MediShares

A Global Mutual Insurance Marketplace on the Blockchain

Whitepaper

V1.0.9

1 Project Overview

1.1 Project Background

1.1.1 Origin & Evolution

Actually, initial mode of insurance is a kind of civil mutual aid organization among marine fishing folks taking the original form spontaneously in fishing community.

In ancient times, if ten fishing boats in a small fishing community were to put out to sea, which were likely to wreck in the storms, the crews' family members at home would as a result be trapped in hopeless situation from deprivation of financial supporters for taking care of their life, in this respect, it's a practice of the fishermen making spontaneous deed of commitment among them before going to the sea, by paying 'pool money' by the owner of each fishing boat, to be used as living security for their families in case of their wreckage, which could be assumed as a civil mutual aid organization in the earliest form.

However, it's hard to popularize this mode of mutual aid due to limited number of fishermen in fishing community, as well as increasing risk with bigger size of boat and boatload no longer sustainable with the limited sum of 'pool money'.

In this context, some profiteers came to commit to do this job in a professional manner. Essentially, of course, they meant to make profit from and by participating in the gambling. With increasing number of participants, it was found by the nation that this was a highly capital intensive trade with as much high financial risk, to the extent that it was not to be qualified for doing a business like this, instead, it was a "profitable" work only to be entrusted to those who were licensed for this purpose. This was the market background for formation of modern insurance industry.

1.1.2 Insurance Market

Global market in Y2016: The premium income accounts for $3.92 trillion or 5.7%of global economic output, a vast market in terms of its size of market value.

China Market in Y2016: The premium income counts for ¥3.10 trillion with a rapid YOY growth rate of 27.50%, a record new high, total assets in insurance industry counts for ¥15.12

trillion, the 2nd largest in global insurance market.

With vast population base, overall size of Chinese insurance market is absolutely a big figure. Unequal, however, is that per capita premium and policy holding in China are at a much lower level than counterparts in developed countries. As a result, to conflicts arise, that (1) insurance penetration rate does not match increasingly higher standard of living, which is reflected by rich material life in the absence of corresponding method of risk response; and (2) the mechanism and innovation of insurance industry as a whole lag behind the pace of industrial development, in that insurance industry comes in a soaring channel, whilst overall industrial mechanism and innovation are relatively backward.

1.1.3 Mounting Health Risk

Health risk is closed tied to environmental pollution, with intense outbreak of cancers expected in the 20 years ahead. In August 2015, World Cancer Report was published by WHO, the first report on global cancers for 6 years, which warns potential outbreak of cancer cases in the coming years, China was ranked No.1 of all nations by the incidents of cancer cases in Y2012, almost representing 50% global total, and nearly one half of new cancer cases by Y2035 was predicted on a global scale. According to the latest 2015 Chinese Cancer Registry Annual Report, 6 patients are diagnosed with malignant tumors and 5 patients died of cancer per minute, of which lung cancer is the highest in incidence, following by gastric cancer, colorectal cancer, liver cancer and esophagus cancer. Top 10 malignant tumors count for 76.39%, female breast cancer is the highest in incidence. The worsening of health risk, together with increasing medical cost, make insurance market a rigid demand of everybody in the world.

1.2 Disadvantages of Traditional Mode

High Threshold of Admission
The capital efficiency is less than 20% with traditional mode of insurance, due to a lot of funds are paid for salary of insurance brokers and overhead of business operation.

Low Operational Efficiency

The insurance organization is overstaffed, and overall mechanism lags behind the pace of market development, leading to avoidably low operational efficiency as a whole.

Privacy Issues

Traditional joining process requires a lot of PII of the user, including ID card, medical history and the like, such personal information stored in centralized database is exposed to the risk of information leakage.

High Probability of Rejected Claims

Insurance rules and procedures for execution of claim settlement are mainly established, published and modified by the insurance organizer, which unavoidably involves human subjective factors, therefore, it's a problem having to be seriously valued in order to secure the participant's legal interest, especially when it comes to the amendment of insurance rules.

Capital Security Issues

Traditional mode of insurance features inability to ensure that insurance organizer is prevented from abuse of raised funds, lack of special capital pool, absence of financing model, and centralized data storage mode is unable to ensure traceability of all payment records, which is basically like a black box for the participating users.

1.3 Advantages of Decentralization

Zero Threshold of Admission

No threshold for participation and exit, anyone is optional for participation and exit at any time he/she wishes. What's more, no one is required to pay any charge in case of no illness, each participant should only pay the charge when conditions for claim settlement are met, such as incidence of serious illness.

On-chain ID Verification

Blockchain-based identity authentication highly secures privacy protection, moreover, data is rigorously encrypted, the inquirer's personal information is subjected to authentication by smart contract for identity recognition, and only the person who owns private key can authorize view of his/her decrypted identity information by another person.

High Capital Efficiency

Nearly each penny paid by the member will be used for the purpose of insurance, of which 95% fund is used for automatic settlement after occurrence, and 5% fund is used for supporting community development and as reward.

Incentive Mechanism

Any organization and individual may initiate a shared insurance contract based on the smart contract template provided by MediShares, and gain "MDS" tokens exclusively generated on MediShares platform. This will substantially diversify application scenarios for future insurance, and satisfy those scenarios unavailable by far.

No Capital Pool

The fund of tokens are locked based upon the terms of smart contract, so that system operator is prevented from any contact with any fund, neither special capital pool or financial model is needed at all. Due to no contact with insurance fund, it will avoid most of legal risks, and even the system by itself will not be deemed as having the characteristics of an insurance company.

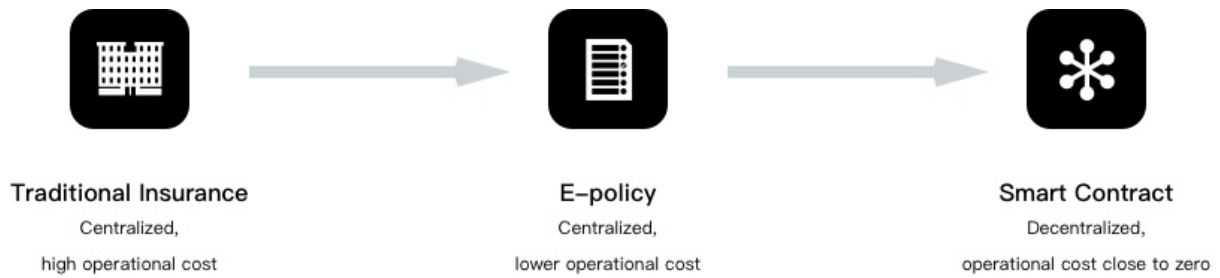**High Operational Efficiency**

The problems arising from subjective judgment about standard of claim settlement are solved by triggering conditions of machine-based data source. Thanks to un-modifiable character of blockchain smart contract, settlement process will be locked for execution of tokens with smart contract, so as to ensure positive performance of settlement so committed.

Global Market

Based on borderless circulation character of MDS Token, MediShares marketplace is open to global users to complete the transaction of settlement and liquidation by blockchain.

1.4 The Vision

What will insurance be like in the future?

Traditional Insurance	E-policy	Smart Contract
Centralized, high operational cost	Centralized, lower operational cost	Decentralized, operational cost close to zero

We believe that the future of insurance is rested neither on the skyscrapers of insurance company nor on internet-based E-policy that seemingly reduces some operational cost, rather, it relies on " smart contract", which truly maintains operational cost of the insurance close to zero.

Within smart contracting of mutual insurance, an insurance contract market will emerge.

This is what MediShares is going to do!

With blockchain technology, we hope to transform productive relation in mutual insurance industry, to enable insurance to return to its nature by sharing benefits with the community.

2 About Mutual Insurance Market

2.1 Mutual Aid Mode

Mutual aid insurance means the entity or individual having homogeneous risk insurance demand to become a member by complying with convention or choosing to participate in mutual aid program, and paying certain charges to form a pool of mutual aid money, which will be used to discharge mutual aid insurance liability for any and all loss caused or incurred by or arising from or in connection with occurrence of the event(s) set out in such convention, or mutual aid insurance activities of discharging the liability for payment of mutual aid money in case of death, disability or disease of the member participating in such mutual aid insurance, or conditions of such convention are met by the member, such as reaching to the age and term of validity set forth therein.

As a minimum, any new member is required to recharge ¥10 for the first time, and maintain the balance in his/her account not less than ¥0 hereafter, to be entitled for ¥300,000 ceiling of serious illness insurance coverage as mutual aid amount. In this way, it's really realized small money for big insurance in favor of the member, who may exit at any time he/she wishes, to establish "self-help by helping others" type of mutual aid based on complying with mutual aid program convention among all members.

The core of mutual aid is convention, this is the major reason why it's realizable through smart contract.

¥300,000
medical cost

1,000,000*¥0.3
10,000,000*¥0.03

2.2 Mutual Aid Market Size

For near 2 years of market education, serious illness mutual aid mode is gradually understood and accepted by the public. Only in Y2016, over 15,000,000 new mutual aid users participated in this industry; so far, overall size of mutual aid users is more than 35,000,000; by the end of Y2017, mutual aid users is hopefully to hit 50,000,000. The incremental market potential is tremendous.

3 MediShares Platform

3.1 What is MediShares?

MediShares is Ethereum-based, decentralized, open-source mutual insurance contract platform, which is designed and developed by Singaporean NPO of Medishares Foundation Pte Ltd. (Medishares Foundation). However, MediShares platform upon completion of development is not owned by Medishares Foundation, but subject to autonomous management and operation by the whole MediShares community, and any organization or individual from all over the world is allowed free participation as member in the open community of Medishares platform.

Globally, any organization or individual can be qualified for settlement under mutual insurance contract by locking MediShares MDS, so as to recover the insurance so specified in the contract.

Globally, any organization or individual can release mutual insurance contract via smart contract template provided by MediShares platform and MediShares, and gain reward of MDS.

3.2 Function Modules

3.2.1 Participation Module
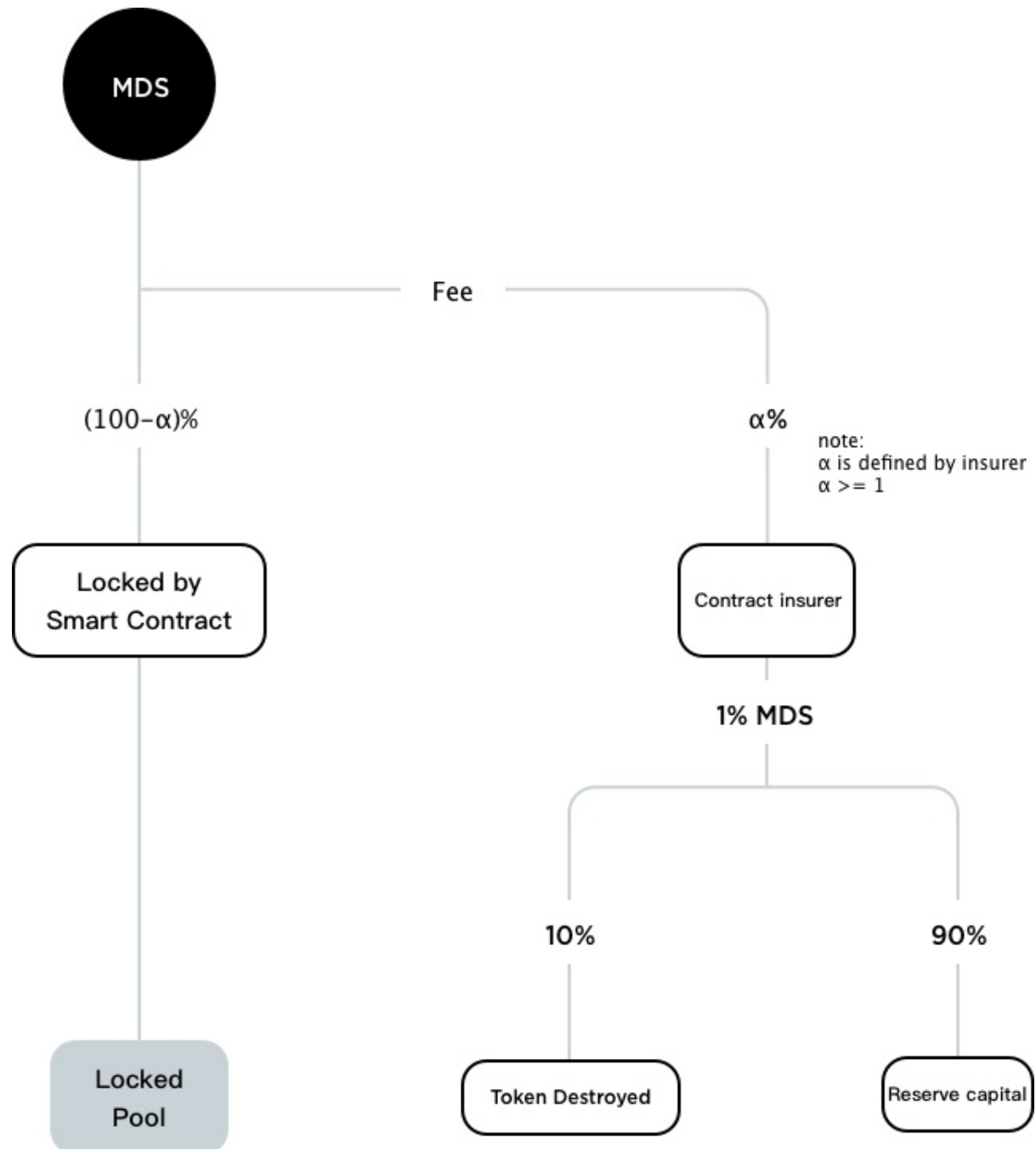
(1) The user can join a mutual insurance scheme through sending variable amount of MDS to a smart contract. When the contract insurer create the smart contract, they need to define parameter α and α>=1. (100-α)% MDS willed be locked by smart contract. Locked tokens

may only be withdrawn by two ways, i.e. deduction by way of mutual aid equal sharing, and user's voluntary request for exit from insurance contract. Contract insurer need to pay 1% MDS as fee. 10% of the fee will be burned, and 90% will be reserve capital.

(2) If the balance of MDS in locked pool is less than updated equally shared sum, the user will be disqualified for mutual insurance scheme, to avoid such situation, the user needs to send further recharged MDS to smart contract where it's locked, to maintain the membership for mutual insurance scheme.

(3) The user can initiate request to smart contract, return MDS to the purse after deducting fee and equally shared amount, and exit from mutual insurance scheme.

(4) Participation module supports two different forms, namely, individual and organization. Individual form includes participation and recharging for the member and his/her relatives/friends. Organization form supports corporate operation for participation of its employees.

3.2.2 Settlement Module
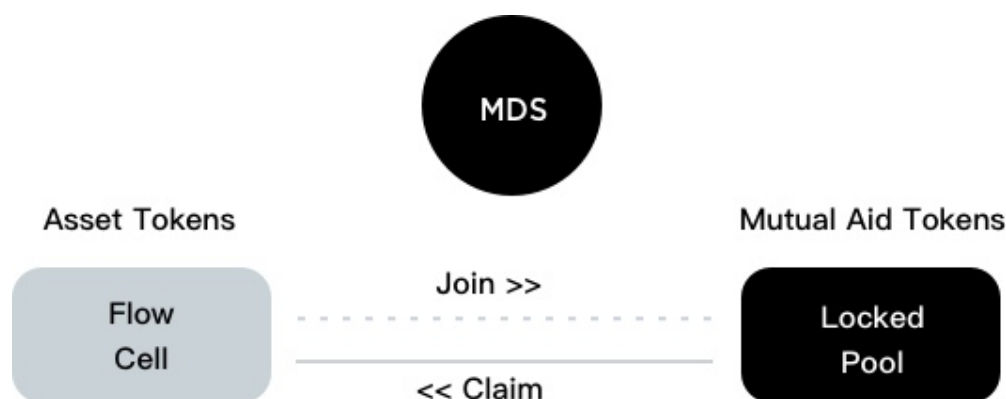
(1) MediShares supports settlement through MDS token.

Due to the character of its binding to digital asset, is good in resistance to inflation, except for the burden of risk of fluctuation.

(2) Once mutual aid event occurs, the user requesting for mutual aid is required to pledge with some of his/her MDS, to be used to introduce a third-party assessment organization approved by the platform for verifying the trueness of such event occurred or alleged by the user.

(3) Settlement module includes two key coefficients: Age coefficient and fee-deducting coefficient.

Age coefficient: The mutual aid money sharing by the user in different age group varies.

Fee-deducting coefficient: It differentiate insurance amount to ensure fairness, that is, the user with less serious illness will be paid with less insurance amount.

3.2.3 Settlement Rules

(1) The actuarial model of MediShares is totally different from traditional counterpart. Main purpose of insurance actuarial model is to increase corporate profit rate. Only by introducing more complex insurance mode, the client with seriously unsymmetrical right to know is enticed to overpay insurance premium, so the objective of actuarial model like this is entirely contrary to the client's legal interest.

(2) In MediShares, making profit by way of payment of insurance premium and claim settlement is a foundation which is no longer there. Then existing actuarial model is fully invalidated, on the other hand, new actuarial model will become an ex post equal sharing model, which enables each member in the system to have more impartial insurance. Such actuarial model is fully in with the member's due interests.

3.2.4 Settlement Data Acquisition Module

Settlement data acquisition mainly includes two ways:

I. Insurance contract with access to third-party reliable data seeds, such as disastrous weather insurance, smart contract will be directed trigged via Oracle for sharing and settlement.

MediShares will, by strategic cooperation with several other blockchain technology companies, obtain reliable Oracle data, including blockchain agreement with Delphy decentralized forecast market and Scry industry-wide classification data agreement.

II. Insurance contract without access to third-party reliable data seeds, such as serious illness mutual aid insurance, will be shared and settled by way of claim settlement investigation and publicity of investigation result.

(1) The user requesting for mutual aid insurance is required to pledge with certain amount of MDS as a commitment of trueness, and pay investigation fee to approved third-party assessment organization. Investigation result will be publicized via DAPP for a period of one week, during which all users participating in such insurance contract are obliged to report as a supervisor about the behavior of insurance fraud by the user in question.

(2) When the number of community users is large enough, community witness mechanism can be introduced in lieu of notarial investigation procedure, in order to further reduce the cost of claim settlement.

3.2.5 Community Witness Mechanism

Any individual in MediShares community can become a witness candidate after paying certain amount of MDS asset deposit; upon request of the patient of member for mutual aid, smart contract will propose preferred witness on the basis of specifically published stochastic algorithm (Inc. comprehensive considerations such as geographical location); after being selected, the witness needs to meet with the patient, review related information, put all information into file, sign confirmation, and gain reward of MDS after completion of settlement.

If the applicant is found falsification from subsequent procedure, which the witness fails discovery in a timely manner, said deposit will be forfeited and used as working capital by the Management Board.

With the incentive of economic benefits, the witness will provide accurate and reliable information input for all parties to the contract, so as to substantially ensure impartial and efficient execution of the contract.

3.2.6 Community Supervisor Mechanism

Any member, immediately upon discovery of potential act of insurance fraud, may anonymously pledge with certain amount of MDS asset and report such falsification, in response, the Management Board will step in investigation of the same, by way of random replacement of other insurance assessment organization or witness, once insurance fraud so reported is verified to be true, the reporting supervisor will gain MDS pledged by the applicant as the reward; in case of misreport, MDS pledged by the informant will be forfeited and used as working capital by the Management Board. Each of the procedures above will be taken in corresponding Hash record on blockchain.

With the incentive of economic benefits, the supervisor helps leverages the power of insurance assessment organization/witness, to effectively reduce conspired fraud by insurance assessment organization/witness, and ensure impartial execution of the contract in a more effective manner.

3.2.7 Risk Control

The biggest risk in traditional insurance model is from cheating by system organizer. If database controller secretly put the participating patient's information in the database and collect the charge in private, it'll not be discovered by other members. In this case, it's difficult to carry out self justification, which, in the past, it's a common practice to be endorsed by government department or audited by professional company. This is not only tremendously costly, but also is lack of complete transparency to ordinary members.

At the time of registration on MediShares platform, personal information of each member is encrypted before writing in blockchain; exit of organization will also be written in blockchain. Moreover, if necessary, corresponding information can be inquired by the member at any time. Once is written in, blockchain information cannot be changed by any nation or individual globally. This is the most unbreakable method of self-justification to date.

3.2.8 Contract Market

Only insurance contract complying with MediShares standards is accepted in the marketplace, which include without limitation to:

Comply with community management regulations of MediShares;

Comply with unanimously agreed fee rates of MediShares;

Settlement result is judged by Oracle or Witness/Supervisor mechanism.

3.2.9 Contract Initiator's Rights & Obligations

Rights:

Contract initiator will gain MDS to an amount equal to 40% payable fee needed for participating in insurance contract as reward.

Obligations:

In addition to payment of Ethereum Gas needed for creation of insurance contract, contract initiator shall also pledge with certain amount of MDS, which is intended, on the one hand, to avoid bunch of invalid insurance contracts in MediShares marketplace, and on the other hand, the number of MDS pledged will become the weighting of the insurance contract in the marketplace; contract of higher weighting will gain better showcasing position in the marketplace, so as to attract more users for participation.

3.3 Application Scenarios

MDS Contract Market

Smart Contract

ETH

Mutual Insurance Contract
for serious illness

Mutual Insurance Contract
for anonymous illness

Mutual Insurance Contract
for X–sports fans

Mutual Insurance Contract
for supercar owners

Mutual Insurance Contract
for disastrous disease

Mutual Insurance Contract
for virtual asset

And more

3.3.1 Mutual Insurance Contract for Serious Illness

Serious illness insurance contract mainly covers insurance for serious illness such as cancer, for which settlement is completed upon completion of claim settlement investigation, result publicity and community supervision, and it a general rule to set half-year observation period. Any company or platform can initiate specific serious illness insurance contract based on smart contract template of MediShares.

Pain Point

Data indicates that the percentage of Chinese people buying life health insurance is only 3%, amid the situation of ever increasing health risk, of which the primary cause is excess cost of traditional insurance.

MDS Application

Globally, any organization or individual can act as insurance contract initiator to initiate insurance contract on MDS platform. In this regard, Zhongtopia, the largest mutual aid insurance platform of China, is interested in becoming one of insurance contract initiators on MediShares platform, to initiate mutual aid insurance contract by use of MediShares platform. Having 8,500,000 mutual aid members, if Zhongtopia joins in a member of MediShares community, its rich experiences in mutual aid community operation and product design will empower MediShares in early development stage.

Zhongtopia will also share with MDS open-source community its national-level invention patent of Blockchain-based Mutual Aid Insurance and Operation Method and System Thereof applied by it in 2016.
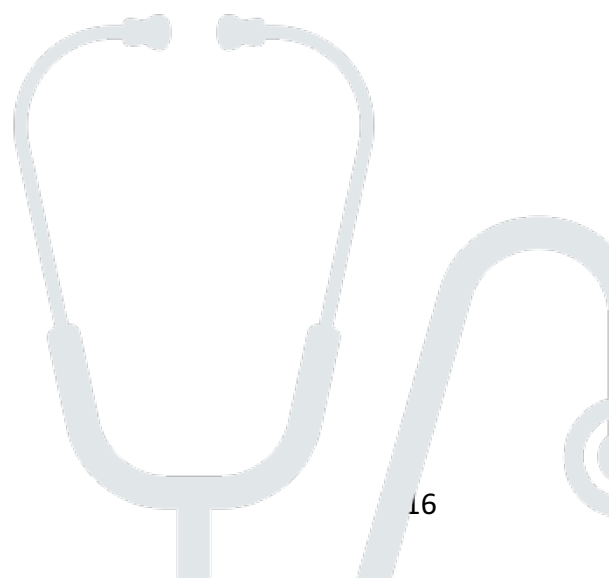
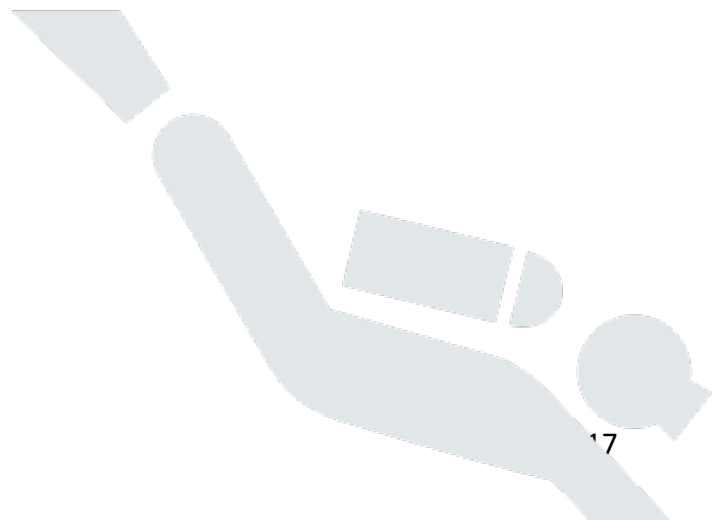### 3.3.2 Mutual Insurance Contract for X-sports Fans

X-sports are becoming an important activity of those who seek for thrilling experiences other than city life, and increasing popular among young people.

Pain Point

Take diving of X-sports as an example, the number of global diving fans is large, but this risky sport of the highest death rate is not matched by corresponding accident insurance product.

MDS Application

The members of diving fans association (e.g. PADI) or community can create mutual insurance contract among diving fans through MediShares platform.

3.3.3 Mutual Insurance Contract for Anonymous Illness

According to the data published by Ministry of Health of the People's Republic of China, China has more than 260 million patients of chronic diseases, and death rate of patients of chronic diseases counts for 85% national total.

Pain Point

Many patients of chronic diseases (e.g. HBV) are reluctant to buy insurance for fear of leakage of personal information and unemployment as a result.

MDS Application

With cryptographic methods such as zero-knowledge proof, anonymous illness insurance contract of blockchain can protect the user's privacy while deliver fair and impartial insurance.

3.3.4 Mutual Insurance Contract for Supercar Owners

Only take Wenzhou, China as an example, in the past 5 years, 4353 Porsche cars, 302 Maserati cars, 128 Bentley cars, 84 Rolls-Royce cars, 34 Lamborghini cars and 24 Ferrari cars were applied and approved license plates.

Pain Point

Due to expensive maintenance price, supercars are declined for insurance by most insurers, or supercar owners are discouraged by expensive insurance premium, for example, the seasonal expenditure of Top Gear on Hunan Satellite TV could not pay insurance premium for once test of Ferrari 250 GTO.

MDS Application

Supercar club or owner can remarkably reduce the cost by initiating mutual insurance contract among supercar owners.

3.3.5 Mutual Insurance Contract for Disastrous Weather

In recent years, the frequency of extreme weather, mainly in the forms of extremely high air temperature, typhoon, drought etc, increased on a yearly basis than in the past years. WMO suggests that global warming from greenhouse gas emission is the principal cause resulting in globally frequent extreme weather.

Pain Point

Disastrous weather is small probability event in a certain geographic area, but in a global view it is a frequent event, with the tendency of acceleration, many families suffer a lot as a result.

MDS Application

Automatic triggering of smart contract is achieved by reading global weather and earthquake related interface, so as to realize full automatic insurance contract in its true sense.

3.3.6 Mutual Insurance Contract for Virtual Asset

MediShares makes possible for virtual asset insurance.

Pain Point

With more and more virtual digital assets coming into the life of ordinary people, market demand for safe virtual asset insurance is increasing.
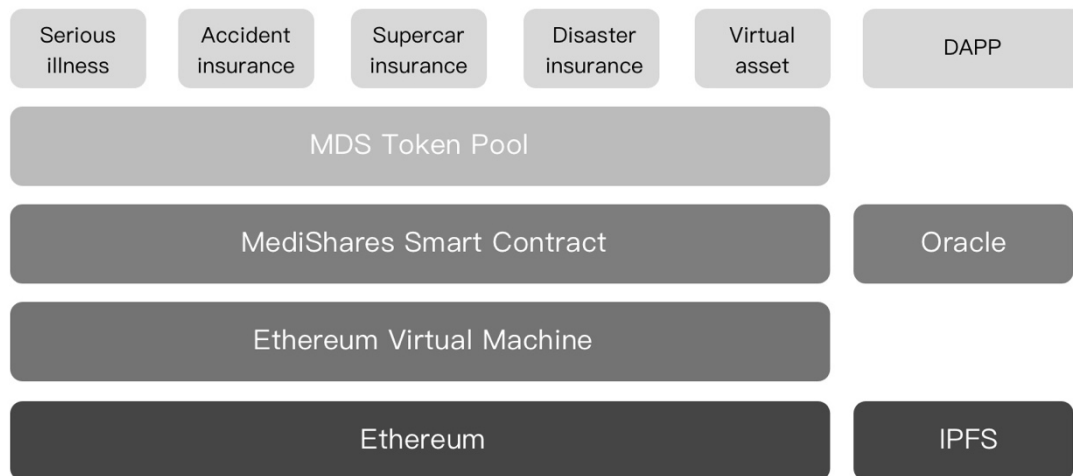
MDS Application

The user can initiate insurance contract established for the risk of loss from transaction of virtual asset; once the user suffers loss and provides publishable evidence, he/she will be recovered such loss.

3.4 Technical Modules

3.4.1 System Architecture

This system includes the following core components:

Ethereum

Smart contract

DAPP

Oracle

IPFS

3.4.2 DAPP

DAPP will provide a Web-based function entry for excellent user experience.

Insurance contract initiator can create and share smart insurance contract in DAPP.

The user can view his/her balance of MDS in DAPP, add in insurance, receive notice etc.

Publicity and voting modules fulfill community management related functions, publicized documents and images will be stored by IPFS.
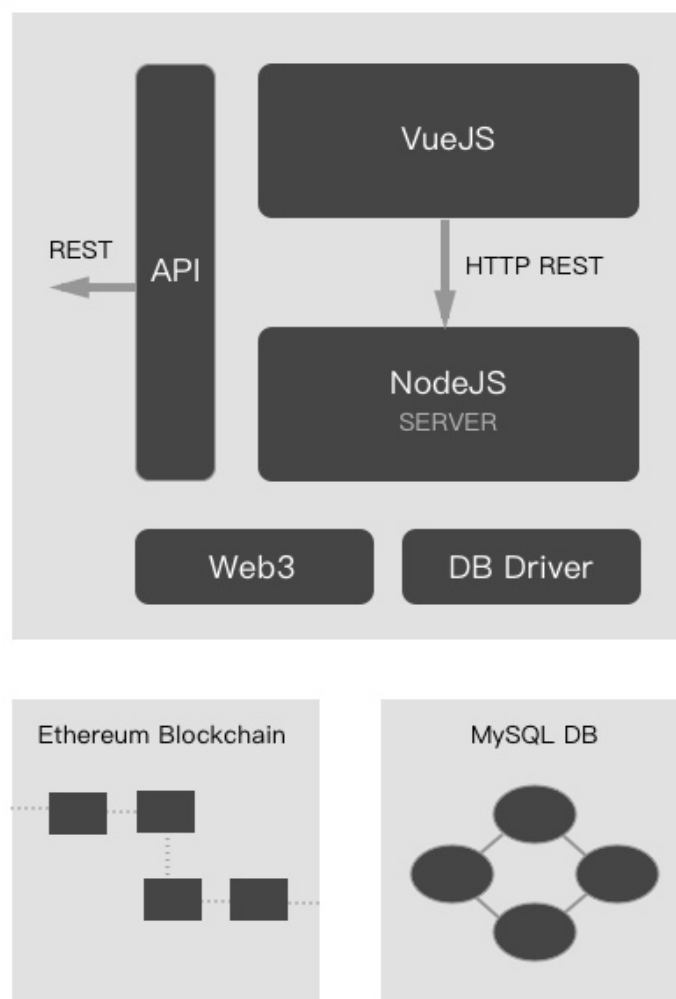

DAPP Architecturezz

3.4.3 Data & API Services

MediShares will open partial data and API interfaces to third-party insurance assessment and claim settlement organizations as well as insurance contract initiators, so as to make possible connection of MediShares platform with third-party system, to reduce third-party use cost, with uncompromised privacy protection for the user, and avoid the risk of data leakage.

3.4.4 Oracle

Smart contract is executed in EVM (Ethereum Virtual Machine), where it's a closed environment, and no any data of contract is able to obtain externally from within EVM. Oracle can help smart contract to obtain external information of EVM, and the principle of realization is contact with external Oracle through Event, and then the data is actively thrown back to EVM by Oracle.

Sometimes, Oracle needs to be used to judge the settlement result of some insurance contract on MediShare platform, also, Oracle will be used to derive an average exchange rate, which is used in settlement by stable coin.
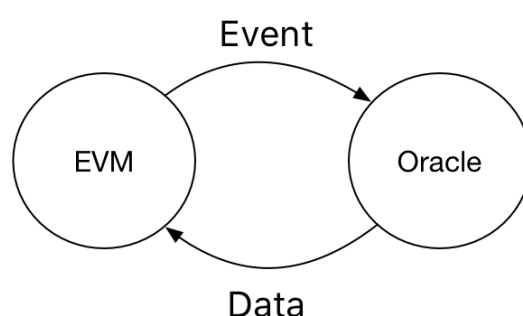
3.4.5 Privacy Protection Technology

Higher level of privacy protection is required for anonymous illness mutual insurance contract, that is, before application for claim settlement, input identity information of all users joining in insurance scheme that is verifiable but untraceable.

Blockchain-based zero-knowledge proof Project Alchemy will be employed to address privacy protection.

3.4.6 System Capacity

With increasing number of users, the system needs to meet the requirement of deductions of small amount by a lot of users, performance bottleneck of POW-based Ethereum public blockchain is likely to occur, to deal with, MediShare technical team will continue to keep a close eye on the solutions of new blockchain technical platform, and main focusing direction will be side chain solution representing by Cosmos and DPOS public chain solution representing by EOS.

3.5 Profit-making Model

Core value of MediShares is minimizing operational cost in the philosophy of "all for one, and one for all", and regarding everyone as both participant and beneficiary. The value of MediShares will be embodied by the value of MDS tokens from participation of more and more users.

4 MDS Token

4.1 Generation of MDS

From the time of official online operation on Ethereum, MediShares platform will automatically and initially generate a total of 2 billion MDS tokens based on Ethereum smart contract ERC20 standards. As the developer of MediShares system, MediShares Foundation will act as original owner of all MDS tokens.

4.2 Usage of MDS Tokens

MDS tokens are used for insurance service on MediShares platform, which are also basic value of MediShares marketplace.

Different participants (Insurance contract initiators, users, management team) hold different amount of MDS tokens, for sound liquidity and circulation according to requirement.

MDS tokens is supervised under smart contract, and realized locking of insurance interest without capital pool.

4.3 Use of MDS Tokens

At the time of participating in mutual insurance scheme, the user will be charged service fee by the system to an amount equal to given percentage to the value of MDS tokens; 40% service fee of the platform will be sent to an address to which private key is not controlled by anyone, and then it's destroyed, any user can view such information via Ethereum blockchain browser, to ensure publicity and transparency.

In order to create insurance contract, certain amount of MDS tokens needs to be locked, contract market will form quasi e-commerce profit model, insurance initiator needs to lock more MDS tokens to gain higher ranking and better market exposure, so as to attract more users to join in and earn more tokens.

The more users joining in mutual insurance, the more MDS tokens are locked by smart contract, the number of negotiable MDS tokens is less, with lowering supply-demand ratio.

4.4 Public Sale Program of MDS Tokens
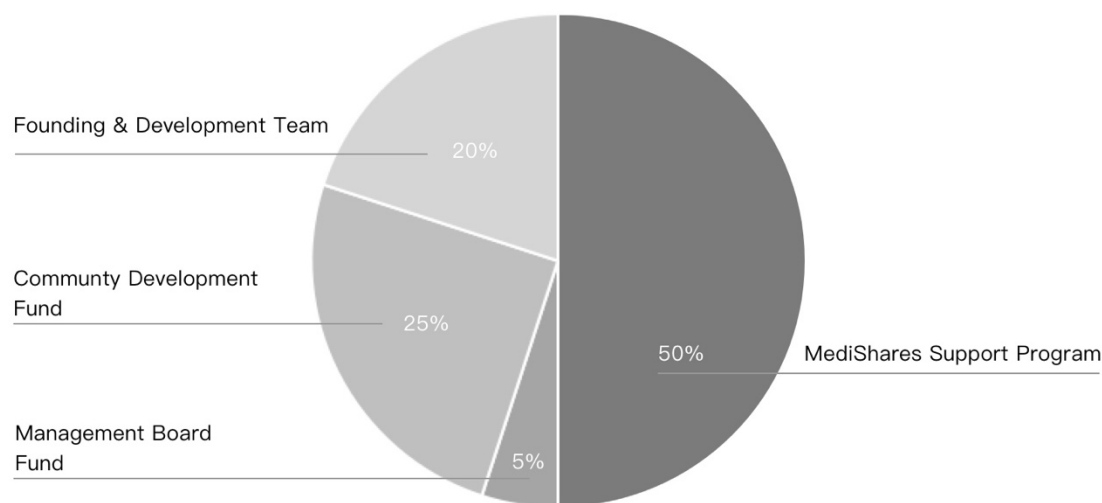
MediShares project has a total number of 2 billion MDS tokens, 50% will be offered by MediShares Support Program by MediShares Foundation.

Distribution plan of remaining MDS tokens:

5% Management Board reserve fund, to apply as O&M fund of the Management Board, to be opened on a yearly basis;

25% community development reserve fund, to apply as reward to partners contributing to community construction, to be opened on a yearly basis;

20% reserve fund of founding and development team, to distribute to founding team members, early contributors and prospective team members, as reward to their contribution to community construction, design and development of products, as well as community operation; as incentive to the team, it'll be unlocked one year after public sale, to be unlocked in four year, 25% per year.

Any China citizen will be not allowed to participate the public support program of MDS tokens.

Any US citizen, permanent resident or US green card holder will not be allowed to participate in public support program of MDS tokens, unless he/she is a qualified investor after certification by applicable law of the United States.

4.5 Project Budget

All MDS tokens offered by public sale will be used for the purposes that are helpful to operation and development of MediShares platform, such as the development fund of MediShares platform, expansion of team members and the like.

Preliminary budget plan is as follows:
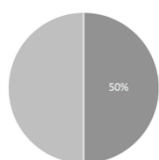
Core development, 50%

This part of funds will be applied to understructure, contract and interface developments, in order to further enhance user experience and develop new functions in the future, including labor cost, and the costs of research and development of various software and hardware.
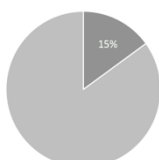
Security, 15%

MediShare team will make continuous investment in security, in order to ensure the safety of users' insurance funds. We'll plan on series of security audits, to the extent that each and every main function is subjected to security audit before online application, and then such function is considered to deploy in main network.
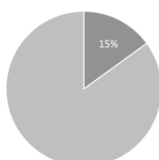
Operation, 15%

To ensure efficient and stable operation of MediShares platform, we'll recruit professional operation, customer service and management staffs, and build efficient operation team, and increase stability and extensibility of MediShares platform.
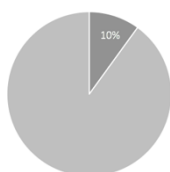
Marketing, 10%

This part of funds will be applied to community construction activities, and promotion of MediShares platform among the mass through traditional marketing channel.
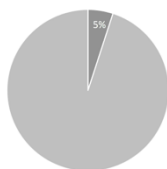
Legal compliance, 5%

Blockchain is an emerging industry, and laws of all countries will have major impact on MediShares platform. Compliance will become one of the key factors of success of MediShares platform. Therefore, we set special budget to cope with potential legal risk, in addition, we'll strictly implement auditing and accounting procedures, and establish well-designed legal procedures, to ensure MediShares platform meeting regulatory requirements of all laws and regulations.
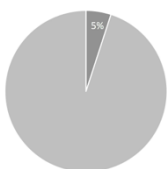
Business development, 5%

The operation of MediShares platform needs establishing business partnership with various organization with insurance requirement, as well as cooperation with insurance assessment organization and data management organization.

5 Development Roadmap

2017 Q4

- Whitepaper
- System design

2018 Q1

- MVP
- Oracle development

2018 Q2

- iOS & Android APP development
- Side chain development

2018 Q3

- Provision of API & SDK
- Security Auditing
- Trial operation

2018 Q4

- Full operation

6 MediShares Community

MediShares community are composed of veterans with long and rich experiences in insurance, mutual aid, blockchain technology and other industries, who have track record of great contribution in promoting industrial development, and respectful influence in respective industries. With profound understanding and keen insight to their industries, these team members will become positive guaranty to rapid development of the project in the long run.

6.1 Community Members

Eric Yu

Shanghai Jiaotong University Master

CTO of Zhongtopia, Full Stack Developer, continual entrepreneur

Patentee of multiple blockchain technologies

Founder of XinChain.org

Sherry Gao

Queen University Belfast Master

PingAn Trust Business Director, XingYe Trust Business Director

CBN Companies & Sectors Commentator

Ge Long

Beijing Normal University Master

Originator of mutual aid insurance mode

Insurance Actuarial Specialist

HuaTai Insurance Product Manager

Xinfang Guo

Medical Practitioner

PingAn Health Insurance Senior Executive

Cofounder of www.guahao.com

MERCER China Leader in Health Management

6.2 Community Advisers

Bo Shen

Founder of Fenbushi Capital

Co-founder of BitShares

David Lee

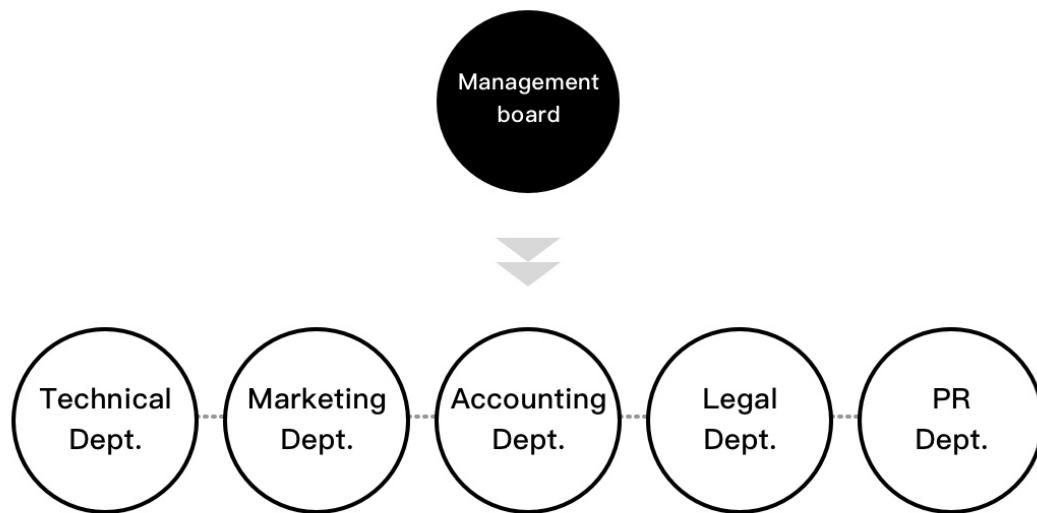Professor, Entrepreneur Director and Advisor Singapore

Famous blockchain investor

Ke Qiao

Founder of Zhongtopia

China PingAn Senior Executive, continual entrepreneur

Internet Society of China Director, China youth entrepreneurship & employment adviser

6.3 Organizational Structure

7 Strategic Partners

7.1 Business Partners

Business partners of MediShares will include medical establishments, mutual aid organizations, mutual insurance companies etc.

Zhongtopia – The biggest mutual aid platform in China, 10 million+ users

2016.3 Zhongtopia, a mutual aid online platform was founded and obtained 100 million RMB venture capital from CSC Group – a China leading VC

2016.7 Zhongtopia APP on production, and released blockchain system for public information disclosure

2016.8 55 days after the APP go-alive, the mutual aid joiners reached 1 million

2016.9 Zhongtopia announced its blockchain solution in the DEMODAY of 2nd Global Blockchain Summit

2016.11 Zhongtopia participated the Global Internet Summit and become the 1st blockchain product on the summit

2016.12 Zhongtopia announed 'XinChain', a public welfare blockchain based on Ethereum

2016.12 Zhongtopia voted two prestigious awards in the 1st China Blockchain Creativity Contest.

2017.6 Zhongtopia mutual aid joiners reached 8 millions, and is the biggest mutual aid online platform in China

7.2 Blockchain Technology Partner

Delphy - Decentralized Forecast Market

SCRY - Industry-wide Classified Data Blockchain Agreement

InfoCorp - Using crypto-assets to unlock value in illiquid assets

8 Disclaimer & Risk Warning

8.1 Disclaimer

This document is only for conveying information and does not constitute an opinion on transaction of project shares or securities. Any proposal or request for offer to such effect will be made under credible terms in accordance with the permission of applicable security laws and other related laws. The above information or analysis does not constitute any investment decision or concrete advice.

This document does not constitute any investment proposal, investment intent or investment solicitation on securities. This document does not constitute and shall not be construed as a transaction offer or an invitation to transact any form of securities, neither is it a contract or promise in any form.

All the examples of returns and profits in this document are for demonstration purpose only or represent the industrial average, and do not constitute a guarantee for the result of user's participation.

MediShares clearly states that users with relevant intent shall have clear knowledge of risks on MediShares platform. By making investment, investors confirm their knowledge and acceptance of the project risks, and are willing to personally take responsibility for all corresponding results or consequences.

MediShares clearly states that it will not take responsibility for any direct or indirect losses arising from the participation in MediShares project, including: (i) reliability of all information provided in this document; (ii) any resulting mistake, negligence, or information inaccuracy; (iii) or any subsequent behavior.

MDS is a digital Token used, besides other scenarios, on MediShares platform. MDS is not an investment target and we cannot guarantee the value addition of MDS, whose value may decrease under certain conditions. Due to unpredictable factors, targets listed in this White Paper may change. While our team will make its best efforts to realize all targets stated in this White Paper, all individuals and groups purchasing MDS shall shoulder the risks on their own.

MDS does not represent a right of ownership or control. Controlling MDS does not mean ownership of MediShares or MediShares applications. MDS does not confer any right on any

individual to exercise participation in, control over or decision- making on MediShares and MediShares applications.

8.2 Risk Warning

As a new model of investment, investment in digital asset involves various risks. Potential investors shall discreetly assess the investment risks and their own risk tolerance.

- Risks on Token Sales Market

The environment of Token sales market is closely associated with the situation of the whole digital currency market. In case of sluggish overall market situation or existence of other uncontrollable factors, the price of Token may be underestimated over a long period of time, in spite of their own good prospect.

- Supervision Risks

Since Blockchain is still in the early stage of development, there are still no laws and regulation across the world, including in China, that stipulate requirements for precondition, transaction, information disclosure, and locking, etc. in the process of ICO. Also it's still unclear as to how the current policies will be implemented. All these factors may bring uncertainty to project investment and liquidity. Blockchain technology has become the main target of supervision in major countries of the world. If there is any intervention or exertion of influence by supervising authorities, MediShares application or MDS may be affected. For example, if there is legal limitation on the use and sale of Token, MDS may suffer restriction and obstruction, or the development of MediShares application and MDS may be directly terminated.

- Competition Risks

With advancement of information technology and mobile Internet, digital assets with "Bitcoin" as a representative are gradually prospering and various decentralized applications are continuously emerging, heating up industrial competition. With the steady appearance and expansion of other application platforms, the community will face constant operation pressure and certain risks from market competition.

- Risk of Talent Loss

MediShares has gathered a technical team and expert consultants with leading advantage and profound experiences in their respective professional sectors, including professionals with lasting engagement in the Blockchain industry and core team with rich experience in development and operation of Internet product. The core competitiveness of MediShares in the industry lies in its stable core team and consultant resources, the loss of which may affect stable platform operation or its future development.

- Risk of Development Failure Due to Fund Shortage

In case of dropping price of Token raised by the founding team or prolonged development time, the team may face a shortage of development fund and possibly even suffer subsequent serious shortage of fund for all activities. In such case, there will be a risk that the intended targets will not be realized.

- Risk of Private Key Loss

After the digital wallet address of MDS is extracted by the buyer, the only means to operate content contained in the address is by his/her associated secret key (private key or wallet passcode). Users are personally responsible for protecting the associated secret keys which will be used to sign transactions and prove their asset ownership. Users understand and accept that if his/her private key document or passcode are respectively lost or stolen, his/her MDS associated with his/her user account (address) or passcode will be unrecoverable and permanently lost. The best method for secure storage of log-in document is to store the secret key separately at one or several places and avoid using a shared computer for this purpose.

- Risk of Hacking or Theft

There is a possibility that hackers, other entities or nations may attempt to interrupt MediShares application or MDS function with any methods, including but not limited to DoS attack, Sybil attack, guerrilla-style attack, malware attack and homogeneity attack, etc.

- Risk of Absence of Loss Insurance

Unlike bank account or accounts with other financial institutions, MediShares account or related Blockchain network are generally without any insurance guarantee. For losses under any conditions, no public individual or public entity will provide insurance.

- Risks of Core Protocols

Currently MediShares platform is developed on the basis of Ethereum. In case of any defect, unexpected malfunction or attack to Ethereum, MDS or MediShares platform may suffer a stop or loss of function in a manner hard to expect.

- System Risk

There are risks related to neglected critical defects in open source software or large-scale failure of global network infrastructure. Though some of the risks may drop over time due to bug fixes and breakthroughs in computation bottleneck, other risks are still unpredictable, such as political factors or natural disasters that may interrupt part of the Internet or the global Internet as a whole.

- Risks Due to Bugs or Cryptography Development

Rapid cryptography development and advancement of science and technology such as quantum computer may bring the risk of cracking to MediShares platform, leading to possible MDS loss.

- Risks of Insufficient Attention

There is a possibility that MediShares application may fail to be used by a large number of individuals or entities. This means that the public do not have enough interest in developing and improving the relevant distributed applications. Such lack of interest may bring negative impact to MDS and MediShares application.

- Risk of Poor Acceptance or User Shortage

First of all MDS shall not be deemed as an investment target. Even if MDS may have some value after some time, such value can be very small if MediShares is not accepted by the market and is therefore short of users. There is a possibility that due to any possible reasons, including but not limited to failure in business relations or marketing strategy, MediShares platform and all the future marketing efforts supported with the raised fund may fail to achieve success. In such case, there will be few or no follow-up supporters for the platform. Of course, this will be very unfavorable to this project.

- Risk of Application Defect

MediShares platform may fail to provide normal service due to defects caused by known or unknown reasons (e.g. large-scale Node crash), and may even suffer loss of user MDS in a serious situation.

- Risk of Application or Product Failing to Reach Their Expectation or Buyer's Expectation
MediShares application is still under development stage, and major changes may be made before the launch of official version. The expectation or imagination by MDS itself or by buyers for the function or manner (including behaviors of participants) of MediShares application or MDS may not be satisfied. Such situation may be caused by any analysis mistake or change of a single design, etc.

- Other Unpredictable Risks
Token which is based on cryptography is a fully new technology that has not be tested. In addition to risks already described in this White Paper, there are other risks that are not yet mentioned or not anticipated by the founding team. Also, other risks may come suddenly, or several risks mentioned above may occur in combination.

9 Supporting Documents & Links

9.1 Important Information

Websites: http://www.medishares.org

Github: https://github.com/MediShares

9.2 Social Network & Channel

Facebook: https://www.facebook.com/MediShares-1971171169832807

Twitter: https://twitter.com/MediShares

Weibo: http://weibo.com/MediShares

WeChat Official Account: MediShares

9.3 Contact

E-mail: reg@medishares.org