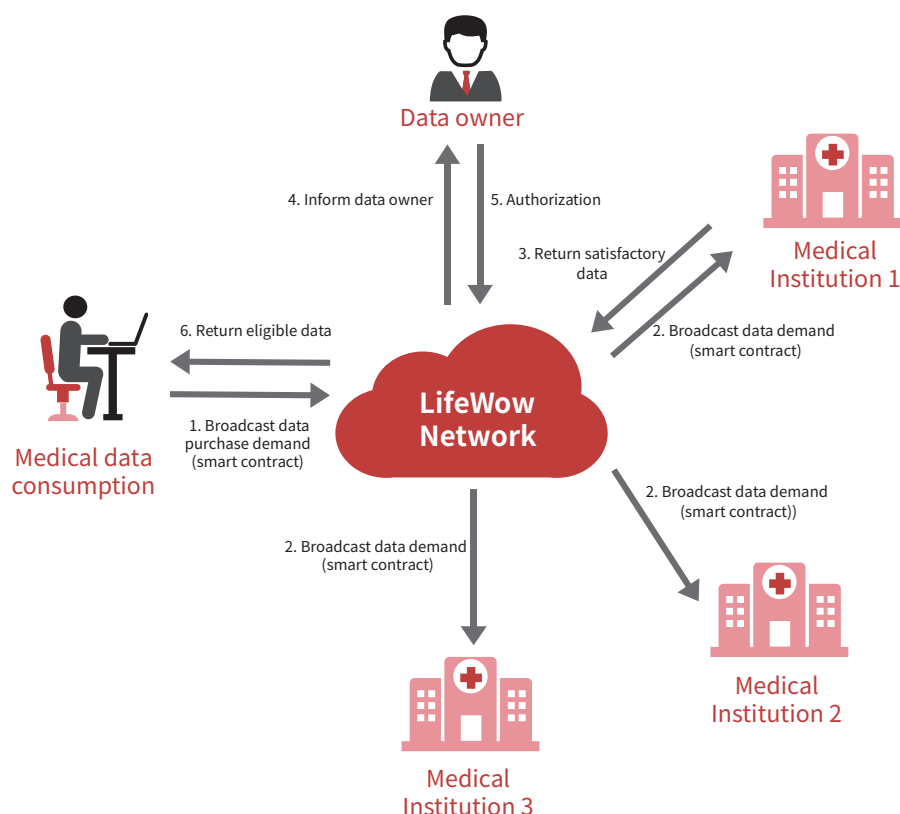


Fig. 12: Transaction cases of medical data in LifeWow network

4. Stages Development Planning of LifeWow

4.1 Stage I: Family Doctor Preliminary Diagnosis Recommendation

Establish comprehensive diagnosis and treatment service center through family doctor platform and blockchain-based health database, so as to realize the low-cost and huge population-covering preliminary diagnosis system, for the purpose of referral and recommendation to three different kinds of medical business models

A. Family doctor platform: constantly expand the family doctor platform (which is currently the biggest in Asia), gathering over 70% family doctors and covering over half of the population

B. Decentralized healthcare database: establish decentralized personal healthcare database using the blockchain technology. The database records personal health and medical data, and it is safe, irreversible, traceable and encrypted

C. Based on the healthcare data, the family doctor would provide preliminary diagnosis services for users, and implement symptomatic treatment or referral according to the category of diseases

a) Serious illnesses and severe diseases: referral to large general hospital

b) Specialized Diseases Whose Challenges Have Been Overcome

- Available for direct treatment: family doctor would implement treatment directly
- Out of competence scope of a family doctor: referral to specialized hospital

a) Chronic disease: recommend the patient to enter the chronic disease self-management network community

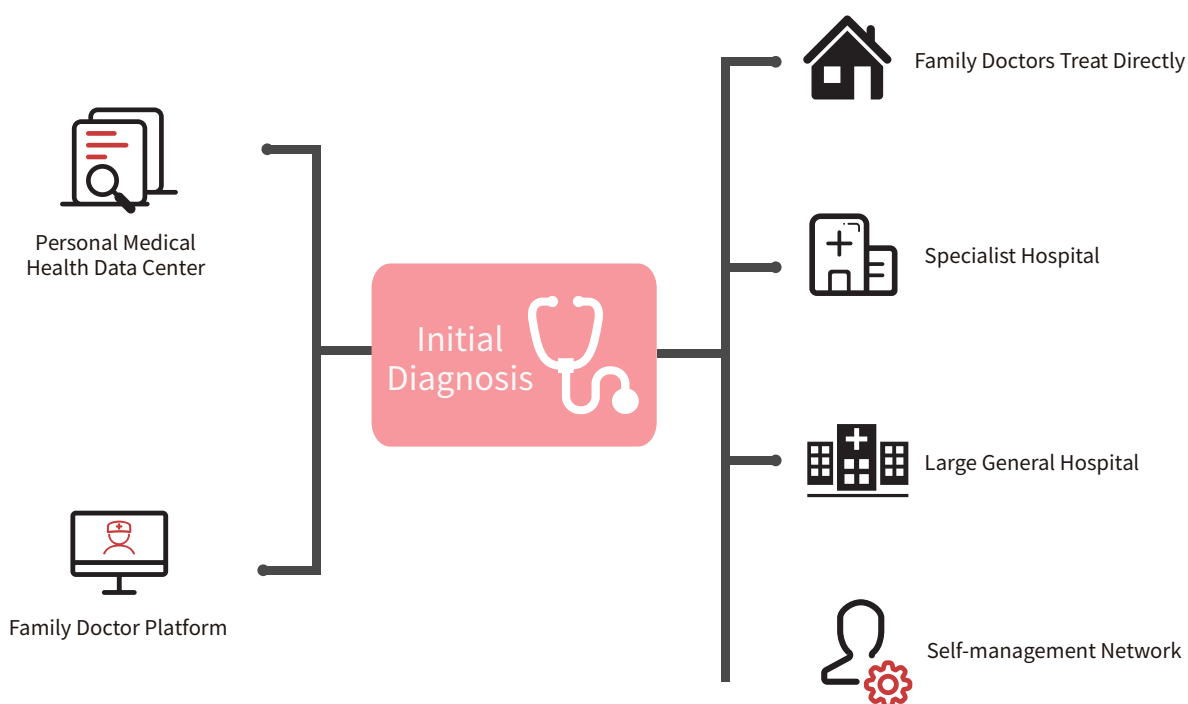


Fig. 13: referral model of general medical service center

Case 1: Tom felt uncomfortable in the abdomen, and turned to the comprehensive diagnosis and treatment service center of LifeWow network. LifeWow recommended the nearest family doctor, Dr. Lee, and Tom made an appointment through the LifeWow APP. Dr. Lee dropped in and made a simple diagnosis. Dr. Lee found that there may be a lump under the skin in the abdomen of Tom, and a tumor is suspected; further confirmation for pathology and blood information are required. Thus, Tom was suggested to take a comprehensive examination in a large general hospital. Once Dr. Lee confirms the completion of preliminary diagnosis, the system would automatically, combining legal tender and LHP, carry out settlement.

Case 2: Nancy woke up in the morning and found edema in her chin, with dull pain in the gingiva, and turned to the comprehensive diagnosis and treatment service center of LifeWow network. LifeWow recommended the nearby family doctor, Dr. Tan, as Dr. Tan had abundant experience in oral treatment Nancy made an appointment through the website of LifeWow, and went to the family clinic of Dr. Tan. After careful examination, Dr. Tan made a diagnosis of dental pulp necrosis and teeth root inflammation generated by tooth decay, and provided corresponding therapeutic schedule: root canal therapy with irrigation. The family clinic of Dr. Tan is not capable of operation, thus Dr. Tan suggested Nancy go to the nearby specialized dental clinic, Toothcare. Nancy immediately went to Toothcare, where she received quick and efficient treatment. Upon settlement, Nancy received 30% discount, as Toothcare was a member of LifeWow ecology.

Case 3: Mark suffers from type II Diabetes, and needs to regularly check the indexes including glycosylated hemoglobin, fasting blood glucose, postprandial blood glucose, etc. All the time, Mark went to large general hospital for examination on a regular basis, which was both time- and energy-consuming. Nancy recommended the comprehensive diagnosis and treatment service center of LifeWow to Mark, who then made an appointment by phone, and visited Dr. Smith, the family doctor nearby. Dr. Smith asked in detail about the conditions of Mark, and recommended Mark to join the patient mutual-care network for type II diabetes, which was spontaneously set up by the users of LifeWow. Mark met a lot of patients who have the similar conditions through this network. They answer questions, give encouragement and supervise the living habits mutually. Dr. Smith would at times provide certain guidance and doubt answering for other patients. Mark found support from others, and had a stronger feeling of control over his own health. Even better, Mark does not need to queue in the large hospitals any more.

4.2 Stage II: Empower Family Doctor

Family doctors could handle more diseases through more completed personal healthcare data, and in combination with new technologies — patients who previously needed a referral could now obtain solutions directly from the family doctor.

- **More completed personal healthcare database:** record various healthcare information more comprehensively, such as gene information, family history, etc. More completed information means that more diseases would be transferred from "intuitive medical treatment" to "accurate medical treatment", i.e. to be solved through more efficient and low-cost mode
- **Distributed, decentralized testing and imaging:** in the past, medical testing and imaging were mainly

relied on large equipment, which were set in large general hospitals. With the development of technologies, lots of equipment for testing and imaging started to be miniaturized and decentralized, such as small lung function test equipment, portable electrocardiogram equipment, small injector pumps, etc. We would provide the family doctors with such equipment for testing and imaging, to help diagnose and treat many diseases that originally required referral.

- **Online diagnosis support tools/expert system software:** such software play the role of "e-doctor". Although they might not be better than the existing treatment when used by specialist physicians, but they could, when used by general family doctors, help them get closer to accurate diagnosis. We would develop and allocate this diagnosis software for family doctors, to help them diagnose and treat many diseases that originally required referral.
- **Telemedicine:** the present telecommunication technologies could help the specialist physicians obtain monitoring data remotely, and it feels like face-to-face joint consultation carried out for the patient together with the family doctor. Those specialist physicians could verify or correct the diagnosis by family doctor through telecommunication technologies. We would allocate necessary specialist physicians for family doctors, and, through telemedicine, help them to diagnose and treat many disease that originally required referral

There used to be challenges relevant to data safety, incentive dividend, etc. of various degrees for the above technological means. Such problems could be effectively solved through the blockchain technology

	Problems solved by the Blockchain
Personal healthcare database	<ul style="list-style-type: none"> • Healthcare data are confidential and safe • Data are reliable and traceable • Users would be rewarded for contributing data
Distributed, decentralized testing and imaging	<ul style="list-style-type: none"> • Test data are confidential and safe • Users would be rewarded for contributing data
Online diagnosis support tools/expert system software	<ul style="list-style-type: none"> • The diagnosis process is traceable and auditable • The diagnosis result is confidential and safe
Telemedicine	<ul style="list-style-type: none"> • Cooperation between specialist physicians and family doctors • Past experiences of specialist physicians are traceable and searchable

Target of Stage II is to help family doctors handle more diseases than before, in an efficient and low-cost way, and thereby lower the total cost of the overall medical system and improve efficiency

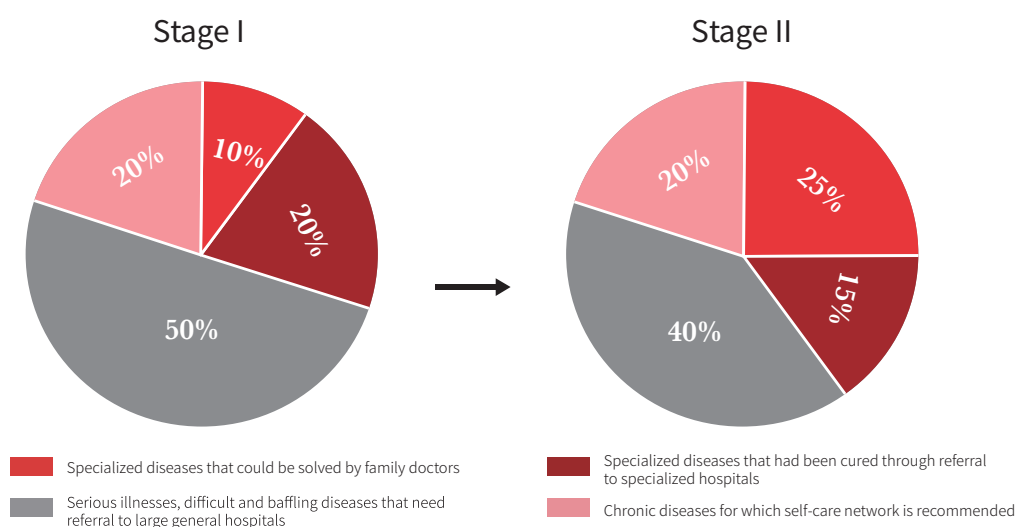


Fig. 14: LifeWow empowers family doctors to solve more diseases efficiently

- **More completed personal healthcare database:** record various healthcare information more comprehensively, such as gene information, family history, etc. More completed information means that more diseases would be transferred from "intuitive medical treatment" to "accurate medical treatment", i.e. to be solved through more efficient and low-cost mode.
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- **Online diagnosis support tools/expert system software:** such software play the role of "e-doctor". Although they might not be better than the existing treatment when used by specialist physicians, but they could, when used by general family doctors, help them get closer to accurate diagnosis. We would develop and allocate the diagnosis software for family doctors, to help them diagnose and treat many diseases that originally required referral.

- Telemedicine: the present telecommunication technologies could help the specialist physicians obtain monitoring data remotely, and it feels like face-to-face joint consultation carried out for the patient together with the family doctor. Those specialist physicians could verify or correct the diagnosis by family doctor through telecommunication technologies. We would allocate necessary specialist physicians for family doctors, and, through telemedicine, help them to diagnose and treat many disease that originally required referral

Case 4: Mary is a mother with second pregnancy. During the first pregnancy, she originally planned to carry out antenatal care in the clinic nearby. However, there was no Type-B Ultrasonic Scanner, and screening for Down's Syndrome was unavailable; thus, she had to go to large hospitals for antenatal care on a regular basis. As it turned out, every time there were huge crowds of people that the medical workers were overwhelmed, which was quite a poor experience. Mary did not want to have such experience for the second pregnancy; thus, she consulted the general medical service center of LifeWow. LifeWow helped Mary to make appointment with the nearby family doctor, Dr. Williams. The mini club of Dr. Williams was equipped with Portable Type-B Ultrasonic Scanner provided by LifeWow, which helped Mary to carry out type-B ultrasonic examination smoothly. Meanwhile, Linda, assistant of Dr. Williams, collected venous blood for Mary, and mailed it to the professional blood test center in LifeWow network, for fetal-maternal cell-free DNA detection analysis. Three days later, Mary received a phone call from Linda: the result of blood test was good, and no major chromosomal disorders had been found in the child (Down's Syndrome or Edward's Syndrome). Until the parturition, Mary completed all antenatal care in the clinic of Dr. Williams, which was comfortable, inexpensive and convenient. Mary made payment to Dr. Williams through LHP, and part of the LHP was directly transferred to LifeWow Foundation through smart contract, as returned money for freely equipping Dr. Williams with Portable Type-B Ultrasonic Scanner.

Case 5: Rebecca had a nevus on the arm, which tickled a lot recently, and it seemed to have become bigger compared with that of a few months ago. Rebecca was worried that it might be melanoma, and turned to the comprehensive diagnosis and treatment service center of LifeWow, where she made an appointment with the family doctor in the neighborhood, Dr. Nakamoto. Dr. Nakamoto carefully observed the nevus of Rebecca, and diagnosed that it was unlikely to be melanoma. However, as it mattered a lot, Dr. Nakamoto dared not make subjective assumption. Thus, Dr. Nakamoto took high-definition photos of the nevus, and uploaded them to the related disease database of LifeWow for comparison. LifeWow had long accumulated mass data, and, through deep learning and training, had possessed the recognition algorithm for skin diseases, with the accuracy rate up

to 98%. A few minutes later, feedback from the system showed negative, i.e. not melanoma. Dr. Nakamoto told Rebecca to take it easy, and as expected, soon the nevus no longer tickled, and all was well hereafter. Rebecca paid Dr. Nakamoto the diagnostic cost through LHP, part of which was then distributed through smart contract to the cooperative agencies in LifeWow ecology, respectively the development team of visual identity and the medical institutions that had provided mass pathologic data. Through another layer of smart contract, the medical institutions further distributed the LHP received to the residents and patients who first provided data.

Case 6: David made an appointment through the comprehensive diagnosis and treatment service center of LifeWow, and visited the family doctor nearby, Dr. Stephen. David complained about pains in hands and ankylosis, which had prevented him from doing housework. Dr. Stephen examined his hands, and found serious swelling and inflammation. Dr. Stephen speculated that it might be rheumatoid arthritis. But as the standard therapy is toxic, Dr. Stephen hesitated about whether to make a prescription directly. Hence, Dr. Stephen opened the medical specialist network APP of LifeWow, where he described the symptoms of David and uploaded photos of the hands, seeking advices from specialists. Within a couple of hours, several specialists of rheumatology responded, and made a definite diagnosis within one day. Dr. Stephen was suggested to carry out extra examinations to ensure correct diagnosis, and therapeutic schedule was recommended. Dr. Stephen adopted the suggestions from specialists, and soon his symptoms and conditions were controlled and relieved. David paid LHP to Dr. Stephen, part of which was distributed through smart contract to the specialists of rheumatology who provided good advices. Later, Dr. Stephen expressed that, "Without their helps, I'm not sure whether I had sufficient experience and confidence to handle the situation of David."

4.3 Stage III: Becoming Provider of Integrated Medical Services

Absolutely, a single-link innovation could not change the current medical system, which needs systematic changes in several links. In Stage III, the referral and recommendation modes in Stage I and Stage II would be persistently strengthened and developed, and the revolution from quantitative change to qualitative change would be completed: LifeWow would integrate the medical system with specialized hospitals, large general hospitals and Internet communities, through self-establishing or M&A.

The target of Stage III is to become a provider of integrated medical services. Only the provider of integrated medical services is more likely to provide efficient, convenient, all-win medical system in the long run:

	Far-sighted	Earn profit from health	Know the patient well	Convenience	Decisiveness
Health insurance	Not good	Fairly good	very poor	very poor	Not good
Independent doctors	Not good	very poor	Fairly good	Fairly good	very poor
Independent hospitals	very poor	very poor	very poor	Not good	very poor
Governments	Not good	Fairly good	very poor	Ordinary	Not good
Employees	Ordinary	Fairly good	Very well	Not applicable	very poor
Employers	Fairly good	Very well	Fairly good	Very well	Fairly good
Provider of integrated medical services	Fairly good	Very well	Ordinary	Very well	Very well

In Stage III, LifeWow would focus on implementing vertical integration and deep strategic cooperation, whose objects include institutions of the following types

- Various specialized hospitals
- Large General Hospital
- Internet health management community
- Testing and imaging center
- Supplier of medical information
- Health insurance

i.e., form closely cooperated and deeply integrated ecosystem, based on the large cooperation system + token money economic system of blockchains, to provide the users with integrated healthcare services.

Case 7: as the mother of two children, Lucy had always paid a lot of attention to the family health and the medical information around. Lucy knew about LifeWow long ago, but except some minor illnesses, she seldom used it, mainly due to the two reasons below: on the one hand, the whole family is covered with commercial medical insurance of traditional medical institutions; on the other hand, LifeWow did not have any large directly-subordinated hospitals, and Lucy was afraid that LifeWow could not solve serious illnesses. But recently, Lucy learned from the news that LifeWow Foundation made investment and purchase the largest hospital in the locality, Uni Hospital, and also launched LifeWow insurance: one could seek medical advice free of charge under all systems of LifeWow provided paying normed LHP each year.

Lucy was interested in it, and immediately purchased LifeWow Total Medicare security, covering all LifeWow solutions and services for life security. After that, Lucy have received follow-up visits from the family doctor of LifeWow, and mailed physical examination package from LifeWow regularly. If Lucy gets sick, the comprehensive diagnosis and treatment service center of LifeWow would help Lucy to make appointment with a family doctor. Most of the time, the family doctor could directly solve the health problems of Lucy; occasionally, Lucy has been transferred to the specialized hospitals of LifeWow; there were also twice that Lucy was transferred to Uni Hospital, the large hospital invested by LifeWow Foundation.

What surprised Lucy just now was that: Uni Hospital transformed by LifeWow no longer shows a scene of overcrowding people and overwhelmed medical workers. What Lucy saw was that everything was in perfect order. Chief physicians from different departments came and carried out expert consultation for Lucy, and the medical workers also showed great concern and patience to Lucy. Being a member of LifeWow Total Medicare, Lucy enjoyed all services here free of charge, which had greatly amazed Lucy.

Case 8: Chris Tan is a doctor in Uni Hospital, the largest general hospital in the locality, who had been working in Uni Hospital after graduated from medical college. Chris used to feel like fighting a battle when working: made diagnosis for patients from morning to night every day, worked overtime as always, with usually over 70 hours of weekly working time. However, the patients queued up for seeing a doctor seemed unable to experience the pain of Chris. They always complained that Chris only provided them with 5-minute consultation time, sent them to do various examinations, and the medicines prescribed were too expensive. Chris felt helpless. He could understand that the patients want more communication with the doctor after a 2-hour lining up; however, there are too many patients that if 5 more minutes given to each patient, Chris would no longer afford the sleeping time. Besides, Chris was also under performance pressure from the Department, and he needed to meet the department income index calculated by month (including medicine fees and examination fees), which directly affected the bonus of Chris. Chris felt exhausted under such great pressure, and he once intended to stop being a doctor.

Later, LifeWow invested Uni Hospital, and amended the process and system extensively. After that, great changes occurred to Chris's job. First, the number of patients was reduced by half, to the extent that there were barely patients of minor or regular diseases; patients now coming are basically with complex or serious conditions. Second, for more complex conditions of patients, Chris started to carry out joint consultation with doctors from other departments more often, which resulted in great improvements to the therapeutic effect and overall

efficiency. In addition, great changes also occurred to the salary system of Chris: Chris no longer burdens any sales performance target, while his main job task is to satisfy the patients. Chris learned from the vice president of the hospital that, almost all the expenses of the hospital are now burdened by LifeWow Foundation, and that the hospital no longer bears profit pressure. Chris can now focus on the medical work patiently, and it feels so good to help the patients with all his strength, and to be honored by them. The consultation with various specialists also greatly improved professional abilities of Chris. Now, Chris feels perfectly happy being a doctor.

Case 9: Joseph is the Marketing Director of a pharmaceutical company, InnoPharm. All the time, Joseph has two main tasks: one is how to introduce new medicines of the company to the hospitals and doctors; another is how to bring the new medicines into the coverage area of insurance companies (Medicines of InnoPharm are expensive, and most of the people could not afford them if not covered by insurance). Joseph always joked with the colleagues that, "Our company is a marketing company other than pharmaceutical company." Later, since InnoPharm signed a group of R&D agreements with LifeWow, great changes occurred. LifeWow did not entrust InnoPharm to research and develop more effective and expensive new medicines, but the medicines for common diseases: the effect of which does not need to be better than those of the post-marketed medicines (or even a little worse), but the costs shall be substantially lowered. Such medicines even do not need to be protected by patent. Joseph was surprised, as in the past, no hospital or drugstore was willing to purchase such medicines, and no pharmaceutical factory was willing to research and develop such medicines. However, after InnoPharm succeeded in the R&D, LifeWow made massive purchase of the medicines, and distributed them to each medical institution under the ecosystem, which had cut the overall costs and expenses of LifeWow ecology.

4.4 Stage IV: Set up Life Health Trust Account, Realize Complete Cycle of LifeWow Ecosystem

Stage IV would center on solving payment problems, supplement and overturn the current medical insurance payment system. Through the per-capita payment (i.e. fixed annual fee) in the integrated system mentioned in Stage III, or setting up life health trust account, which integrating high-minimum-amount-of-pay medical insurances, it is aimed to establish a sustainable, all-win, long-term optimal payment system

Life health trust account: individuals could make regular deposit (legal tender or LHP), and obtain the proportional LHP token subsidies. An individual who has healthy habits and behaviors would obtain more LHP tokens, which would be deposited in the account.

With the help of life health trust account, users of LifeWow could gain effective medical payment guarantee through two different modes:

1) **LifeWow ecology fixed annual fee:** users could subscribe the fixed annual fee guarantee of LifeWow integrated medical ecosystem (similar to the LifeWow Total Medicare guarantee in Case 7) through life health trust account, so as to obtain sustainable, superior life health services.

or

2) **Third-party high-minimum-amount-of-pay insurance:** users could also choose the high-minimum-amount-of-pay insurance from the traditional insurance companies, and, taking LifeWow life health trust account into consideration, form combined effective medical insurance.

Life health trust account is used for paying regular low-cost medical fees; once reaching the annual deductible, the third-party insurance would get involved. Whether there is any gap between the amount of life health trust account and the amount for which insurance gets involved, is related to the personal life health trust plan and the degree of saving for healthcare expenditures.

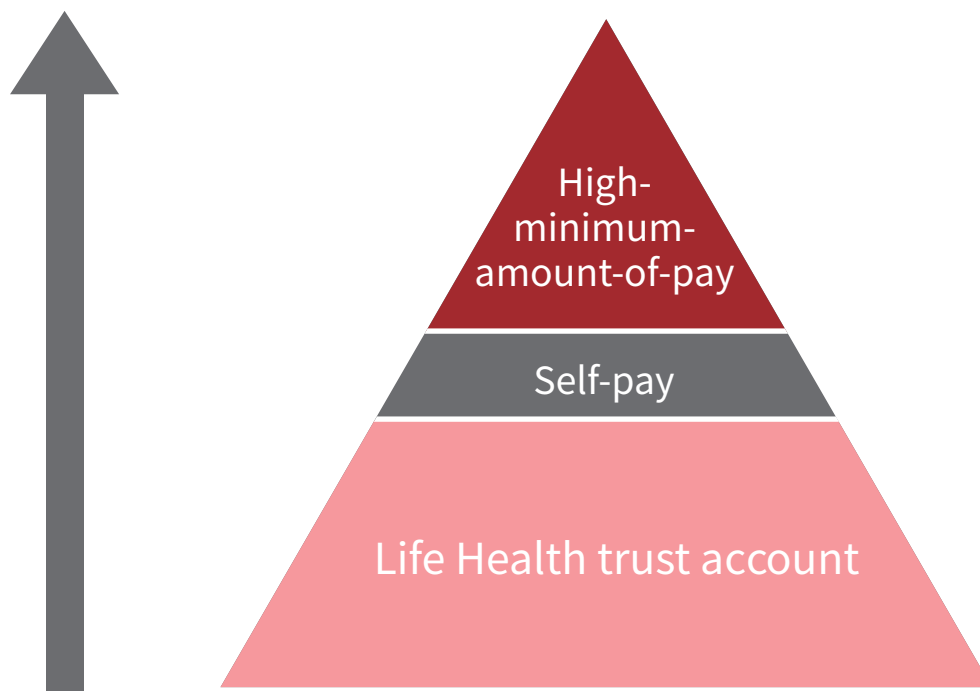


Fig. 15: Combination of life health trust account + high-minimum-amount-of-pay insurance

Different payment systems would have widely different effects for realizing goals of different parties:



		Pay-for-service	National health insurance	Pay per capita in independent system	Pay fixed annual fee in LifeWow integrated system	Life health trust account + high-minimum-amount-of-pay insurance
Expectations of patients	Help me regain health	Ordinary	Ordinary	Not good	Fairly good	Ordinary
	Help me keep healthy	Ordinary	Ordinary	Not good	Fairly good	Fairly good
	Help me with my economic capacity	Ordinary	Ordinary	Ordinary	Ordinary	Fairly good
	Protect my assets from loss	Ordinary	Fairly good	Very well	Very well	Very well
Expectations of medical services provider	Pay for the services I provided	Fairly good	Not good	Ordinary	Very well	Fairly good
Expectations of employers	Help me to attract and keep the best employees cost-effectively	Fairly good	very poor	Not good	Fairly good	Very well
Expectations of the insurance company	Help me to avoid paying for unnecessary services	very poor	Not good	Very well	Very well	Ordinary
Expectations of politicians	Help me to maintain a balanced budget and meanwhile make political achievements	very poor	very poor	very poor	Fairly good	Fairly good

It can be seen from the above form that, both the payment systems, "LifeWow integrated ecosystem fixed annual fee" & "life health trust account + high-minimum-amount-of-pay insurance", could optimally realize the interests and goals of various parties. Both payment systems are compatible with the ecosystem of LifeWow, and thus complete the overall reconstruction of the medical system.

Case 10: Park was once a fat "couch potato" at the age of 30. Busy work and bad living habits brought to his severe overweight, and also big heart problems. Once a common cold, which turned into pneumonia finally, caused Park to stay in bed for as long as 30 days; and after the hospital discharge, Park almost went bankrupt due to the medical bill. Park realized that, health is the biggest assets. Suggested by friends, Park became a member of LifeWow network.

Park set up his own life health trust account on LifeWow network, and, following suggestions from the system, went to the nearby physical examination center authorized by LifeWow for a complete health examination. LifeWow exclusively arranged a family doctor for Park, Dr. Raynor, who then customized a systematic health restoration scheme for Park, and followed up the progress in real time using mobile equipment and intelligent hardware of LifeWow. After that, Park started sticking to healthy lifestyle: control diet, increase exercise, work and rest regularly. Hard as it was, with the raises in various body indexed, Park surprisingly discovered that the life health account could obtain LHP reward. Moreover, Park deposited part of his salary into the life health account on a regular basis, as it could offset partial individual income tax.

One year later, Park was obviously healthier and more energetic, with higher work efficiency and less illnesses. Occasionally when Park got sick, he would directly spend the LHP in the life health account for treatment provided by the medical institutions of LifeWow network. Certainly, Park also bought traditional commercial insurance, in order to cope with the conditions of serious illnesses.

Case 11: Park feels increasingly satisfied and confident with the services provided by LifeWow, so he bought LifeWow Total Medicare, which allows him to pay a fixed fee annually to enjoy free medical services. He also terminated the original commercial medical insurance.

LifeWow Total Medicare makes adjustments to its annual fee based on Park's current health status and past medical records. Park has since become more concerned about his health. Park sets an example for his friends and relatives, among whom some "couch potatoes" have become a fitness fanatic.

5. Token Economic Model of LifeWow & Its Ecological Group

5.1 Economic Model Based on Token

LifeWow will issue LifeWow Healthcare Points (LHP) token as the value carrier of LifeWow ecosystem. The ceiling number of LHP tokens is 10 billion, and after that no more will be released.

The ledger and transaction information of LHP token will be recorded in the LifeWow Blockchain and distributed database, which is credible, traceable and untamperable.

LHP will be embedded in the LifeWow ecosystem and used by various parties, institutions and individuals for trade and value delivery. The specific usages of LHP include but are not limited to:

- Users buy all kinds of life quality services in LifeWow ecosystem, including consulting services, diagnostic services, treatment plans, test analysis, medicines, medical devices, etc.
- Users buy health insurance or health care financial products, such as the LifeWow Total Medicare in third stage.
- Doctors or medical institutions buy or lease specific medical devices, software services, data authorization, etc.
- Patients contribute their valuable medical or health data, which are rewarded.
- LifeWow Foundation rewards those contributing values to the ecosystem (e.g., engineers, doctors, etc.)

Use scenario case 1: Tom is a patient suffering a rare disease, and he has tried and experienced a variety of complex treatments. Tom then sends his medical records and treatment information to LifeWow's rare disease data center for reference by researchers and clinicians. LifeWow Foundation awarded Tom a certain number of LHPs; In the future, if Tom's data is used by an authorized user for a paid invocation, Tom will get additional LHPs.

Use scenario case 2: InnoPharm is a new drug development company that collects case data from various medical institutions within LifeWow network and pays LHPs to the data provider when developing a new drug.

Use scenario case 3: Linda paid a visit to a doctor's office at a medical institution under LifeWow's ecosystem, and used LHPs to pay the inspection fee, diagnosis expense and medicine expenses.

Using scenario case 4: Dr. Stephen faced a difficult case, and after using the remote medical expert network of LifeWow and convening a network consultation, he finally cured the patient's disease. The patient paid LHP, which was distributed among the various doctors participating in the consultation.

Use scenario case 5: Lucy used LHPs to purchase LifeWow Total Medicare for his family, which enables them to enjoy free medical services in LifeWow network.

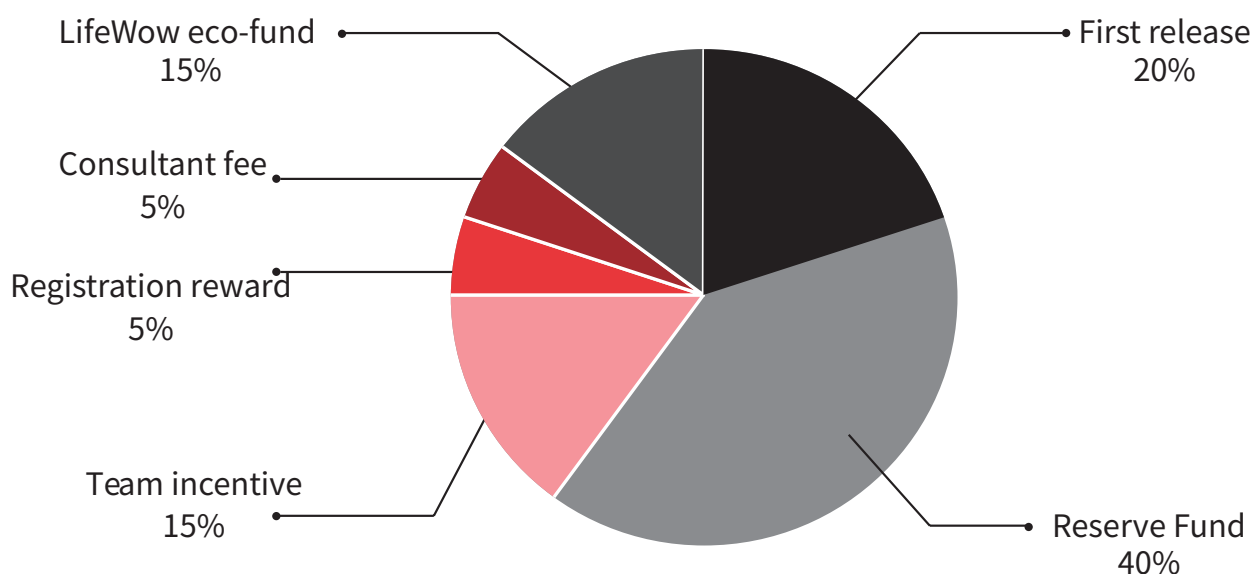
Use scenario case 6: Park has registered a life health trust account on the LifeWow network. By remaining in good physical health, Park can be rewarded with LHPs. Park also regularly deposits LHPs on the life health trust account to cover subsequent medical expenses.

Apart from the typical usage scenarios described above, the use of LHPs is also mentioned in the various case studies in the previous article, which will not be repeated here.

5.2 Plans for the Initial Offering of Token

The ceiling amount of LifeWow token money 10 billion (10,000,000,000), and after that no more will be issued. The first issuance will be 20 billion (that is, 20% of the total).

A. The first release is to be followed by distribution of LHP token.



After the initial release, LHP token is distributed as follows.

Proportion	Description
20%	Initial issue
40%	The Reserve fund, after reaching the milestone of its initial release, will be used for the follow-up financing of LifeWow.
15%	Team incentive is designed as the option incentive for LifeWow's founding team and global team.
5%	The registration award is used to reward the first group of individuals and institutions to join the LifeWow ecosystem.
5%	The consultant fee is used to reward financial, legal, technical and other service providers in the first round of issue.
15%	LifeWow eco-fund is used to reward individuals or institutions that have made outstanding contributions to the LifeWow ecosystem.

B. Purpose of funds raised:

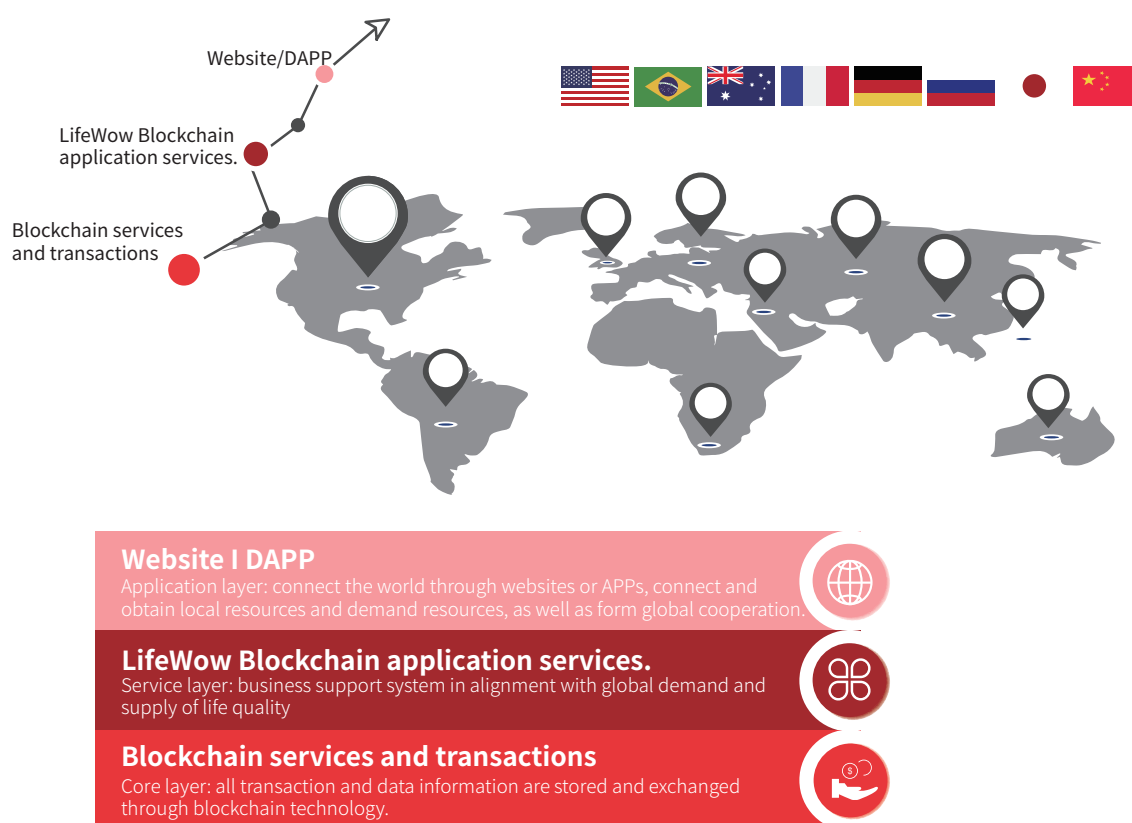
The funds raised and the future operation of the project can be tracked and audited, and the results will be published regularly through social media.

The funds raised will be used for the following purposes:

- To develop the LifeWow Blockchain and LHP token distributed data storage trading system (primary stage).
To develop application program for the first stage of the LifeWow network, including mobile APP and web APP.
- To have more doctors join the LifeWow family doctor platform network, expand the area of service regions, and form traffic entrance.
- To initially set up a LifeWow ecological system consisting of comprehensive diagnosis and treatment service center, as well as distributed and convenient service network.
- To establish a complete medical database, and develop the artificial intelligence data pathology matching system and the telemedicine auxiliary system.
- To expand its global presence, by establishing cooperative platform institutions in East Asia, Southeast Asia, North America, Europe and Australia, as well as building a secure global real-name medical and regulatory data center.

- Build a global team to promote the ecological concept of LifeWow, and engage relevant medical institutions and enterprises in the LHP economic system. Encourage inter-agency collaboration, and inspire users and institutions to upload valuable medical data.
- To build a financial team, design trust and insurance products to serve the individual users within the ecosystem, and synergize with large institutions.

5.3 LifeWow Ecosystem



A. Existing partners of LifeWow ecosystem (China)

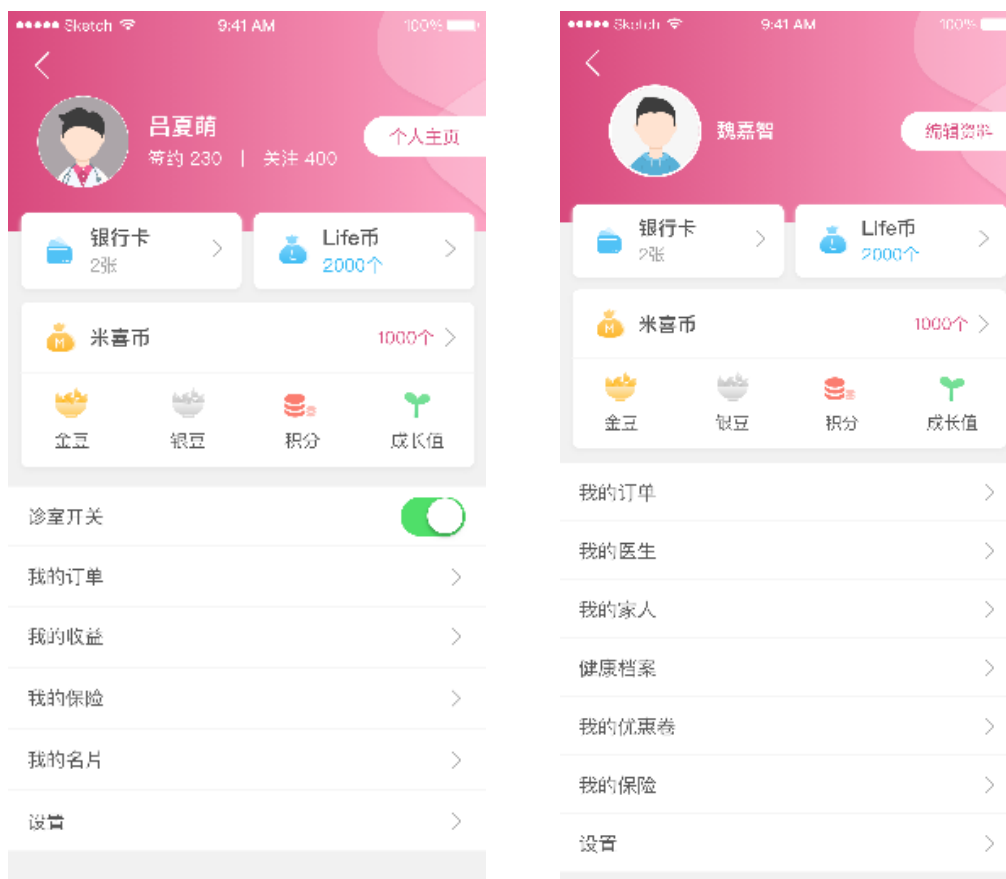
a) Partners in China, including those already in place, and those being built:

- Medishare -- Asia's largest family doctor service platform; the platform has 30,000 doctors, 5,000 specialists and 5 million patient users. And it is related to more than 10,000 Chinese medical institutions.
- Nearly 20 offline chain life houses of Medishare.
- Haotian Zhicheng global location security service provider;

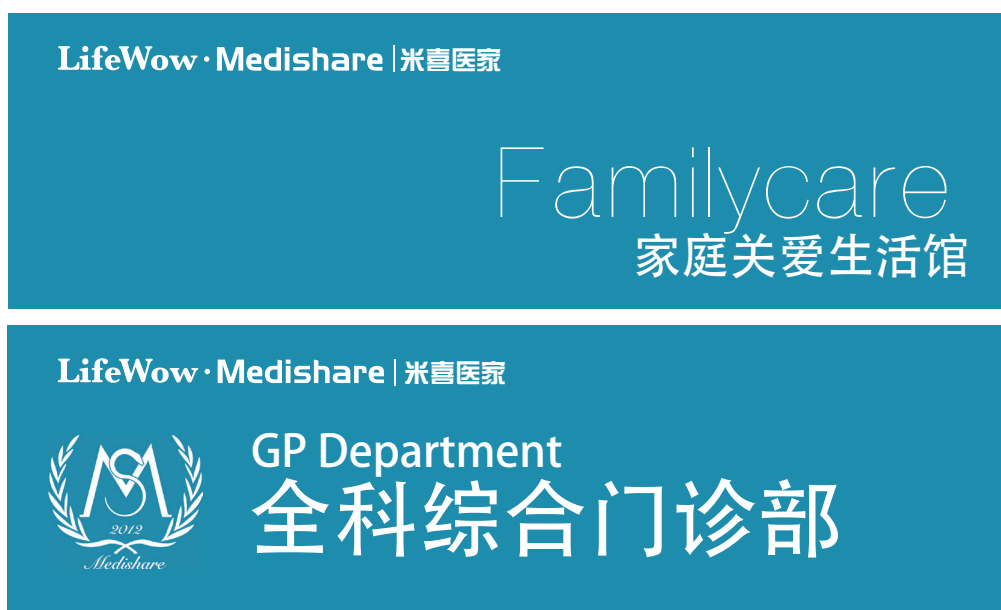
- Medical Sub-association of Jilin University Alumni Association;
- Bethune Medical School Alumni Association

b) Products and offline network of partners in China:

APP products already in use:



Application available for cooperation offline, including general clinic and family health living house

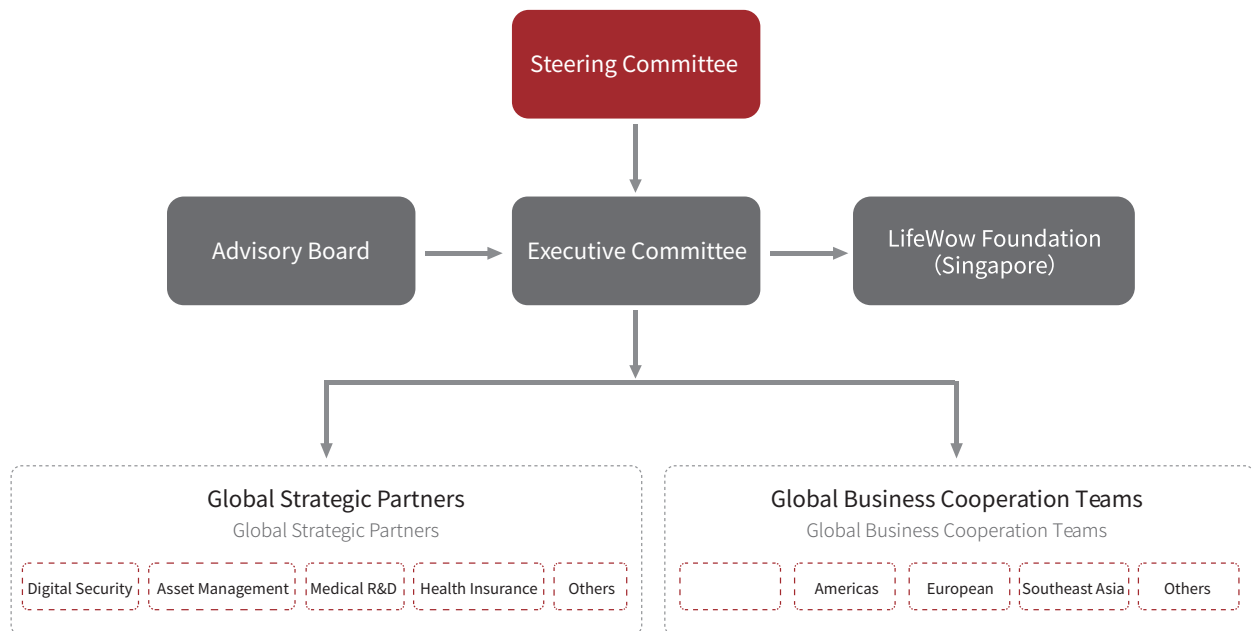


5.4 Development Plans in Other Countries and Regions

Subsequently, we will integrate the cooperation businesses in the United States, Japan, Korea and Europe, including general practitioners, specialists, nurses, nursing workers, insurance companies, and medical service institutions. In addition, the cross-border medical cooperation participants are introduced to increase the number of participants for mutual cooperation in the ecosystem.

6. Team

LifeWow team consists of Preparatory & Steering Committee, Global Business Cooperation Teams, and Advisory Board:



A. Preparatory & Steering Committee

Steering Committee



Helen Zhang

Committee Member

Work as Senior Vice President of private hedge fund on Wall Street, New York.

With more than ten years of senior management experience on Wall Street, specializing in structured and credit products, has worked for Lehman Brothers, Nomura Securities and IHS Markit.

Proficient in financial model, analysis, IT and financial accounting related technical business management.

Master of Medicine, Bachelor of Computer Science

Alex Zhu

Committee Member

Deputy General Manager of Shenzhen Jinzheng Technology co. LTD
General Manager of Shenzhen Jinweilan Technology Co., Ltd. (East China)

Participated in and successfully introduced JD Financial and Guoyuan Securities' strategic investment in Jinweilan.

Was responsible for contact and cooperation with IBM, EMC, Netapp and CICS0, Oracle, HP, Lenovo, Ericsson and other traditional powerful manufacturers.

Have developed and managed over 500 agents in east China.



Neal Adams MD

Committee Member

MD, a practicing Ophthalmologist(Eye Specialist) in Washington, DC.

Graduated from University of Health Sciences of Antigua School of Medicine in 1998.

Has been in practice for 17 years.

Currently practices at the National Retina Institute and is affiliated with Johns Hopkins Hospital.



Laurence Cao

Committee Member

IT senior with over 10 years of experience in IT development, proficient in system architecture and artificial intelligence deep learning. Worked as a researcher at SNDA, and a platform architect at Alibaba. Mainly responsible for the construction of Medishare technical architecture and the establishment and management of the technical team.



Jay Zhang

Committee Member

Come from a family of doctors, and one of the founding partners of the company.

With rich experience in operation of government business and specialized hospital service, and good at business cooperation and event planning in the medical industry.

Responsible for accessing hospitals, multi-tiered referral project arrangement, launching of scientific research projects, government public relations etc.

Rich in government resources, enjoy good relations with government branches, have a good understanding of the resources and policies of medical institutions.

Business Economics, Brock University, Canada

Executive Committee



Alex Zhu

Executive Committee Member



Laurence Cao

Executive Committee Member



Jay Zhang

Executive Committee Member

B、Global Business Cooperation Teams

Cooperation Team in China



Lynk Wu

Copartner

Set up Medishare Network Technology Co., Ltd in 2012.

With five years of experience in the management of Internet medical service innovation enterprise.

With 15 years of experience in the entire industry chain of the pharmaceutical and healthcare industry.

International registered senior business planner being expert at ecological planning and business modeling.

Senior information engineer majoring in economics and management.

Worked at the largest pharmaceutical industry group in China as marketer, manager of innovation services, etc.

Engaged in the creation and management of the largest family doctor medical service platform in Asia as a co-founder.

JC Zhang

Copartner

Serial Entrepreneur

Was co-founder of a large professional online education platform in China.

Was a partner of a well-known domestic management consulting company.

Vice president of a famous agrochemical group in China

MBA, Shanghai Jiao Tong University

E-MBA, INSEEC





Cyrus Li

Technical Partner

Infrastructure and system development of medical platform of Medishare, with over ten years of experience in IT, and joining Medishare in 2016. Running the R&D department of the company, with outstanding technical ability, good at programming, architecture design, computer algorithm, talented in innovation, practical and devoted. Responsible for the design and development of platform infrastructure, and data application research, etc. Running the server-side development for Three kingdoms, Daredevil Driving and other games.

Well Gao

Product Director

With more than ten years of experience in serving as a PM Proficient in project process standardization and quality control. Good at team communication and coordination. Responsible for the management, tracking and revision of all the company's projects. Years of experience in the Internet, once a founder of a technology company based in Shanghai, joined Medishare in 2014, and devoted to his work. Once overseeing the development of multiple cultural platforms and APPs.



Ming Zeng

Medical Director

Many years of experience of working at several of the national top 100 community service centers and public health services, and familiar with the whole business process and service scene of the community health service center. Responsible for the establishment and training of MA team for Medishare, with a focus on the standardization of operation service process of primary medical service business.

Cooperation Team in US

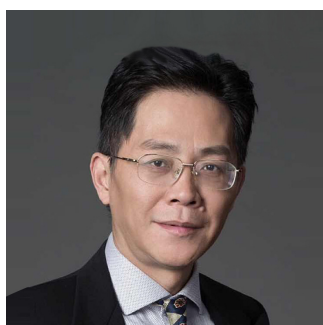
Kevin Zhang

Copartner

Over 17 years of experience in product commercialization operation in global health care industry.
US business general manager of Century Galaxy.
General partner of Galaxy Fund.
Once a partner of Summit Global Ventures, and an investor and founder of over 20 medical technology enterprises.
Working at Abbott Labs, one of the global top 100 medical enterprises, for many years.
An MBA from Kelley School of Business, Indiana State University.



C、 Advisory Board



Bo Shen

Managing Partner of
Fenbushi Capital



Zhang Min

Managing Partner of
Empower Investment



Gao Nan

President of XHN Asset
Management

7. Development Paths & Milestones

The ICO of Life Health Point (LHP) is expected to be completed in July 2018, after which the LifeWow Project will be fully launched. The core objectives and milestones are as follows:

Within the first year:

- LifeWow ecosystem will introduce “thedoc” , an application platform which is Asia's largest family doctor service provider.
- In LifeWow ecosystem, the number of family doctors will exceed 30,000 and they will be deeply empowered.
- Family doctors supporting service agencies and other service resources will be imported into LifeWow ecosystem.
- The development of LifeWow blockchain network application will be launched, and version 1.0 to 2.0. will be released.
- Circulation of LHP token will be performed within LifeWow ecosystem.

Within two years:

- In the key Chinese market, medical peripheral services through “thedoc” will be expanded and the regional ecology of medical health in the Chinese market will be formed.
- The number of family doctors and service institutions in various regions, including the United States and southeast Asia, will be increased. There will be more than 200,000 professional service personnel such as doctors and more than 20,000 service agencies.
- The innovative form of medical service - “Comprehensive Diagnostic Service Center” & “Distributed Convenient Service Network” by LifeWow will be established in Chinese market.
- LifeWow blockchain network application technology version 3.0 to 5.0 will be released, and digital assets and transaction closed-loop system will be established.
- Healthcare services in China will achieve a closed loop and the LHP will get a wider range of circulation.
- The connection with the international medical service collaboration platform will be realized and international cooperation operators will be imported.

During the third and the fourth year:

- In LifeWow ecosystem, the number of family doctor and other professional service personnel will exceed 1,000,000, and the number of ordinary user will up to hundreds of millions.
- LifeWow ecological model will be copied and established overseas and widely distributed in the global market.
- Ecosystem coverage will be implemented, including the coverage of the entire process of medical and health services. And the non-boundary point to point service will be realized.

From the fourth year to the sixth year:

- LifeWow will enter the third stage and the ecosystem will be vertically integrated on a large scale.

LifeWow ecosystem will cover a full range of medical upstream and downstream links, including family clinic platforms, specialty hospitals, large general hospitals, network mutual help communities, and medical insurance institutions.
- LifeWow Total Medicare products will be released.
- LifeWow will complete the initial transformation of the healthcare service industry and create a demand-driven global medical service model.
- LifeWow will become the world's largest health care service network.
- LifeWow ecosystem will cover scenes in healthy life and LHP will become a universal token for great health and extended life.

After the sixth year:

- LifeWow will enter the fourth stage to achieve a complete closed-loop Lifewow ecosystem.
- LifeWow will realize the life and health trust account and form profound changes in people's life style.
- LifeWow will form substantial cooperation with governments or industry associations, and will be compatible with, and link with, the corresponding social security, medical insurance, and income tax policies.

8. Disclaimer

This document only describes the project, and it does not constitute any investment opinion or proposal, and this document does not constitute any form of contract or commitment.

It is risky to buy Token, hold Token and use Token in the ecosystem of this project. Intended participants of this project must clearly understand the risks involved in the project. Once investors purchase the Token, it is acknowledged that they understand and accept the risks, and are ready to bear the corresponding consequences. The project team expressly states that it shall not bear any direct or indirect losses caused by any party participating in the project.

The risks of this project include but are not limited to:

- a) There is no guarantee that Token will appreciate, but rather, its value may fall in some cases.
- b) Token does not represent any claims, ownership, or control. The project does not grant any individual or group any rights regarding the project and application decisions.
- c) There are risks that Token may be lost, stolen, or cheated.
- d) Risks associated with regulatory and enforcement uncertainties. Changes in the laws and regulations of sovereign states or actions of regulatory agencies may affect the project or project Token. Changes in the laws and regulations of sovereign states, for example, may cause the project to be identified as illegal, and/or regulatory agencies decide Token is a regulated financial instrument that needs to be registered or licensed, while the project does not meet the necessary registration or licensing requirements.
- e) There are risks that the project or project Token may fail to attract attention. It is likely that Token fails to attract attention from a large number of individuals or organizations.
- f) The risk of being attacked. Hackers and other malicious groups or organizations may deliberately disturb Token and project ecosystems in many ways, including but not limited to, malware attacks, denial of service, consensus attack, Sybil attack, Smurfing attack and spoofing attack.
- g) The risk of listing in a specific exchange. The project team is not committed to listing in a specific exchange, so investors are advised to know this risk.



h) The risk of termination of operations or risk of project team dissolution. It is likely that, due to various reasons, such as the development team suffering serious problems, business relations break-down, or intellectual property claims, the project platform and/or ecological system will be unable to continue operating, and the project team may be disbanded.

i) Risks of the official website and project-related wallet failing to work.

j) Tax risks. Investors need to seek advice on the tax issue of buying, holding and using Token, which may leads to adverse tax issues, including but not limited to, withholding tax, trade tax, value-added tax, income tax and similar taxes such as levies, customs duties or other charges, and charge/tax reporting requirements.

k) Other unexpected risks. For encrypted token money such as Token adopting new frontier technology, in addition to the previously mentioned risks, there may be other risks related to the purchase, possession and use of Token, including currently unforeseen risks of the project. Such risks may emerge in the unpredictable variations or combinations of the risks discussed here.

You are not suggested to participate in Token subscription, unless you understand the development route of this project and understand the risks associated with the digital currency industry. Encrypting digital assets is an early and risky business, so investment and participation requires extreme caution. Once you participate in Token pre-sale, your crowdfunding digital assets will not be returned except that the Token presale fails. It is likely for this project to fail due to legality, market demands, technical or other uncontrollable reasons.

Any question about to these risks, please contact ***@***.com.

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