

MediShares

A Global Mutual Aid Marketplace on the Blockchain

Whitepaper

V1.0.9

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1 Project Overview

1.1 Project Background

1.1.1 Origin & Evolution

In ancient times, the earliest mutual aid organisations came in the form of a civil mutual aid organisation among marine fishing folks, which product had developed spontaneously in the fishing community.

Back then, if ten fishing boats in a small fishing community were to put out to sea and any given boat(s) was wrecked in the storms, the crews' family members at home would as a result be trapped in a hopeless situation without financial support for sustenance. Hence, it became a practice of fishermen to, before going out to sea, enter into a spontaneous deed of commitment amongst them, by the owners of each fishing boat pooling their money for the purpose of living security for their families in the case of loss at sea. This was a civil mutual aid organisation in the most primitive form.

However, it's hard to popularize this mode of mutual aid due to a limited number of fishermen in fishing community, as well as increased risk with larger boat sizes and boatload, which was not sustainable with the limited pool of money.

Against this context, specialists came in to perform this mutual aid function in a professional manner. With an increasing number of participants, it was found by the nation that this was a highly capital-intensive trade with high financial risk as well, to the extent that common folk were not qualified for doing a business like this – instead this work could only be entrusted to those who were licensed for this particular purpose. This was the market background for the formation of modern insurance industry.

1.1.2 Insurance Market

Global market in Y2016: The total 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 total 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 stands at ¥15.12 trillion, the 2nd largest in global insurance market.

With its vast population base, the overall size of the Chinese insurance market is absolutely a big figure. What is 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 in 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 – the insurance / mutual aid industry is rapidly expanding, whilst the overall industrial mechanism and innovation are relatively backward.

1.1.3 Mounting Health Risk

Health risk is closely 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, each minute 6 patients are diagnosed with malignant tumors and 5 patients died of cancer, 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, makes mutual aid a service in great demand by everybody in the world.

1.2 Disadvantages of Traditional Mode

High Threshold of Admission

For traditional modes of insurance, capital efficiency is less than 20%, due to a lot of funds being paid as salary of insurance brokers and overheads of business operation.

Low Operational Efficiency

Most insurance organisations are overstaffed, and overall mechanism lags behind the pace of market development, leading to avoidably low operational efficiency as a whole.

Privacy Issues

Traditional on-boarding processes require much personal data from the user, including ID card, medical history and the like. Such personal information is usually stored in centralised databases which are 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 a centralised insurer, 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. This problem is particular significant in the context of amendment of insurance rules.

Capital Security Issues

Traditional mode of insurance features inability to ensure that the insurer is prevented from abuse of raised funds, lack of specialised capital pool, absence of financing model, and centralised 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 Decentralisation

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 offers highly secured privacy protection. Moreover, data is rigorously encrypted and the inquirer's personal information is subjected to authentication by smart contract for identity recognition. Only the person who owns that private key can authorize view of his/her decrypted identity information by another person.

High Capital Efficiency

When the Platform (as defined below) is fully developed, a very high proportion of the funds paid by a user will be used for the purpose of mutual aid. $(100-\alpha)\%$ of the funds will be applied towards automatic settlement after occurrence, and a portion of the fee paid by the contract creator to the Platform will be applied towards supporting and rewarding community development.

Incentive Mechanism

Any organisation and individual (which is properly licensed and/or otherwise qualified, as assessed by the Platform) may create a shared mutual aid contract based on the smart contract template provided by the Platform, and collect fees in the form of MDS (as defined below) from the users of the Platform. This will substantially diversify application scenarios for future mutual aid use cases, and satisfy those scenarios unavailable by far.

No Capital Pool

The funds (in the form of MDS) are locked based upon the terms of smart contract, such that the Issuer, the Platform and the entity which creates the shared mutual aid contract are all prevented from accessing or transferring the funds. No additional capital pool or financial model is needed at all. As there is no contact with the mutual aid funds or any underwriting activity being carried out by the Platform, it is envisaged that the Platform 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 objective 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, the MediShares marketplace platform is open to global users to complete the transaction of settlement and liquidation by blockchain.

1.4 The Vision

What will insurance / mutual aid be like in the future?



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, the insurance product of the future must rely on mutual aid "smart contract", which truly reduces operational costs of the insurance to close to zero.

Within the ability to write mutual aids contracts as smart contracts, a mutual aid 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 Aid Market

2.1 Mutual Aid Model

Mutual aid may be effected by entities or individuals with homogeneous risk profile and demands, by becoming a user of a mutual aid program by complying with certain rules, and paying certain charges to establish a pool of mutual aid money, which will be used to discharge mutual aid liability for any and all loss caused or incurred by or arising from or in connection with occurrence of defined event(s) set out in such rules (e.g. death, disability or disease of the participating user, or reaching certain age and validity terms).

For example, a new user may be required to recharge ¥10 for the first time, and maintain the balance in his/her account at not less than ¥0 hereafter, to be entitled for ¥300,000 mutual aid amount in the event of serious illness, to establish "self-help by helping others" type of mutual aid based on complying with mutual aid program rules among all users. Users may exit at any time he/she wishes.

The key to this form of mutual aid are well established rules, and this is the major reason why it is realisable through smart contract.



2.2 Mutual Aid Market Size

After nearly 2 years of market education, serious illness mutual aid modes are 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, the number of mutual aid users will hopefully hit 50,000,000. The incremental market potential is tremendous.

3 MediShares Platform

3.1 What is MediShares?

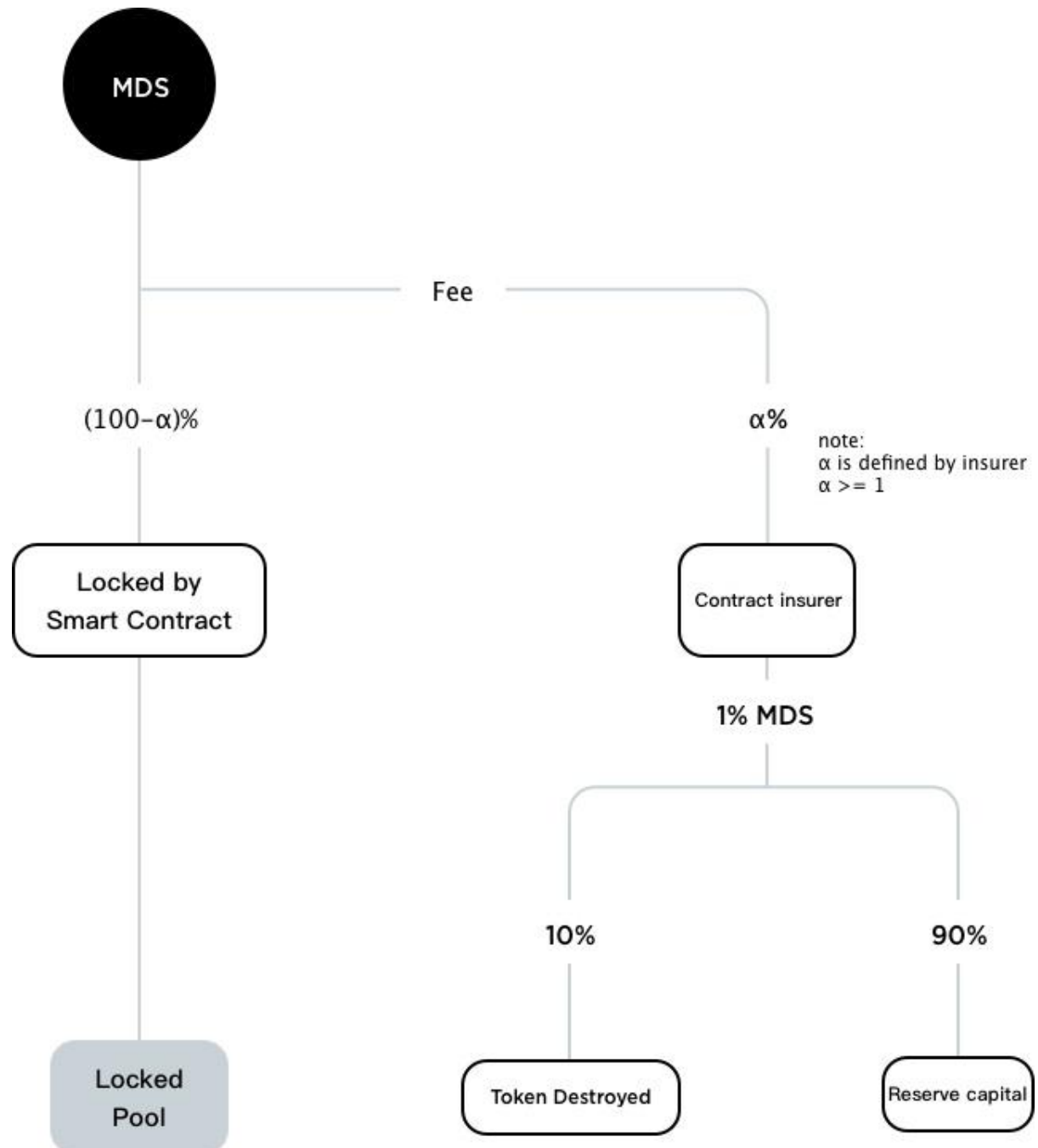
MediShares is intended to be an Ethereum-based, decentralised, open-source platform which will provide all the tools required for users and contract creators to enter into mutual aid contract (the **Platform**), initially operated and owned by the Singapore based Foundation and/or its affiliates. Upon completion of development, the Platform will be subject to autonomous management and operation by the entire MediShares community, and any organisation or individual from all over the world may be allowed free participation as a user or contract creator in the open community of the Platform.

Globally, any organisation or individual can be qualified for settlement under mutual aid contract by locking MediShares MDS, so as to be eligible for the mutual aid amount so specified in the contract.

Globally, any organisation or individual (which is properly licensed and/or otherwise qualified, as assessed by the Platform) can create mutual aid contracts via the smart contract template provided by the Platform, and MDS will be paid to these contract creators.

3.2 Function Modules

3.2.1 Participation Module



(1) The user can join a mutual aid scheme through sending the required amount of MDS to a smart contract. When the contract creator creates the mutual aid smart contract, they need to define parameter α and $\alpha \geq 1$. $(100-\alpha)\%$ of the MDS will be locked by smart contract.

Locked MDS may only be withdrawn by two ways, i.e. deduction by way of mutual aid sharing of payouts, and user's voluntary request for exit from mutual aid contract. The contract creator will be required to pay 1% of the MDS as a platform fee. 10% of the fee will be burned by the Platform, while 90% will be held by the Platform as reserve capital.

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

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

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

3.2.2 Settlement Module



(1) The Platform allows settlement through the usage of MDS. Due to the character of MDS being limited, it is good because it is resistant to inflation, but vulnerable to the risk of price 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 organisation 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 will be able to differentiate mutual aid amounts between users to ensure fairness, that is, the user with less serious illness will be paid with a lower mutual aid amount.

3.2.3 Settlement Rules

(1) The actuarial model of MediShares is totally different from its traditional counterpart, insurance. The main purpose of the 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, hence the objective of actuarial model like this is entirely contrary to the client's legal interest.

(2) In MediShares, there is no requirement to make profit by way of payment of mutual aid premium and claim settlement. 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 user in the system to have more impartial mutual aid. Such actuarial models of contract creators is more fully aligned with the interests of users.

3.2.4 Settlement Data Acquisition Module

Settlement data acquisition mainly includes two ways:

I. For mutual aid contracts with access to third-party reliable data seeds (e.g. disastrous weather insurance), smart contracts will be directly triggered via Oracle(s) (which are able to conclusively determine outcomes of events) for sharing and settlement.

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

II. For mutual aid contracts without access to third-party reliable data seeds (e.g. serious illness mutual aid), information will be shared and settled by way of claim settlement investigation and publication of investigation results.

(1) The user requesting for mutual aid payout is required to pledge a certain amount of MDS as a commitment of trueness, and pay investigation fee to approved third-party assessment organisations. Investigation result will be publicised via DAPP for a period of one week,

during which all users participating in such mutual aid contract are obliged to report (as a supervisor) about the behavior of 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 user in MediShares community can become a "witness" candidate after depositing a certain amount of MDS. Upon the request by a user for a payout of mutual aid, the 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 user / claimant, review related information, put all information into file, sign a confirmation, and for this work the witness will be rewarded in MDS after completion of settlement.

If subsequent checks indicate that the user has falsified the claim or information, which the witness fails to discover in a timely manner, the witness' deposit will be forfeited and used as working capital by the Foundation.

With the incentive of being rewarded in MDS, the witness will provide accurate and reliable information input for all parties to the contract, in order for the impartial and efficient execution of the smart contract.

3.2.6 Community Supervisor Mechanism

Any user, immediately upon discovery of potential act of fraud, may anonymously pledge a certain amount of MDS and be entitled to report such falsification. In response, the Foundation will step in to investigate of the same, by way of random replacement of other risk assessment organisation or witness. Where the fraud so reported is verified to be true, the reporting user will gain MDS pledged by the applicant as the reward; converse in case of an inaccurate report, MDS pledged by the reporting user will be forfeited and used as working capital by the Foundation. Each of the procedures above will be recorded by way of a corresponding Hash record on the blockchain.

With the incentive of economic benefits, the role of the supervisor helps to leverage the power of risk assessment organisation/witness, to effectively reduce conspired fraud by risk assessment organisation/witness, and ensure impartial execution of the smart contract in a more effective manner.

3.2.7 Risk Control

The biggest risk in traditional insurance model is from cheating by the centralised system organiser (i.e. traditionally the insurer). If a database controller secretly puts the participating user's information in the database and collects the payout in private, this will not be discovered by another user. 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 there is also a lack of complete transparency to the ordinary user.

At the time of registration on the Platform, personal information of each user is encrypted before writing onto blockchain. The exit rules of the Platform will also be written in blockchain. Moreover, if necessary, the recorded information can be inquired by the user at any time. Once written into the blockchain, this information cannot be changed by any individual or even by any nation. This is the most bullet-proof method of self-justification to date.

3.2.8 Contract Market

Only mutual aid contracts which comply with MediShares standards is accepted on the Platform, which include without limitation to:

- (1) Compliance with community management regulations of MediShares; and
- (2) Compliance with unanimously agreed fee rates of MediShares.

It is envisaged that settlement results will be judged by way of Oracle(s) or the witness/supervisor mechanism.

3.2.9 Contract Creator's Rights & Obligations

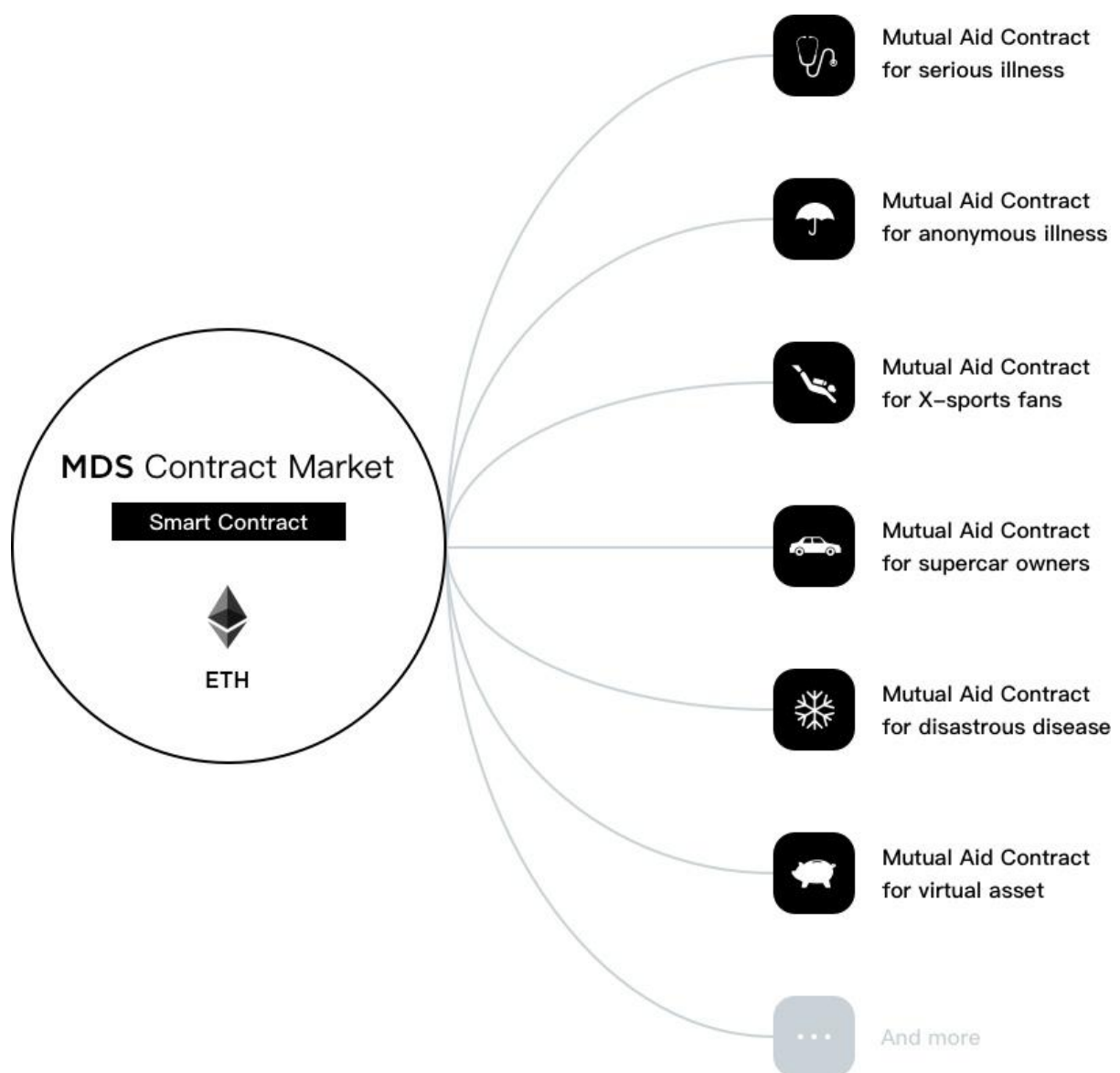
Rights:

When the contract creator creates the mutual aid smart contract, they need to define parameter α and $\alpha \geq 1$. $\alpha\%$ of the MDS will be paid (by the user participating in the mutual aid contract) to the contract creator as fee, out of which the contract creator will be required to pay 1% of the MDS as a platform fee. 10% of the fee will be burned by the Platform, while 90% will be held by the Platform as reserve capital.

Obligations:

In addition to payment of Ethereum Gas (to the underlying Ethereum blockchain network) needed for the creation of the mutual aid smart contract, contract creators shall also pledge with the Platform certain amount of MDS, which is intended, on the one hand, to avoid uncommitted invalid mutual aid contracts in the Platform, and on the other hand, the number of MDS pledged will represent the weight and ranking of the mutual aid contract in the Platform. A mutual aid contract with greater weight and ranking will gain better showcasing position in the Platform, and through this be able to attract more users for participation.

3.3 Application Scenarios



3.3.1 Mutual Aid 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 as a general rule there will be a half-year observation period.

Any company or platform can create specific serious illness mutual aid contract based on the smart contract template of the Platform.

Pain Point

Data indicates that the percentage of Chinese people buying life health insurance is only 3%, despite the situation of ever increasing health risks, of which the primary cause is excessive cost of traditional insurance products.

MDS Application

Globally, any organisation or individual (which is properly licensed and/or otherwise qualified, as assessed by the Platform) can act as mutual aid contract creator to create mutual aid contract on the Platform. In this regard, Zhongtopia, the largest mutual aid platforms of China, is interested in becoming one of the mutual aid contract creators on the Platform, to create mutual aid contracts with the tools available on the Platform.

With 8,500,000 mutual aid members, if Zhongtopia joins as a member of MediShares community, its rich experiences in mutual aid community operation and product design will empower the Platform in early development stage.

Zhongtopia also plans to share with the MDS open-source community its national-level invention patent of Blockchain-based Mutual Aid Contract and Operation Method and System Thereof applied by it in 2016.



3.3.2 Mutual Aid 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 mutual aid product.

MDS Application

Through the Platform, the members of diving association (e.g. Professional Association of Diving Instructors) or community can create mutual aid contracts targeting diving fans.



3.3.3 Mutual Aid Contract for Various Illness

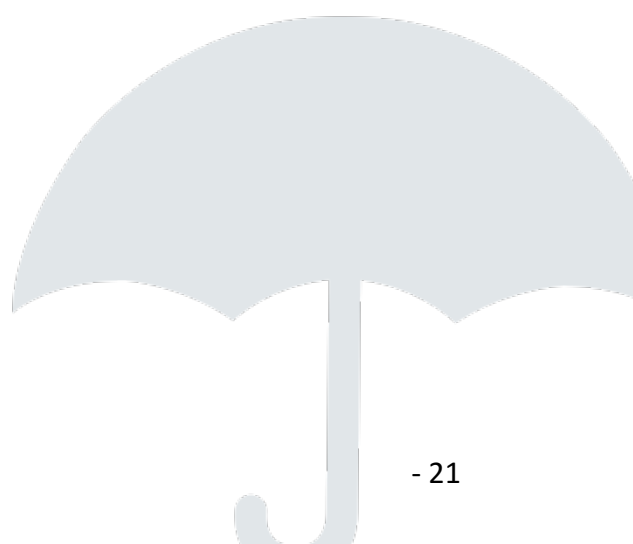
According to the data published by Ministry of Health of the People's Republic of China, China has more than 260 million patients of chronic diseases, and death rate of patients of chronic diseases counts for 85% national total.

Pain Point

Many patients of chronic diseases (e.g. HBV) are reluctant to buy insurance for fear of disclosure of personal information (which may result in unemployment).

MDS Application

With cryptographic methods such as zero-knowledge proof, anonymous illness mutual aid contracts of blockchain can protect the user's privacy, while at the same time deliver fair and impartial mutual aid assistance.



3.3.4 Mutual Aid 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. To illustrate, the seasonal expenditure of Top Gear on Hunan Satellite TV could not afford to pay the insurance premium for one test drive of a Ferrari 250 GTO.

MDS Application

Supercar club or owner can remarkably reduce the cost by creating mutual aid contracts for use by other supercar owners.



3.3.5 Mutual Aid Contract for Disastrous Weather

In recent years, the frequency of extreme weather (mainly in the forms of extremely high air temperature, typhoon, drought etc) has increased on a yearly basis compared to past years. WMO suggests that global warming from greenhouse gas emission is the principal cause which results in frequent extreme weather around the globe.

Pain Point

Disastrous weather is small probability event in a certain geographic area, but from a global view it occurs relatively. With the trend of increased frequency of these event, many families suffer a lot as a result.

MDS Application

Automatic triggering of smart contract is achieved by reading global independent and unbiased weather and earthquake related interface, so as to realize full automatic mutual aid contract in its truest sense.



3.3.6 Mutual Aid Contract for Virtual Asset

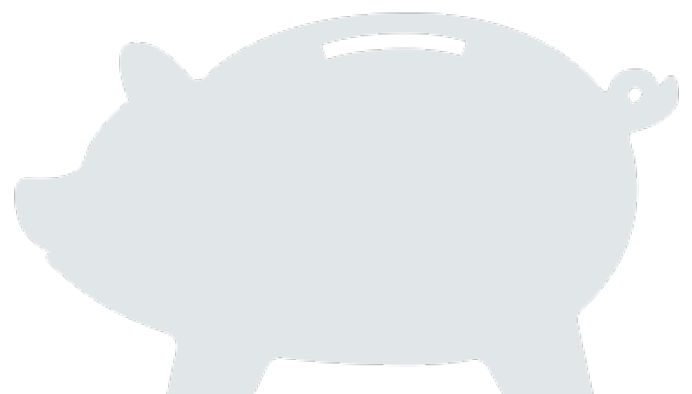
The Platform makes virtual asset insurance possible.

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.

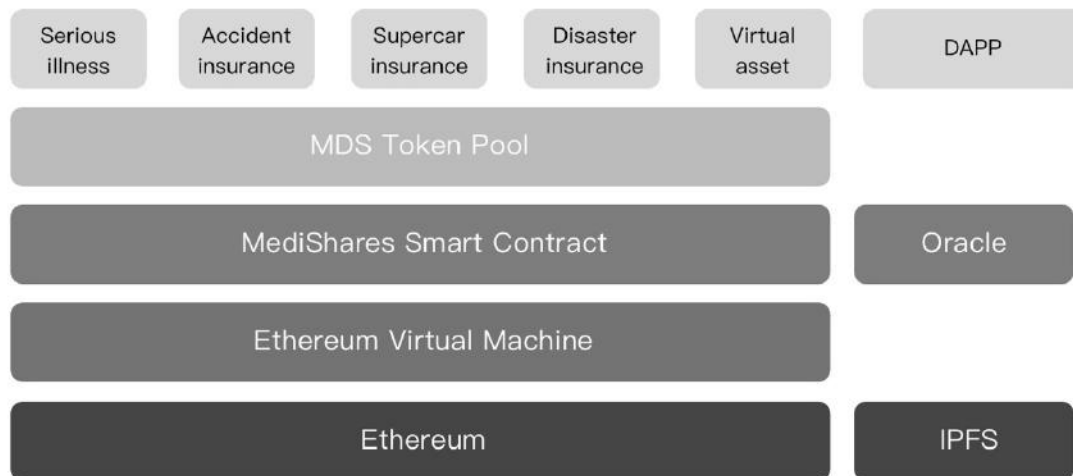
MDS Application

The user can create mutual aid contracts 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

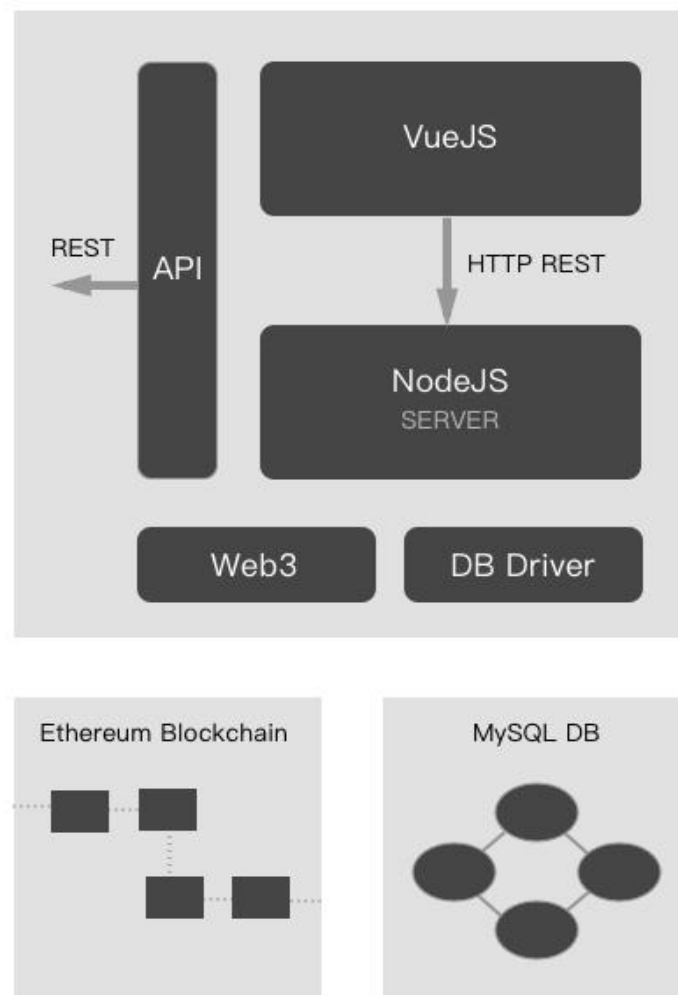
3.4.2 DAPP

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

Mutual aid contract creators can create and share smart contracts in DAPP.

The user can view his/her balance of MDS in DAPP, view various mutual aid contracts, receive notice etc.

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



DAPP Architecture

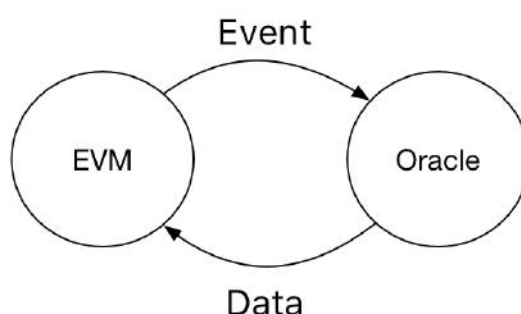
3.4.3 Data & API Services

The Platform will open partial data and API interfaces to third-party actuaries, claim settlement organisations as well as mutual aid contract creators, so as to make possible connection of the Platform with third-party systems, 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 Ethereum Virtual Machine (EVM), which is a closed environment, and smart contracts are generally not be able to obtain data which is external to the EVM. Oracles can help smart contracts to obtain information external to EVM, and the principle of realisation is contact with external Oracle through Event, and then the data is inputted back into the EVM by the Oracle.

Sometimes, Oracle(s) are needed to judge the settlement result of certain mutual aid contracts on the Platform.



3.4.5 Privacy Protection Technology

Higher level of privacy protection is required for anonymous illness mutual aid contract. The goal is that prior to application for claim settlement, identity information of all users joining the mutual aid scheme will be inputted in a manner that is verifiable yet 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 is required to meet the requirement of deductions of small amounts initiated by a large number of users. Performance bottleneck of POW-based Ethereum public blockchain is likely to occur and to deal with this issue, the Platform's technical team will continue to keep a close eye on the solutions of new blockchain technical platform. The main focus of the technical team will be the side chain solution presented by Cosmos and DPOS public chain solution presented by EOS.

3.5 Fairness to all participants

A 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.

4 MDS Token

4.1 Generation of MDS

From the time of official online operation on Ethereum, the Platform will automatically and initially generate a total of 2 billion MDS tokens (**MDS**) based on Ethereum smart contract ERC20 standards. The Foundation (or its affiliate) will be the original issuer of all MDS.

4.2 Usage of MDS

MDS is a utility token which may only be utilised on the Platform for payment by users to participate in the mutual aid claims contract, and payout of mutual aid claims on the Platform. Ownership of MDS carries no rights, express or implied, other than the right to use MDS as a means to enable usage of and interaction with the Platform, if successfully completed and deployed.

Different participants (mutual aid contract creators and users of the Platform) hold different amount of MDS, for sound liquidity and circulation according to their respective requirements.

MDS is supervised under smart contract, and realises locking of insurable interest without capital pool. There will be no reinvestment or redeploying of MDS which are locked in the smart contract.

MDS is a non-refundable functional utility token and cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Foundation or any affiliate. MDS does not in any way represent any shareholding, participation, right, title, or interest in the Foundation or any other company, enterprise or undertaking, nor will MDS entitle token holders to any promise of revenue, fees, profits or investment returns. MDS is not intended to constitute securities in Singapore or any relevant jurisdiction.

4.3 Details of usage of MDS

At the time of participating in mutual aid scheme, the user will be charged a service fee by the contract creator equal to $\alpha\%$ of the MDS (as determined by the contract creator), out of which the contract creator will be required to pay 1% of the MDS to the Platform as a platform fee. 10% of the fee will be burned by the Platform (i.e. sent to an address to which

private key is not controlled by anyone, and then it will be destroyed), while 90% will be held by the Platform as reserve capital.

Any user can view such information via Ethereum blockchain browser, to ensure publicity and transparency.

In order to create a mutual aid contract, a certain amount of MDS belonging to the contract creator needs to be locked as well. A contract market will form quasi e-commerce profit model, such that mutual aid creators will need to lock more MDS to gain higher ranking and better market exposure, so as to attract more users to sign up (and allow the contract creator to be rewarded with more MDS).

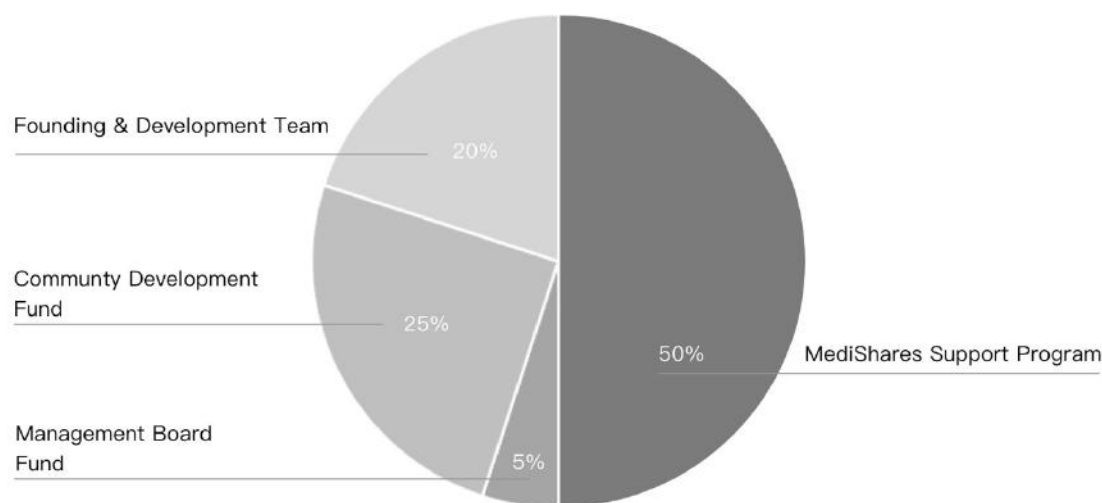
As a result, the greater the number of users joining in the mutual aid scheme, the more MDS which will be locked by smart contract. The number of transferrable MDS will be reduced, leading to a lowered supply-demand ratio.

To the extent a secondary market or exchange for trading MDS does develop, it would be run and operated wholly independently of the Foundation (or its affiliates), the sale of MDS and the Platform.

In particular, you understand and accept that MDS:

- (a) do not represent or confer on you any right of any form with respect to the Foundation (or any of its affiliates) or its revenues or assets, including without limitation any right to receive future revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to the Platform, the Foundation and/or its service providers;
- (b) are not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument or any other kind of financial instrument or investment;
- (c) are not a loan to the Foundation or any of its affiliates and there is no expectation of profit; and
- (d) do not provide you with any ownership or other interest in the Foundation or any of its affiliates.

4.4 Public Sale Program of MDS



MediShares project has a total number of 2 billion MDS, 50% will be offered for sale by the Foundation.

Distribution plan of remaining MDS:

5% will be allocated for the Management Board reserve fund, to apply as Operations and Maintenance fund for the Management Board of the Foundation, to be opened on a yearly basis;

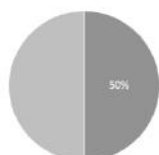
25% will be allocated for the community development reserve fund, to apply as reward to partners contributing to community construction, to be opened on a yearly basis;

20% will be allocated for the reserve fund for the 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 an incentive to the team, it will only be unlocked one year after the public sale, and the total amount will be unlocked over four years (25% of the total amount will be unlocked yearly).

4.5 Project Budget

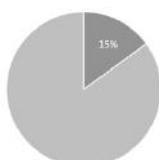
All proceeds of the public sale will be applied towards the Foundation's objects, including without limitation promoting and supporting research, design and development of, and advocacy for decentralised cryptographic or blockchain solutions to build transparent, free and reliable mutual aid markets.

Preliminary budget plan is as follows:



Core development, 50%

This part of funds will be applied to development of the understructure, contract and interface, 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).



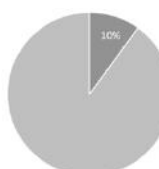
Security, 15%

The Foundation will make continuous investment in security in order to ensure the safety of MDS locked in the smart contracts. We have planned for a series of security audits. Each and every main function is subjected to security audit before online application, before such function is considered to deploy in main network.



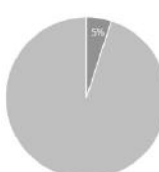
Operation, 15%

To ensure efficient and stable operation of the Platform, we will recruit professional operation, customer service and management staffs, and build efficient operation team, and increase stability and extensibility of the Platform.



Marketing, 10%

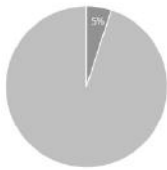
This portion of the funds will be applied to community construction activities, and promotion of the Platform to the masses through traditional marketing channel.



Legal compliance, 5%

Blockchain is an emerging industry, and laws of all countries will have major impact on the Platform. Compliance will become one of the key

factors of success of the 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 that the Platform meets regulatory requirements of all laws and regulations (in particular, laws which relate to insurance and mutual aid organisations and markets). In this regard, we have instructed specialist counsel in Singapore from Tzedek Law LLC to advise on the MDS token sale.



Business development, 5%

The operation of the Platform requires business partnership with various organisation with insurance requirements to be established, as well as cooperation with actuaries and data management organisations.

5 Development Roadmap



6 MediShares Community

MediShares community is composed of veterans with long and rich experiences in insurance, mutual aid, blockchain technology and other industries, who have established track records of great contribution in promoting industrial development, and respectful influence in respective industries. With profound understanding and keen insight in their respective industries, these team members will contribute 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

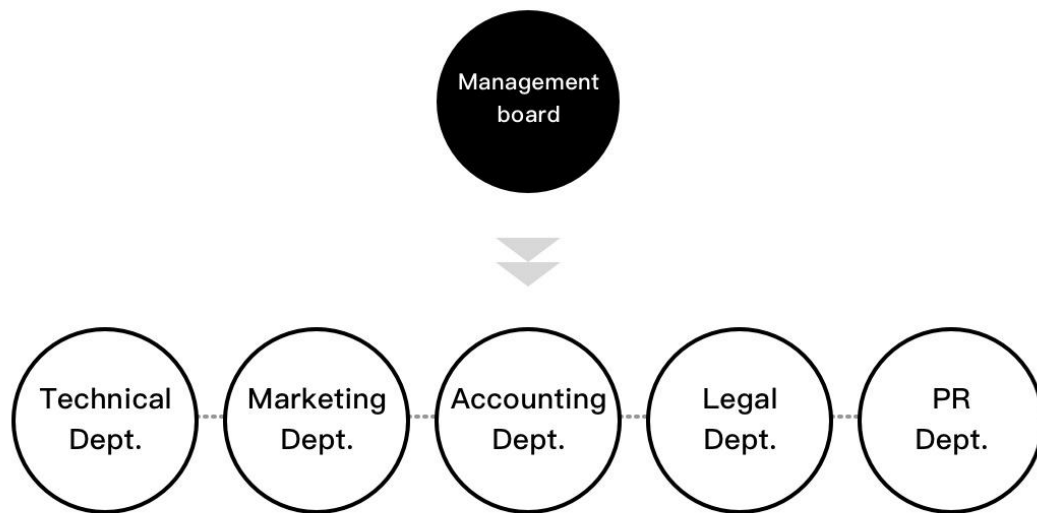
Professor, Entrepreneur Director and Advisor Singapore
Famous blockchain investor



Ke Qiao

Founder of Zhongtopia
China PingAn Senior Executive, continual entrepreneur
Internet Society of China Director, China youth entrepreneurship & employment adviser

6.3 Organisation Structure



7 Strategic Partners

7.1 Business Partners

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

Zhongtopia – The biggest mutual aid platform in China, with 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 announced ‘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 million, and becomes the biggest mutual aid online platform in China.

7.2 Blockchain Technology Partner

Delphy - Decentralised Forecast Market

SCRY - Industry-wide Classified Data Blockchain Agreement

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

8 Risk Warning

YOU CLEARLY UNDERSTAND THAT BLOCKCHAIN AND VIRTUAL CURRENCIES / TOKENS, INCLUDING WITHOUT LIMITATION ETHEREUM, QTUM, BITCOIN AND MDS, ARE NEW AND UNVERIFIED TECHNOLOGIES THAT ARE BEYOND CONTROL OF THE FOUNDATION OR THE ISSUER (AS THE CASE MAY BE). THE PLATFORM AND THE PROJECT ARE SUBJECT TO THE FOLLOWING RISKS, WHICH YOU EXPRESSLY ACKNOWLEDGE AND ASSUME:

- Regulatory Risks

Since blockchain technology is still in the early stage of development, the regulatory status of MDS and/or the Platform, and distributed ledger technology generally is unclear or unsettled in many jurisdictions, including in China. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including MDS and/or the Platform. Also, it is 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. Regulatory actions could negatively impact MDS and/or the Platform in various ways. For example, if there is legal limitation on the use and sale of token, MDS may suffer restriction and obstruction, or the development of the Platform 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 decentralised applications are continuously emerging, heating up competition in the industry. With the steady appearance and expansion of other application platforms, the community will face constant operational pressure and certain risks from market competition.

- Risk of Talent Loss

The Foundation has presently 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 an adverse downturn in the virtual currency market (leading to low prices for MDS and other virtual currency raised by the Foundation) or where there is a prolonged development time, the team may face a shortage of development funds and possibly even suffer subsequent serious shortage of fund for all activities. In such case, there will be a risk that the Platform may not be developed as intended.

- 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 malicious groups, organisations, entities or nations may attempt to interrupt or interfere with the Platform and/or MDS with any number of method(s), including but not limited to DoS attack, Sybil attack, guerrilla-style attack, malware attack and homogeneity attack.

- Risk of Absence of Loss Insurance

Unlike bank account or accounts with other financial institutions, MDS 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 the Platform is developed on the basis of Ethereum. In case of any defect, unexpected malfunction or attack to Ethereum, MDS or the Platform may suffer a stop or loss of function in a manner hard to expect.

Given that MDS and the Platform are based on the Ethereum protocol and architecture, any malfunction, breakdown or abandonment of the Ethereum protocol or architecture may have a material adverse effect on MDS and/or the Platform. Moreover, advances in cryptography, or technical advances (including without limitation development of quantum computing), could present unknown risks to MDS and/or the Platform by rendering ineffective the cryptographic consensus mechanism that underpins the Ethereum protocol.

- 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 the Platform, leading to possible MDS loss.

- Risks of Insufficient Interest

There is a possibility that the Platform 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 use or interest may negatively impact the development of the Platform and MDS.

- Risk of Poor Acceptance or User Shortage

First of all MDS shall not be purchased for any investment, speculative or other financial purpose. There is no guarantee that the MDS will have any value. Even if MDS may have some value after some time, such value can be very small if the Platform 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, the 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 Platform defect

The 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 Platform or Product Failing to Reach Their Expectation or Buyer's Expectation

The Platform 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 the Platform 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

MDS 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