



ZZM White Paper V4.0

Table of Contents

I. Project basic information.....	2
1.1 Project introduction and goals.....	2
1.11 Background information.....	2
1.12 Industrial pain points.....	4
II. Design concept.....	7
2.1 ZZM design concept.....	7
2.2 Application scenarios.....	8
2.21 Content distribution.....	8
2.22 Trade of related products.....	10
2.23 Online and offline activities.....	10
III. Commercial value system of the project.....	11
3.1 Generation and use of endogenous value.....	11
3.2 Commercial value-added logic	12
IV. Project plan.....	13
4.1 Innovation and possibility of implementation of project.....	13
4.2 Project's design principle.....	13
4.3 Project innovation.....	14
4.4 Characteristics.....	15
4.5 Structure and components design.....	16
4.6 Description of part of components.....	17
V. Introduction to Token and usage plan.....	24
VI. Project governance mechanism.....	25
6.1 Funds management mechanism.....	25
6.2 Foundation governance.....	26
VII. Introduction to the team.....	26
7.1 Introduction to core team.....	26
7.2 Introduction to partners:.....	27
VIII. Introduction to and Future Planning of Implemented Project.....	29
8.1 Implemented and To-Be-Implemented projects.....	29
8.2 Future Planning.....	30
IX. Risk and Control.....	32
Legal Structure and Disclaimer.....	32
Risk disclosure.....	33

I. Project basic information

1.1 Project introduction and goals

1.11 Background information

The cultural industry refers to the business industry that produces cultural products and provides cultural service. The entertainment industry is an essential part of the cultural industry. It mainly includes digital music, digital books, digital videos, digital games, etc. The entertainment industry plays an important role in meeting people's spiritual and cultural needs, expanding and guiding cultural consumption, creating employment, boosting the economy and other aspects.

As an important way of strengthening the national "soft power", the entertainment industry is highly valued by all nations. As is pointed out in the *13th Five-Year Planning Proposals*, China will make the cultural industry the pillar industry of national economy by 2020. In 2016, China's entertainment niche market was thriving with numerous contenders. The increasing rate of the segment markets such as movie, TV drama was over 30%. In addition, the technological development results in channel innovation, and the consumption upgrade brings significant investment opportunities for entertainment industries. The whole entertainment industry includes the segment markets at core level, related level and expanded level. Among them, the scale of the core level market of 2015 was about 450 billion yuan, the annual average compound growth rate was about 25% and the overall scale of 2020 is expected to reach 1000 billion yuan. In the reports on entertainment industry, Deloitte pointed out that the Chinese cultural industry is at its unprecedented "golden age" under the advantageous circumstances where supportive policies are launched by the government, traditional industries are improved by the Internet and substantial capital from home and abroad is being invested. As for movie, China leads the increase rate of global box office returns and is expected to become the top one market of the world in 2020.

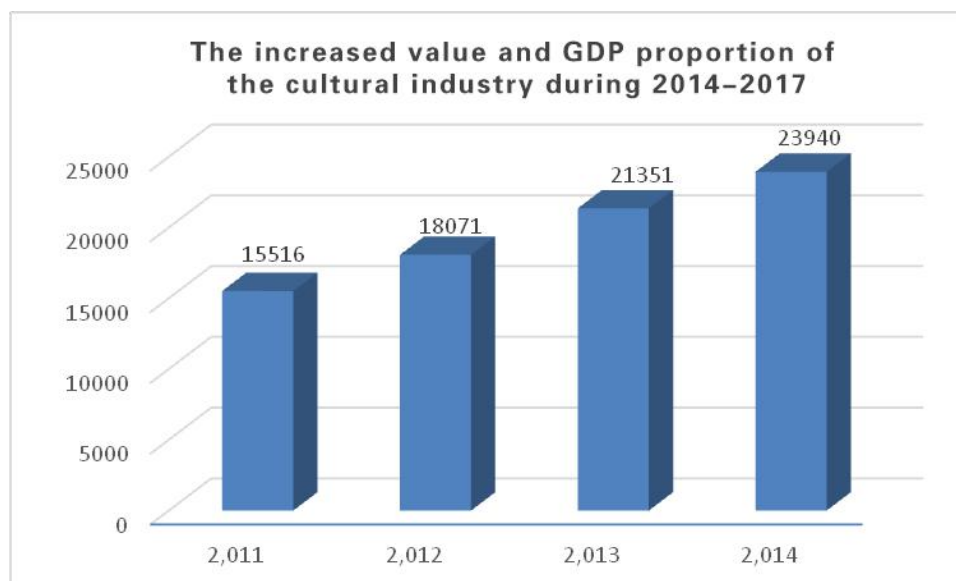
The *Investment Prospect and Trend Analysis Report on the Entertainment Industry* by the Qianzhan Industry Institute shows that, the investment with domestic entertainment industry maintained a positive growth from 2013 to 2016. The investment events of the entertainment industry in 2016 reached 668 and the acquisition scale and speed kept staying at a high level. CIConsulting Industry Institute summarizes ten hot spots in the industry. They are movie, IP economy, show entertainment, animation, web drama, music, web literature. The institute also analyzes and forecasts their market scale. See the following chart:

Industry	Market scale
Entertainment	The whole entertainment industry includes the segment markets of core level, related level and expanded level. Among them, the scale of the core level market of 2015 is about 450 billion yuan, the annual average compound growth rate is about 25% and the overall scale of 2020 is expected to reach 1000 billion.
Movie	In 2015, China's movie industry scale reached 100 billion yuan for the first time with a year-on-year increase of 46% . It is expected to reach 180 billion yuan by 2020.
IP economy	By conservative estimates, the IP original market scale will exceed 15 billion yuan in the next three years, and the derivative market is expected to exceed 200 billion yuan.
Show entertainment	In 2016, the show industry market scale reached up to 10 billion yuan. It will increase at a 20% to 30% speed and reach 25 billion in 2020.
Animation	By the end of 2015, the total output of the animation industry had exceeded 120 billion yuan and is expected to reach 440 billion yuan in 2020.
Web drama	The web drama becomes popular and the market space is expected to reach 65 billion yuan in 2018.
Music	In 2015, the music market scale was about 290 billion yuan, and the compound growth rate will be about 3% in the next five years. It will reach 330 billion yuan in 2020.
Web literature	In 2015, the web literature market scale reached 7 billion, and the compound growth rate can be about 20% in the next five years. It is expected to reach 17 billion yuan in 2020.

Pan-entertainment refers to the integration between all culture fields as well as culture itself and other fields, especially the co-existence of multiple fields based on the Internet and mobile Internet, to create fans economy for stars' intellectual properties(IP). As the cultural industry develops rapidly in recent years, Pan-entertainment has become the most highlighted business mode of the cultural industry. As was shown in the Qianzhan database, in 2016 China's total output value of Pan-entertainment was about 415.5 billion yuan and was estimated to reach 480

billion yuan in 2017.

In 2017, China's national expenditure on education, cultural and entertainment increased by 12% quarter-on-quarter, which was the fastest in increase rate among all national consumption links. As the pan-entertainment IP featuring literature, animation, movie and TV drama and games is consumed and circulated by the Internet natives including the post 80s, 90s and even the younger 95s, and is supported by the national policy, the pan-entertainment is faster gaining positive public opinions and people's consumption on pan-entertainment has become a normal cultural social common phenomenon.



1.12 Industrial pain points

Although the entertainment industry is at its “golden age”, there are many shortcomings in its organizational structure and factors. Under the current entertainment industrial mode, copyright infringement, data tamper, severe resource tilt and other issues are hindering the development of the cultural industry.

(1) Ingrained infringement issues

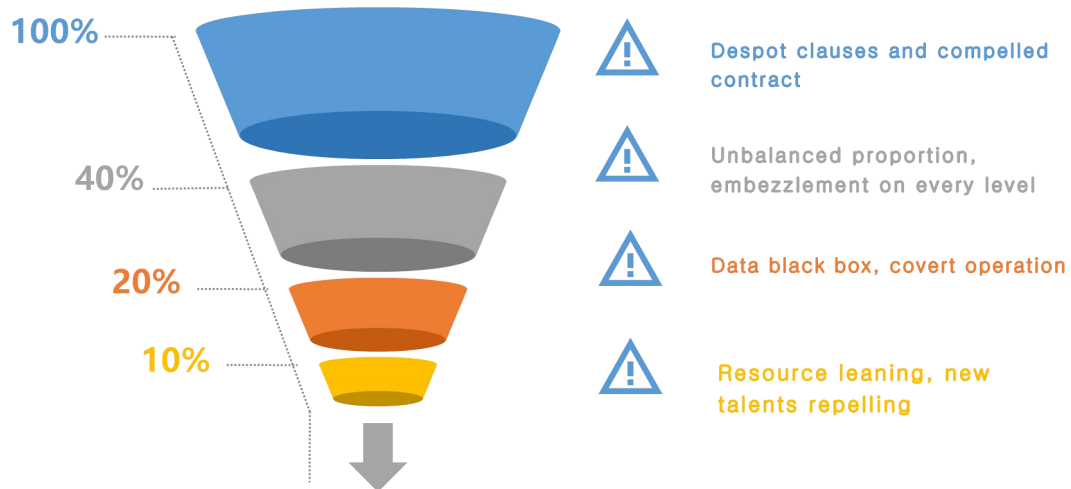
In the Guangdong “DJ202NET” case in 2014, 62286 musical works were provided for the public without authorization; Beijing Tianyingjiuzhou Network Technology Co., Ltd violated the copyright of written works due to unauthorized transmission via its

own “ifeng.com” and Apple smart mobile client softwares “military secrets” and “phoenix reading”; the “yyets.com” organized others to upload 467 movie and TV drama dialogs including *Gravity* to the Internet for users to scan, download and use without the authorization of the copyright owners. Copyright infringement The original songs by web musicians are collected by various music websites for users to download randomly. Some even use them to generate profits by all possible means, which the musicians are totally unaware of. Those infringement cases are numerous. However, due to the fact that it’s easy to copy but hard to trace on the Internet, and that national copyright awareness is constrained, infringement is seen everywhere and hard to be eliminated. Once the works by the creators of music, movies, TV dramas, web novels and other contents are uploaded to the Internet, they will be appropriated or used for free inevitably. The origin of entertainment is creative ideas, while the contents are the core. The copyright issue harms the authors’ rights greatly and impairs their momentum for production, which severely hinders the development of the entertainment industry.

(2) Lack of fairness on the centralized platforms

Web authors have to cooperate with reading platforms and sign agreements in order to sell their works. However, as the disadvantaged group, authors have no right to negotiate and often have to agree on despot clauses, for example, the successive works shall be released on this platform first and the copyright shall be reserved by the platform, etc. Web musicians may sell their original music on the platform. However, due to opaque sales data and recommendation rules, the income of web musicians totally depends on the data provided by the centralized platform. In addition, the share proportion of the platform to the works providers is not fair. The traditional record artists don’t share the earnings. Lyricists and composers earn only 0.8 yuan of copyright royalty for each song. As for digital music shares, normally the share proportion of record companies to musical platforms is 70 percent to 30 percent (famous singers share more), and then lyricists, composers and artists receive fix proportion from the record company. Lyricists and composers share 16%, and

artists 15-30%. Their effort isn't proportional to their returns at all. Big companies' vertical monopoly on the industry deprives many bottom creative idea providers and creators of the opportunity to show their talents. The highly centralized management methods and system result in platforms' severe inclination towards mature IP and well-known creators, which hinders the development of new IP and new talents. Some even violate the regulations and appropriate the earnings of the authors.



(3) Long returns cycle for original authors

The creative ideas providers and contents creators of the cultural industry spend countless effort and time on creation only to get unequal pay. For example, a unique IP business mode needs to be developed along with the prospective IP. Products are strictly selected at the front end to grow with the IP. Product/brand thinking is applied to the definition of the contents, and IP is magnified in a three-dimensional way through multiple channels within shortest time to help the IP generate profits through multiple channels. IP incubation, music creation, novel writing and others all need to endure a cycle. Meanwhile, the authors are often unpaid, which results in a long “income vacuum period” of the authors of the entertainment industry. This kind of payment process based on the results greatly raises the threshold for creation. Once the IP incubation fails or the works are turned down by the market, the effort during this period of time could mean nothing.

II. Design concept

2.1 ZZM design concept

With its industrial experience and block chain technology, ZZM team cooperates strategically with many large-scale enterprises and dedicates itself to applying block chain technology to the entertainment industry to build a global cultural and entertainment digital platforms. It aims at solving the current pain points of the entertainment industry, supporting the cultural contents creators of the new generation, changing the structure of the entertainment industry, restructuring the entertainment industry network and operation mode at the pan-entertainment age.

ZZM ecosystem sticks to the principles of building a decentralized, transparent, equal, and open-to-all block chain. Decentralization of the block chain will ensure the businesses on the platform are carried out in a decentralized and transparent manner. It will also avoid the covert operation of centralized management and despot clauses; the block chain digital encryption technology and traceability will guarantee the copyright and interests of the web authors, original musicians, IP incubation teams are well protected; the high liquidity of ZZM helps the authors to avoid the “income vacuum period”. In the real-time clearing, settlement and delivery based on the block chain, there is no intermediate platform during the real-time transfer, so it’s safe and reliable. In addition, the service charge is extremely small and it will be energy-saving, achieving multiple functions with high efficiency and low cost, which gives great development space to ZZM. In the future, there will be many possibilities on the ZZM platform such as crowd-funding on entertainment activities, movies and TV dramas, literature; purchasing IP spin-offs and the eco-products of the system; holding fans’ offline activities and strengthening fans economy; rewarding favorite stars, icons, works, etc.; saving identity information, words, movies, TV dramas and others in a safe and decentralized way.

The origin of the entertainment industry is creative ideas and the contents are the core. The block chain technology will integrate effectively and accelerate the circulation of

all links of the entertainment value chain and shorten the value creation period; it will achieve the value transfer of the digital contents and ensure the accountability, auditability and transparency of the transferring process; based on the policy surveillance, industrial self-discipline and individuals' multi-level trust consensus and incentive mechanism, and by way of constructing the infrastructure including safety verification nodes, parallel transmission nodes, transaction market nodes, consumer terminal manufacturing and others, the block chain will constantly improving the storage and computing ability of the entertainment industry and facilitate the entertainment industry to enter the age of overall digital production and transmission.

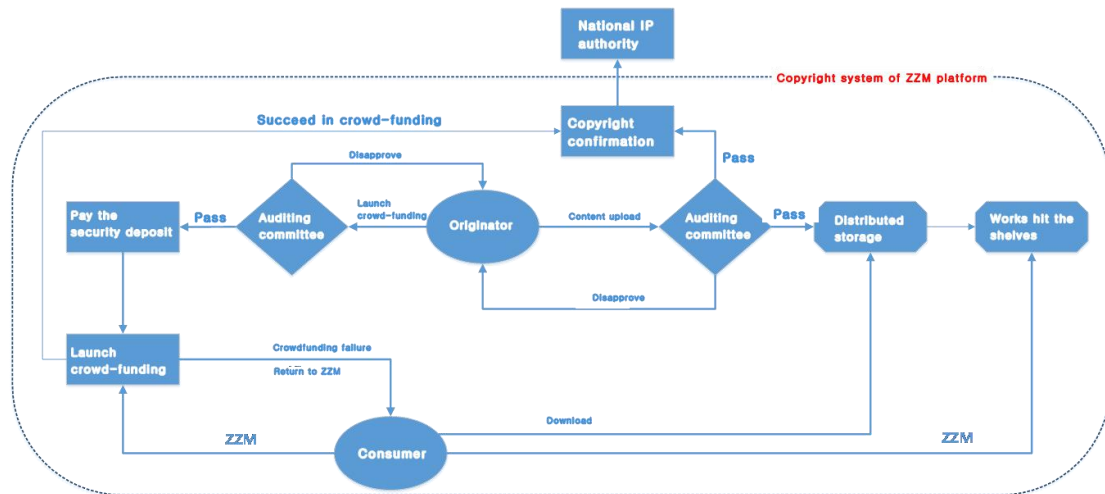


2.2 Application scenarios

ZZM has a wide range of feasible application scenarios. There are mainly three categories: content distribution, products transaction and fans activities.

2.21 Content distribution

With the block chain's accountable data environment of the ZZM platform, all original authors can achieve original statements, copyright registration and crowd-funding in a simple, fast and low-cost way; they can also upload their works to the decentralized storage system. The platform provides one-stop assets management solutions for the original authors.



(1) Copyright confirmation

ZZM provides copyright confirmation service for original entertainment works, intellectual property rights and others. It provides timestamps for copyrights in a decentralized method, so the data are authentic and accountable. It will ensure the authenticity of the generation time of the copyright. In the future, ZZM's copyright confirmation information will be linked to the national intellectual property rights authority. If appropriation of the works or arguments on the copyright occur, judgment on the belonging of the copyright can be made by the timestamp in the block chain.

After confirmation, the author can build a smart contract to set the time and required ZZM amount for using or downloading. Once others use or download the original contents, automatic payments for the preset ZZM amount will be made to the author. It makes full use of the block chain encryption technology and the smart contract to protect the author's interests.

(2) Decentralized storage

ZZM provides decentralized storage service for the original author, words, movies, TV dramas and other valuable information, which integrates the decentralized solution based on IPFS agreements in an innovative way.

(3) Crowdfunding for works

IP incubation and other relevant projects feature long time, high cost of initial investment and so on. In order to reduce the returns cycle of the original authors and

their risk for creation failure, ZZM platform provides crowd-funding service for original authors. During the process of song composing, novels writing and IP incubating, ZZM platform collects a certain amount of ZZM and sells the rights for the works in advance so as to encourage the authors to work free from all inhibitions and thus reduce the risks of their works being unwelcome to the market.

2.22 Trade of related products

Due to high production cost of cultural works, it is difficult for producers to recover the production cost by a single product form, so they often borrow the mature IP in pan-entertainment field as basis and extend to related industries. Most cultural industrial chains surround IPs, which consists of core-content production layer as upstream, diffusion-channel distribution layer as middle stream and related products-derivative product layer as downstream.

Originators take their own works as IP and cooperates with manufacturers and designers to sell related products on the ZZM platform. In addition, due to the lack of funds for early production of related products, the method of platform crowd-funding can also be adopted to involve users in. The sales profits can be returned to crowd funder in a certain proportion. Because all the information is on the chain, all participants, designers, manufacturers and IP creators can see the amount of sales. Through forming intelligent contracts to ensure the timely implementation of contracts, neither party needs to worry about breach of contract and other issues.

2.23 Online and offline activities

(1) Stars meeting

On ZZM, fans can purchase chances to meet, eat, and deeply talk with their favorite stars by Token payment. In star meeting, many ZZM can be got, and the collected ZZM Token can be used to produce related goods.

(2) Purchase of star time

Star time can be bought through ZZM token. For example, on ZZM platform, a user can find the star his girlfriend likes. After giving several ZZM token, user can ask the star to record a video for his girlfriend a birthday gift.

(3) Crowd-funding of “Young Hunk”

Stars can issue exclusive colorful coins to their fans. Fans can collect them immediately or use them to exchange the related goods of the star on ZZM platform.

(4) Giving a reward by fans

Users can use Token to reward their favorite stars, masters, and authors of film, television, and literary works. Due to real-time clearance, settlement and delivery based on block chain, amounts will come to accounts of these people at real time, which avoids intermediate platforms and is safe and reliable with very low service charges, saving human resources and achieving functions at high efficiency and low cost.

III. Commercial value system of the project

3.1 Generation and use of endogenetic value

As the underlying assets of ZZM ecosphere, ZZM Token's total circulation is 200 million and the number will never be added.

All ZZM is pre-digged and put in “Project Extension” asset to be frozen.

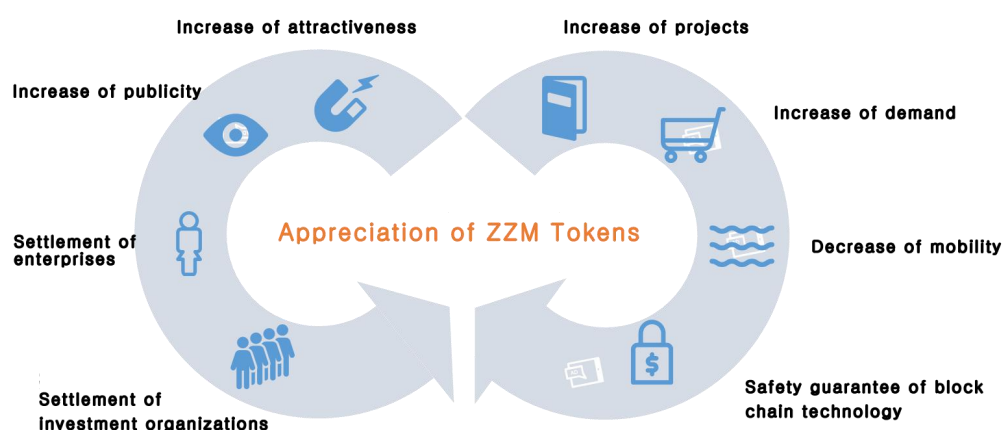
The minimum unit of ZZM is 10^{-8} , which means the eight decimals following decimal point, similar to bitcoin design. ZZM can be used and traded in ZZM ecosphere. To be exact, ZZM is not a digital currency. Instead, it is a universal equivalent and ZZM team's equity in ZZM ecosphere. The person who has ZZM can gain ZZM ecological overall earnings at a certain proportion. ZZM is digital asset guaranteed by Elliptic Curve Digital Signature Algorithm (ECDSA) with functions of asset trading, crowd-funding and event launching, etc. in ZZM ecosphere.

ZZM's price will not be anchored at any legal or encrypted currency. All payment

for trading, deposit, etc. are made via ZZM within ZZM ecosphere. Only by ZZM can various functions be used within ecosphere, including but not limited to on-chain transfer, work publishing, copyright confirmation, etc. In addition, the one holding ZZM can vote on inner governance and major technical development evolution (branching, updating, etc.) in ZZM ecosphere. ZZM is the undertaker for universal equivalent and economic cost within ZZM ecosphere so ZZM is one of indispensable core elements in ZZM ecosphere.

3.2 Commercial value-added logic

ZZM is the first entertainment industry platform based on block chain technology. With extremely many future application scenarios, it has realistic conditions for implementation. With each added scenario, ZZM team will buy back ZZM with the profits generated from the scenario and apply the purchased ZZM to the next scenario. See the figure below. With an increase in application scenarios, the number of participants in ZZM ecosphere will see explosive growth. In accordance with Metcalfe's law, the value of ZZM network will have exponential growth. Meanwhile, the number of ZZM is 200 million and will stay unchanged. Therefore, the value of ZZM will keep increasing.



When docking with a project, ZZM will unblock part of ZZM in “project extension” asset for market circulation. When the project operates successfully and forms a

mature ecosphere, ZZM team will buy back a certain proportion of ZZM and put it in “project extension” asset to be frozen. Repeat this step in the next project. When the projects keep being implemented unceasingly and the assets in “project extension” are near to be used up, ZZM will establish a multi-dimensional closed ecosystem launched by digital content publishing, merchandise trading, online and offline activities. The richer the ecosystem is, the more circulation of ZZM Token is needed. In accordance with currency demand quantity theory, ZZM Token's price will increase as well.

IV. Project plan

4.1 Innovation and possibility of implementation of project

- It uses block chain technology to solve the pain points of the cultural entertainment industry and to reconstruct cultural entertainment industrial chain
- Integrated application of multiple block chain technologies: multiple signature technologies, homomorphic encryption technique, IPFS protocol
- The implemented project supported by multiple large enterprises

ZZM team has rich experience and resources in the industry. Currently, ZZM philosophy is very popular among many enterprises and they have established strategic cooperation relationships with ZZM in advance.

- Shaanxi Chinese Cultural Industry Development Co., Ltd.
- Yituo (China) Group Holding Co., Ltd.
- VK—Verus Knight Gentleman Show, Global Fashion Brand
- Miaouou Social E-commerce Platform

4.2 Project's design principle

- **Transparent open source**
The underlying technology of block chain and the encryption method will use

open source method and be maintained by the community.

➤ **Industry-oriented**

ZZM will focus on entertainment industry and need to be adapted and adjusted in accordance with scenario demand.

➤ **Community maintenance**

ZZM will submit and maintain codes via community. The start-up team, as the governance committee, will be responsible for management and operation.

➤ **Safe and efficient**

ZZM will integrate multiple cryptographic mechanisms and set them as pluggable and include them into anti-quantum computation mechanism, providing sustainable safe guarantee for mass data in future.

➤ **Supervision and audit**

ZZM will provide CA authority node to meet the supervision and audit requirements of the regulatory side and meet the operational compliance requirements.

➤ **Reliable performance**

ZZM can meet the requirements of participation of multiple users and enterprises in scenarios by multi-chain structure, cross-chain protocol, performance optimization, configured parameters adjustment and efficient application design.

➤ **Multi-chain structure**

The rock-bottom structure considers system performance, safety, reliability and extendibility. It also introduces status channel, achieves data safety insulation and access control and provides abundant contract templates.

4.3 Project innovation

➤ **Improved underlying technology of Litecoin**

It is developed based on the underlying technology of Litecoin and is achieved with scripting language Python, reducing maintenance cost and improving version iteration efficiency.

➤ **Loosely coupled design**

The scenarios which ZZM targets at have a huge number of users and amount of data. Meanwhile, the interactive logic between different users and data is complicated. To reduce loss due to interaction of different hierarchies of components and for necessity of updating, we conduct loosely coupled design for the whole system.

➤ **Quick transaction**

ZZM provides quick data caching services. Quick transaction nodes are selected via selection algorithm in RAFT. The transaction settlement is almost real time, improving transaction efficiency and assets activity ratio.

➤ **Simple transaction rule design**

Intelligent contract can be edited on the user-oriented operation page. Therefore, ordinary users can embed the designed transaction rules in the block chain for easy

use of the intelligent contract.

➤ Channel design

It improves the privacy of transaction. When the enterprise users in the scenario need to transact by anonymity, ZZM will provide specific channels and store evidence of hash index via randomly selected nodes. Hence, it guarantees privacy and safety.

➤ Out-of-chain storage design

For the storage method for mass data combining centralization and decentralization, it ensures the information cannot be tampered and ensures the efficiency of data treatment, thus improving user experience.

➤ Convenient private key management

The traditional private key management will reduce user experience. By introducing main-control and self-control transaction mechanism, the ordinary user can use account and password for login.

➤ Multi-chain mechanism

ZZM uses public chain technology for C-terminal customers and alliance chain technology for alliance enterprises. Different chains are interacted through cross-chain protocol, notary schemes, hash-locking, side chain and other methods.

4.4 Characteristics

- Commercial-level platform performance and ability
- Implementation ability of highly-tailored intelligent contracts
- High self-evolution and self-improvement ability
- Highly safe
- Multi-chain structure with parent chain + n side chain
- Efficient cross-chain communication system
- High computing efficiency, chip-level acceleration ability
- Structural optimization of operation system level
- Industry Alliance Enterprise Server Group, IAESG

4.5 Structure and components design



User layer

The user layer is the entrance targeted at users. The management functions related to customers can be implemented via this entrance. This layer can also output the block chain service to other resource layer and support cross-layer block chain service.

Service layer

Service layer provides unified access and node management and other reliable and efficient services.

Network layer

This layer co-establishes infrastructure cloud service with the operation system, network, storage, computing and other resources and provides multi-node identity authentication and management, based on point-to-point networking, data transmission and verification mechanism, etc. Inter-chain communication network as

well as interactive protocol can be established in different service scenarios.

Motivation layer

Value measurement, wallet, account, etc. are integrated in ZZM system to establish a motivation scheme which motivates bookkeeping and credit nodes and punishes the nodes which do not conform to rules. Therefore, the layer promotes healthy development of the whole system.

Core layer

Core layer is the core function layer of the block chain system, including consensus mechanism, homomorphic encryption, encryption, abstract, data signature and other modules. Additionally, intelligent contract module which can automatically implement the pre-set logic can be selected and added in accordance with different application scenarios.

Contract layer

This layer is responsible for sequencing the bookkeeping nodes, analyzing the contract script and managing the contract category. It also adds status channel and is responsible for anonymous controllability of intelligent contract. It also configures safe container for contracting to guarantee the safety of contract.

Foundation layer

This layer is responsible for storage of basics. It uses LevelDB and file system to store the data set of the block chain and system's overall status. This layer also maintains node account book and accelerates hardware according to the upper layer of hash signature and formulates check protocol to protect data safety. It is also responsible for performance tuning and IO treatment so as to improve concurrency of the system in terms of software and hardware.

4.6 Description of part of components

User management

It is responsible for managing the identity information of all participants in the block chain, including maintaining public and private key generation, private key storage, and the relationship between users' true identity and block chain address. Meanwhile, it supervises and audits the transaction of some true identities under authorization. It also sets rules for risk control to protect safe transaction in the system for the application of digital asset and other financial transactions.

Registration

It registers and manages the information in accordance with the alliance chain nodes in the scenario. It registers the enterprises' information, submits public key of the enterprises, registers the certificate, manages the unified registration of information

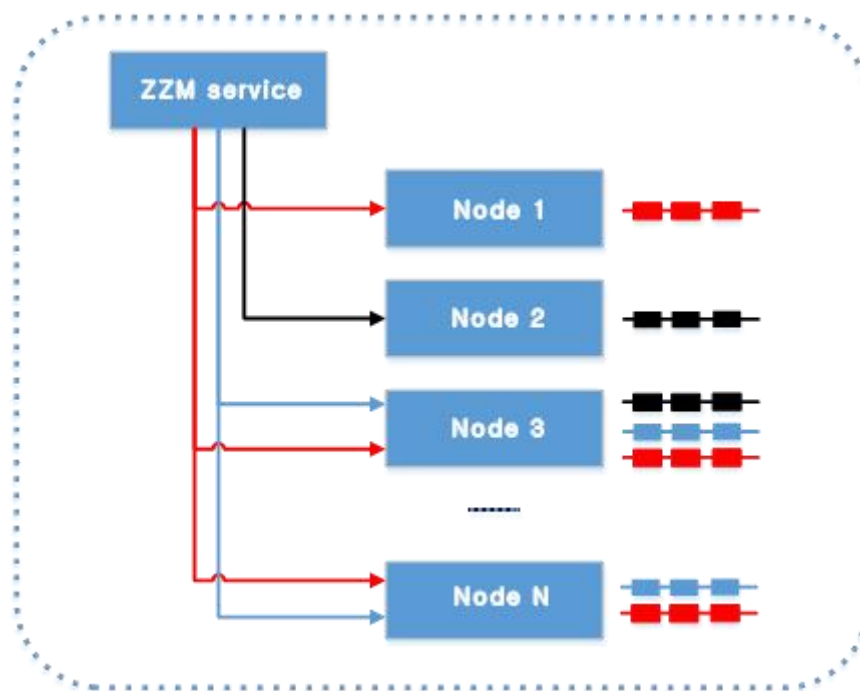
and meets the requirements of governance committee KYC and AML.

Authorization and approval

It automatically approves the information and public key submitted by the participant in accordance with the tailored authorization requirements. After approval, it issues the related information and public key information in accordance with certificate generation rule. Authorizes and approves to set the rules of generating certificates with special supervisory authority.

Status channel

The channel management function of the platform service can establish independent business chain in accordance with business scenarios. It allows the participants to join the business chain via block chain nodes to share business chain data. The nodes of block chain can be added to multiple business chains via channel management function. Plus, the data (chain, business) of all business chains are insulated with each other. It also supports multi-chain structure, separates different businesses to operate on the same platform, thus, strengthening privacy protection, reducing the cost of system structuring and improving equipment use efficiency.



Dynamic netting

ZZM platform can identify nodes via chain channels and allow the dynamic

regulated network nodes to enter or exit the business chain under the premise that the service is not suspended.

Intelligent contract

It is responsible for registration, implementation, updating and logout of the contract. The user can compile intelligent contract by a certain programming language. The intelligent contract can automatically trigger the contract or be triggered by other contracts for automatic implementation.

Load balancing

It can balance the traffic of the application program, transfer the front-end concurrent access to the multiple cloud servers in the background to improve the business level. By automatic switch of breakdown, the single breakdown of service is eliminated immediately to improve the service availability and enable DAPP or scenario application on ZZM to have good user experience.

Service component

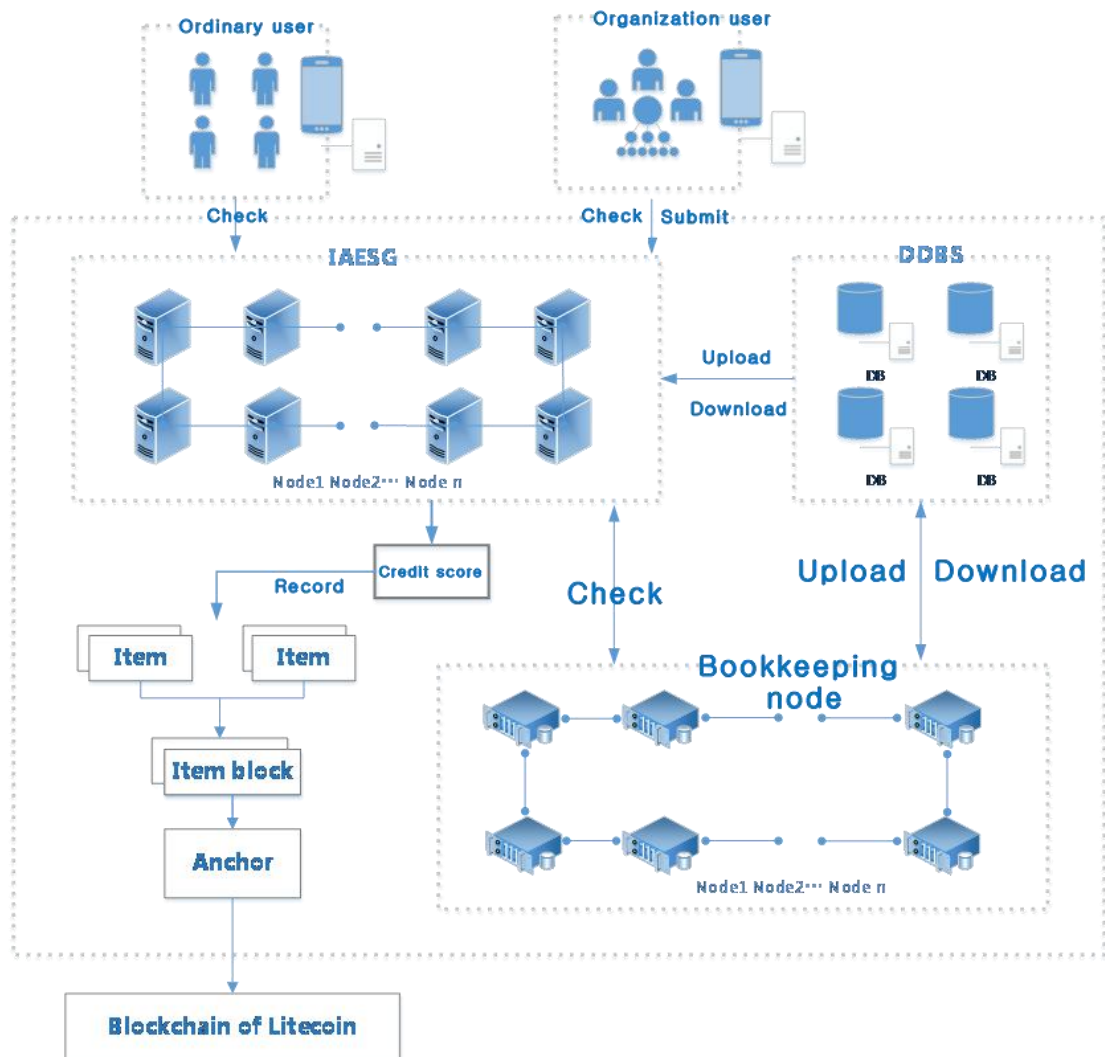
It can create account, digitalize asset, access the block height, create and check transaction information and chain as well as real-time notify the information, etc. for enterprise and individual developers. In the current stage, it can provide Baas services such as access via SDK, information privacy protection, value transfer, evidence storage to meet access requirements of different application platforms in the ecological chain.

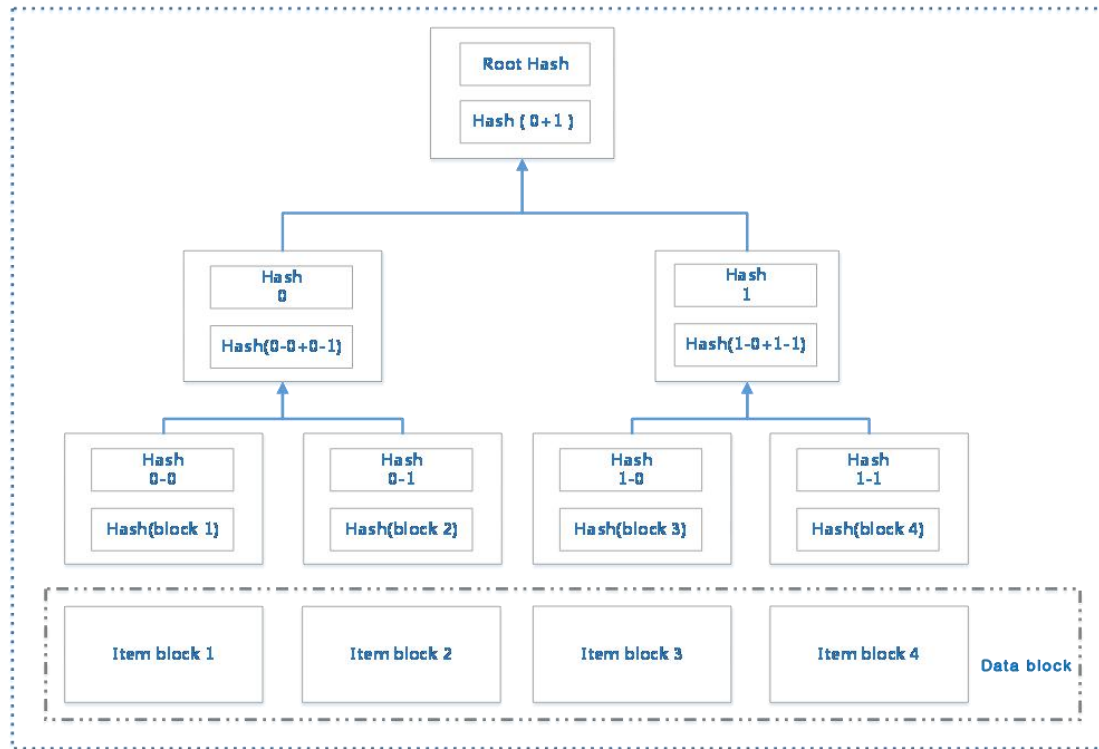
Data safety design

After surveying and thinking of the scenario, we have found that small-scale service providers and companies generate little amount of traffic and data. On the other hand, the data center establishment of traditional entertainment scenarios are not improved and do not have strong data processing abilities. Therefore, we have designed two alliance servers groups which match with Litecoin underlying technology for use. We also add cross-chain mechanism to share the database in a decentralized, safe, quick and traceable way by using the original database in the current entertainment scenarios. Additionally, many data have huge amount including pictures, videos, films, etc. The data encrypt and store the public keys of the users in the distributed database. To guarantee the record is credible and untampered, abstracts of all data are recorded by models, and hierarchical mechanism storage is applied. It stores the data hash value in Item structure and calculates the hash value of each Item to store it in Item block structure, which can reduce search space efficiently and accelerate the user's checking speed of records.

As is shown in the figure, the data block consists of multiple Item blocks. Hash value is calculated layer by layer and then Merkle root of the data block is gained once in a minute. As the underlying block chain structure of Litecoin applies POW mechanism and needs several minutes to generate a block, the database is frozen every 10 minutes in the model. As Merkle root generated in IAESG is sent to the Litecoin block chain and the form is similar to submitting a Litecoin transaction, the data cannot be tampered. Since there are more opener and more credible nodes in the public chain, each Item block is stored with hash value and header information, which not only benefits the transmission of peer-to-peer network of each block but also

reduces the cost of data check. Each data includes 3 parts of information: public key, metadata and data abstract of the data owner.

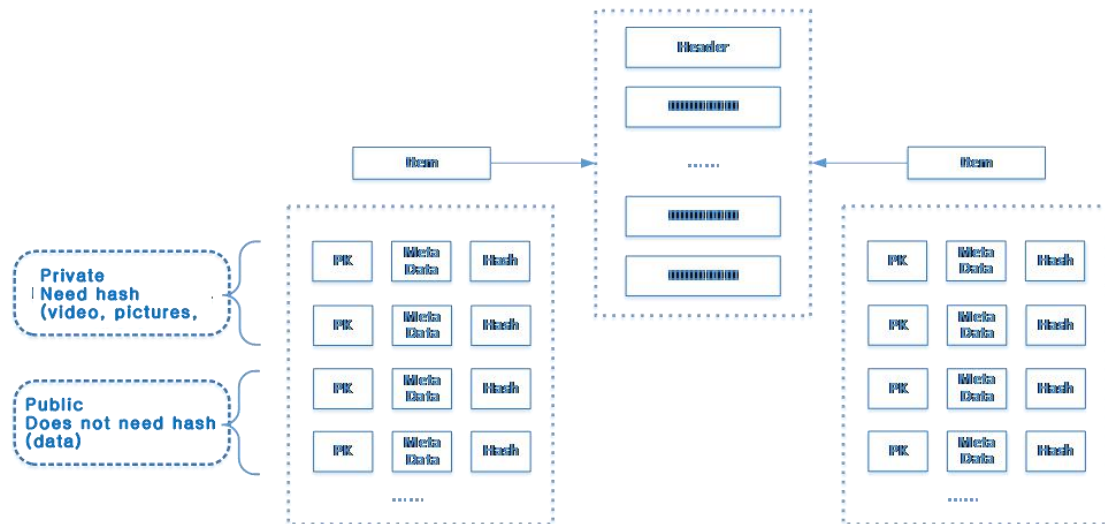




Consensus process

The work flow of IAESG is as follows:

- Step 1: the user submits request and public key as the identifier
- Step 2: the representative node receives request
- Step 3: the representative node broadcast has received request
- Step 4: the user submits the record. If the user doesn't want to publicize data, he/she can use public key to encrypt the data.
- Step 5: the node which represents value adds the record to Item in accordance with the user's public key
- Step 6: the node which represents value broadcasts Item to confirm information and store the large file which needs to be processed into the distributed database
- Step 7: The node which represents inspection checks the record and other nodes update data
- Step 8: Check the number of Item blocks every one minute. 10 data blocks form a data block and the merkle root of the data block is calculated.
- Step 9: The merkle roots of the newly-generated data blocks are anchored to the bitcoin block chain every 10 minutes
- Step 10: back to step 1



Data sharing and access design

The data owner encrypts and stores the data in the distributed data base. The model uses proxy re-encryption mechanism in cryptology to control and share data access. Since the model is a decentralized application scenario based on block chain technology, without a creditable third party, there will be no only proxy in the traditional re-encryption scenario. Any node in IAESG can serve as proxy and finish re-encryption operation. ZZM Token can be gained as remuneration. The proxy protocol setting is as follows:

1. Generate stochastic matrix , select safety factor q, n .
2. Generate public and private key pairs: public key $(pk)=P$, $P=R-A$, among which, R, S are Gaussian parameters, then, private key $(sk)=S$

3. Encryption algorithm:

$$c = () = ()$$

among which are tolerance parameters

4. Decipherment algorithm:

$$M = S + , \text{ take } 0 \text{ or } 1 \text{ in accordance with the distance with } 0$$

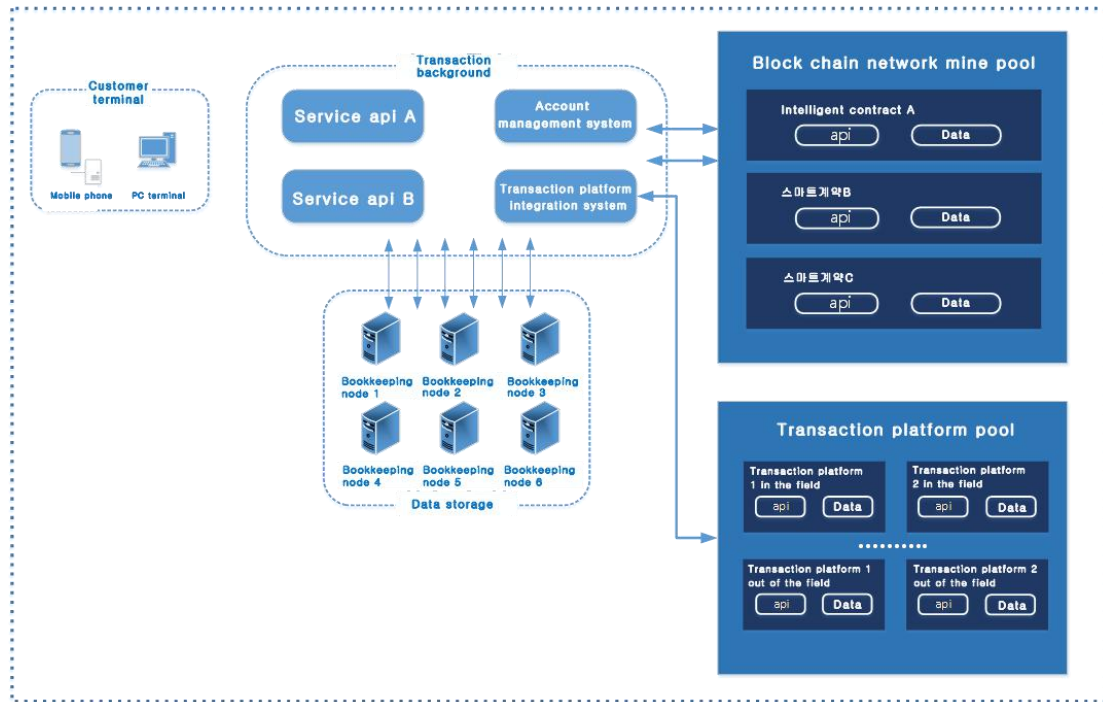
5. Reencryption key generation algorithm:

Including: X is stochastic matrix and E is noise.

6. Re-encryption algorithm:

Including: selection tolerance distribution

Issuing organization of colored coin

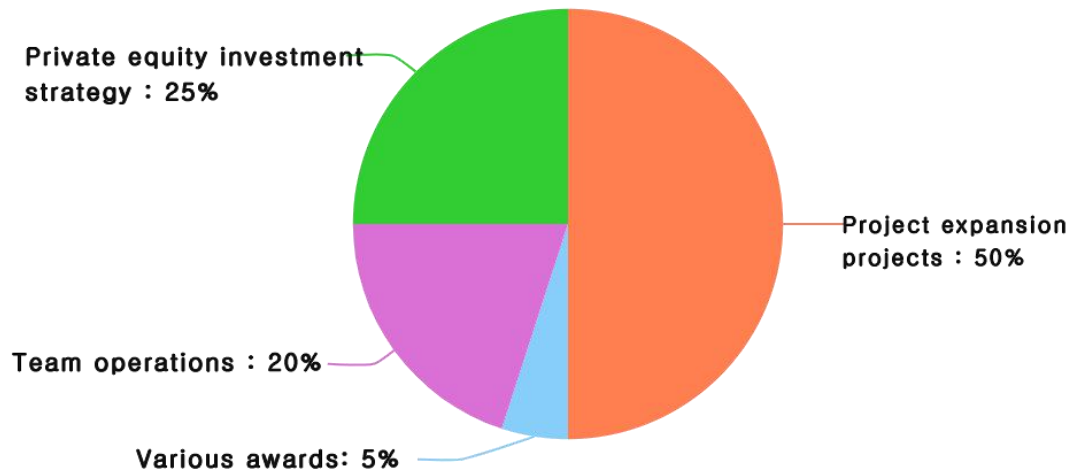


V. Introduction to Token and usage plan

Token name	ZZM	Operation subject	ZZM Singapore Foundation
Algorithm	SCR2.0	Issuing date	November 27th, 2017
Circulation	200 million	Amount in circulation	30 million
Current user scale	3000- 5000 people	Official website	www.zzmnb666.com
Download link of wallet	http://www.zzmnb666.com/download/zzm-wallet.exe		
Source code	http://39.106.36.203/index.php		

Total number of Token sales: 200 million tokens, whose distribution plan is:

- 50% for project expansion projects
- 25% for private equity investment strategy
- 20% for team operations
- 5% for various awards



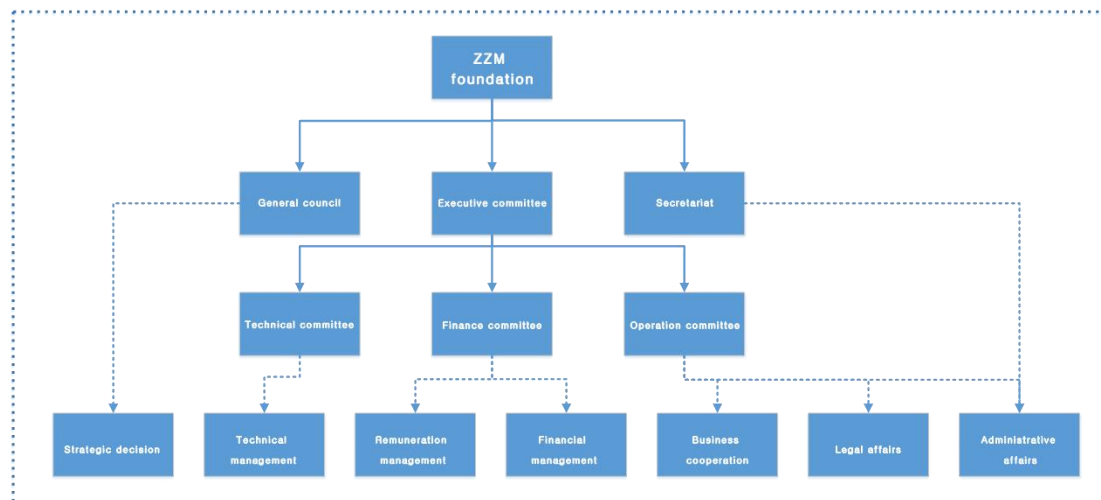
VI. Project governance mechanism

6.1 Funds management mechanism

The raised funds will be maintained and operated according to principles of transparency, audit-ability and efficiency. The raised BTC and ETH are kept in multiple signed wallets and reviewed by the public. For security issues, the private keys of these wallets are controlled by five reliable individuals. Any payment by the wallet requires the simultaneous signature of these five people. The raised funds will not be used in developer's distribution of shareholder dividend or profit, but in ZZM's development, maintenance and other technical work, as well as ecosystem construction (such as various applications in investment cultivation chains, etc.).

6.2 Foundation governance

ZZM is a decentralized international block chain community, which sets ZZM Foundation at abroad to ensure the management and operation of ZZM communities and funds. The ZZM Foundation consists of the foundation's general council, the foundation's executive committee and the secretariat. The general council, which has 11 members, is elected annually by community voting according to the principle of one coin, one vote, and is mainly responsible for formulating the future direction, development strategy and major events decision of ZZM. The executive committee is composed of technical, finance and operation committees. They are responsible for technical development, financial management, and business cooperation and operation of ZZM platform. The secretariat has 7 members, at the ratio of 3: 2: 2 of above three committees, mainly for coordinating work of all committees.



VII. Introduction to the team

7.1 Introduction to core team

Li Jinlong - core of ZZM team

Li, graduated from finance department of School of Economics Shandong University, is a rising star who specializes in the block chain and one of the founders of ZZM.

During his time at university, he was invited to participate in many e-commerce platform seminars. After graduation, he successively engaged in the internet industry, financial industry and e-commerce platform operation. After being invited to attend the “2015 Hundreds of Enterprises Financial Summit” in 2015, he was deeply inspired and changed his mind to study block chain. He has a deep love for the block chain and sets the goal to apply the block chain to the entertainment.

William Jefferson Clinton - initiator of ZZM

William was born in New York, USA, and graduated from New York University. He is a famous American economist and the Bitcoin preacher in early time. He also has participated in numerous project investments, including Ethereum, Ripple, etc.

Li Zhan - operation director of ZZM

Li Zhan, the operation director of ZZM project and the master of Korean finance, has a wealth of studying abroad experience and international view. In 2013, he went back to China and founded Yi Tuo (China) Group Holdings Co., Ltd. at the same time, he is the founder of three brands of Yi Tuo, the vice chairman of Shandong Business Union, and the initiator of Yi Tuo Dream Charity. He first entered the coin field in 2015 and participated in the block chain investment, project operation, and the holding of summit forum in the following two years. With the rich operation experience in block chain project, block chain communities and cooperated channels with exchanges in Korea, Li is dedicated to promoting the spread of ZZM value.

Yuko Aoki - co-founder of ZZM Japanese community

Yuko Aoki studied in Japan in 2011 and graduated from University of Tokyo. She is one of the first people who are involved in the Bitcoin in China and one of the co-founders of ZZM Japanese community.

7.2 Introduction to partners:

➤ Shaanxi Chinese Cultural Industry Development Co., Ltd.

When there is no derivative market of Chinese film, Shaanxi Chinese Cultural Industry Development Co., Ltd. devoted itself to developing the traditional film

derivative industry into a comprehensive film eco-industrial chain of “film + film derivative + cinema + culture-oriented travel of scenic spot”, and started Chinese film derivative together with Xian TV Media Co., Ltd. based on the platform of Xijing Film and Television Culture.

➤ Yi Tuo (China) Group Holdings Co., Ltd.

Yi Tuo is the first one-stop entrepreneurial life service platform taking the housing asset management as the entrance in Shandong Province. The group is involved in ten businesses of property, asset management, investment operation, business service, real estate agents, decoration, financial agents, human resources, car rental and elevators.

Yi Tuo has three brands: Yi Tuo Dream Apartment, providing office rental services for the entrepreneurs who have dreams; Yi Tuo Youth Apartment, providing apartment rental service for non-native young people who work hard to pursue their dreams; Yi Tuo Free Apartment, providing hotel apartment rental service at travelling destination for tourists.

The five-year goal of Yi Tuo is to build itself into the largest and the most professional asset management group in Shandong Province; the ten-year vision is to build itself into a world-renowned entrepreneurial life service platform.

➤ VK - global fashion brand for Verus Knight Gentleman Show

Verus Knight Gentleman Show, is a gather platform for Chinese men’s lifestyles in different ethnic groups, areas, fields, ages (ranking from 5 years old to 65 years old who have the life attitudes) in China. It is the gather for 12 men’s fields in China, including entrepreneurs, new media, athletes, beauty industry and styling, child models, men from 56 ethnic groups, Kol celebrities, Chinese supermodels, fitness trainers, cabin attendants, designers, artists, actors, hosts and opinion leaders in various fields. Some famous people are Simon Yam, Edison, Chen, UNCLE Wu Guoping from Grandma’s Diet. More people are the men with their own life attitudes from Singapore, Taiwan, the United States, Japan, Beijing, Shanghai, Hangzhou, Guangzhou, Shenzhen and Hong Kong. It shows the new international standard charm

of Chinese men from multi-perspectives and multi-styles, then to inspire and spread to more men.

➤ Miaoou Social E-commerce Platform

Miaoou is a social e-commerce platform. After the issuer's time is launched on "Miao Ou", users can hold valuable time resources by purchasing and turn the virtual personal time into visual presented flexible assets. Users can not only use time to meet with celebrities, but also to invest and control time resources through trading and exchanging communication opportunities, knowledge, related goods, sharing experiences, etc. provided by the issuer.

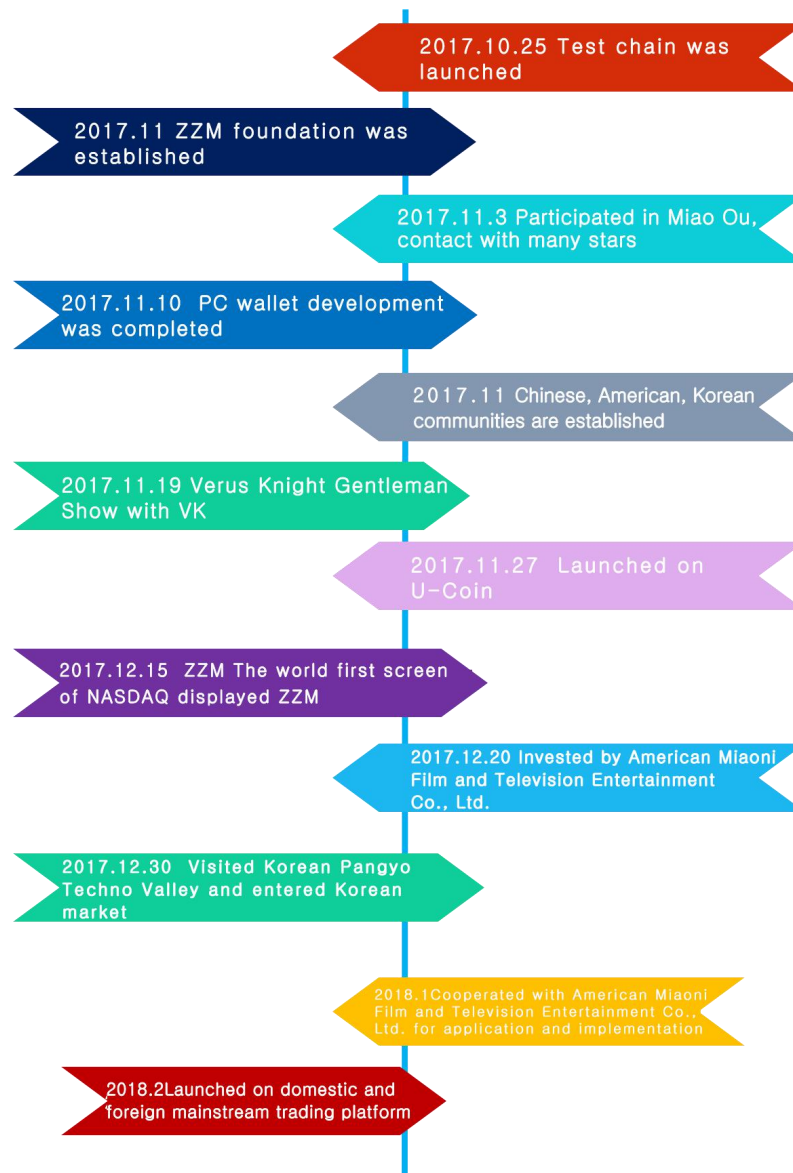
VIII. Introduction to and Future Planning of Implemented Project

8.1 Implemented and To-Be-Implemented projects

- ZZM can be used to purchase books published by well-known writers in Miaoni APP.
- ZZM held VK - Verus Knight Gentleman Show in Xi'an with VK international fashion clothing brand, also known as "Chinese Victoria's Secret" on November 19, and ZZM can be used to purchase VK clothing.
- American Miaoni Film and Television Entertainment Co., Ltd. will develop and implement the star purchase APP in January 2018. There are many global stars and celebrities gathering for the APP, at the same time, their time can only be purchased by ZZM. This APP will become an important part of ZZM ecosystem.

8.2 Future Planning

ZZM has completed the whole process from concept proposal, launch of test chain, development of PC wallet, to but-joint of wallet collection; from the establishment of Chinese community to the establishment of American and Korean communities; from the participation in the conference of Miaoni e-commerce platform on November 3 to the holding of VK - Verus Knight Gentleman Show in Xi'an with VK international fashion clothing brand on November 19; from the one with only a hundred supporters to the one with tens of thousands of community members. From concept test to implementation and application in 2017, ZZM will continue improving ZZM community, accelerating the maturity of ZZM underlying technology, and building ZZM ecology in the upcoming six months. The development planning of ZZM is as follows:



In the future, ZZM will:

- (1) cooperate with American Miaoni Film and Television Entertainment Co., Ltd. to make ZZM be implemented and applied really and start ZZM payment for star time fragments, and build the first ZZM repurchase system.
- (2) establish ZZM American community
- (3) enter Korea, launch in Korean exchange and establish Korean ZZM community at the same time
- (4) establish ZZM foundation in Singapore
- (5) launch mainstream trading platform
- (6) create more ZZM recovery systems to establish ZZM ecology

IX. Risk and Control

Legal Structure and Disclaimer

Any purchase of ZZM token for anyone is based on his/her own knowledge of the block chain and the information of ZZM white paper.

ZZM developer expressly does not recognize and refuse to assume the following responsibilities:

- (1) Anyone violates the regulatory requirements of any country such as anti-money laundering, anti-terrorist financing when purchasing ZZM tokens;
- (2) Postponement or delay of development and the consequent failure to reach the schedule which disclosed in advance;
- (3) Errors, defects or other problems in the source code;
- (4) Any participant leaks, loses or destroys cryptocurrency or wallet private key of Token;
- (5) Violation, infringement, collapse, paralysis, service termination or unable services, fraud, misuse, misconduct, error, negligence, bankruptcy, liquidation, dismissing or close of the third party crowd funding platform of ZZM;
- (6) Agreement contents between anyone and the third party crowd funding platform have difference, conflict or contradiction with the contents of white paper;
- (7) Trading or opportunistic practice of anyone on ZZM ;
- (8) Forbidden, regulated or legally restricted by any government, quasi-government agency, authority or public agency for that ZZM is classified or deemed as a kind of currency, security, commercial bill, negotiable instrument, investment goods or other stuff;
- (9) Any risk factor disclosed in the white paper, as well as adverse effects such as damages, loss, claims, liabilities, penalty, costs related to, resulted from or arising from such risk factor.

Risk disclosure

Token purchase should be a well-thought-out decision and the participants are deemed to have been fully acknowledged and agreed to accept the following risks:

- (1) ZZM cannot be normally developed or used, or ZZM is prohibited from being held or used due to legal policy changes or government actions.
- (2) The safety of cryptography-based currencies (for example, the private key is easily cracked) cannot be ensured due to the development of cryptography or commercialization of quantum computers.
- (3) Unpredictable risks are resulted from the upgrading and modification of source code as required by community.
- (4) Suffering from “distributed denial of service” attack or attacks of other types during the operation.
- (5) Theft, lethe or loss of ZZM tokens held by anyone.

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