X-power Chain

Your World Your Screen

A Cloud Screen Ecosystem Based
on Self-developed Public Chain

Preface

Cellphone has been defined as a communication tool, till Apple came into being -

Thanks to iPhone with genius design of Steve Jobs, the cellphone screen becomes larger, the functions transform from unitary communication to smart Internet connection, and the definition of the cellphone as a sole communication tool is substantially changed. It starts to evolve into online surfing tool and mobile computer. The secluded and diversified iOS business ecosystem brings safer and smooth use experience to iPhone users. It also accumulates the most excellent teams from the world to develop diversified Apps, and changes the living state of the human.

Internet information has made the people concerned about mistrust, till Blockchain came into being –

Currently, Internet is still in the stage of information Internet and only delivers information. As the information becomes huger and complicated, various high-tech fraud tricks spring up and lead to mistrust. To look into the future, Blockchain technology has the potential to lead new-generation technology reform. With the characteristics of being decentralized, tamper-resistant and transaction without third-party trust endorsement, it is likely to reshape the enterprise form and social structure, achieve value exchange, and bring economic value effect to every user on Blockchain network.

Public scenario has been mutually independent individual in the eyes of the people, till X-power Chain came into being –

A person will experience multiple different scenarios, such as home, company, shopping mall, restaurant, health club, beauty salon, KTV, and hotel, etc. As the world's first public chain of screen ecosystem, X-power Chain has cooperated with ten thousands of enterprises worldwide, deployed over 400,000 offline screen terminals, generated over 100,000 nodes, had more than ten million of daily visitor rate. It will become a newly-increased traffic entry in industry, redefining global screen ecosystem.

X-power Chain is equipped with user center system of personal token, linking with the screens of home, cinema, hotel, health club, beauty solon, fitting room, etc. on cloud. In front of these screens, people have long standing time for fully gaining or consuming XPO, and enjoying personalized services.

With all screens connected to network upon opening unbounded screens by X-power Chain, users can create smart cloud screens by overall behavior trace and consumption up-linking at the screens.

Except for powerful application settlement, the brand-new X-power Chain also attaches importance to technology R&D, strives to establish the public chain, improves the transaction processing rate of Blockchain, explores the program that increases processing rate and enhances data storage, applies the core innovative technology in global public screen scenarios. The publisher of contents, copyright traceability, income of Token is tamper-resistant, and no fees incurred to the third party.

The Blockchain technology-based smart management system of platform protects the rights and interests of content-owned party and users, and creates more value for the society. X-power Chain makes breakthrough in three technical sections: DPOS consensus algorithm improved from DPOS for extremely rapid consensus; support sidechain

protocol through two-way peg, and achieve cross-chain circulation of the assets; explore distributed data storage and reading program based on Merkle Tree, and increase data reading rate, so as to truly settle the Apps in large scale, and support the application with high concurrence and large data volume.

Let us witness that Blockchain changes the traditional screen and soars vigorously.

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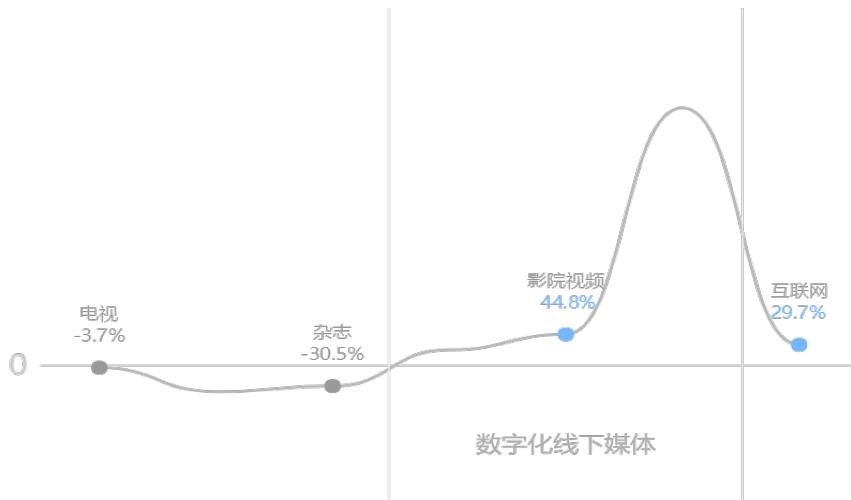
1.1 Enormous Global Digital Screen Value Needs to Be Explored

Urgently

Currently, offline traffic is more than 100 times of online traffic, and lots of life and work scenarios such as the office buildings, shopping mall, supermarket, restaurant, hotel and KTV, etc. throughout the world are surrounded by tremendous amount of screens: Some are huge screens in crowded New York Times Square, and some are television screens quietly broadcasting in hotel rooms. Hundreds of millions of screens cover billions of people around the world every day. However, the value of these screens are not fully explored: only local play of fixed contents due to no Internet connection, restricted content of copyright update, Content manufacturer and providers' revenue cannot be better measured, and the relation between consumer and screen is estranged, lack of efficient management logic, significant information influence but no certification of information source. This means that plenty of offline screens are not empowered by new technology, and the value remains to be mined.

As shown by BAIDU's research report, after 2017, the growth rate of mobile devices is decreasing month by month, and the demographic dividend is exhausted. The per capita usage time period of single day and day numbers of mobile APP netizens per month is slightly decreased. In contrast, the number of offline digital public screen
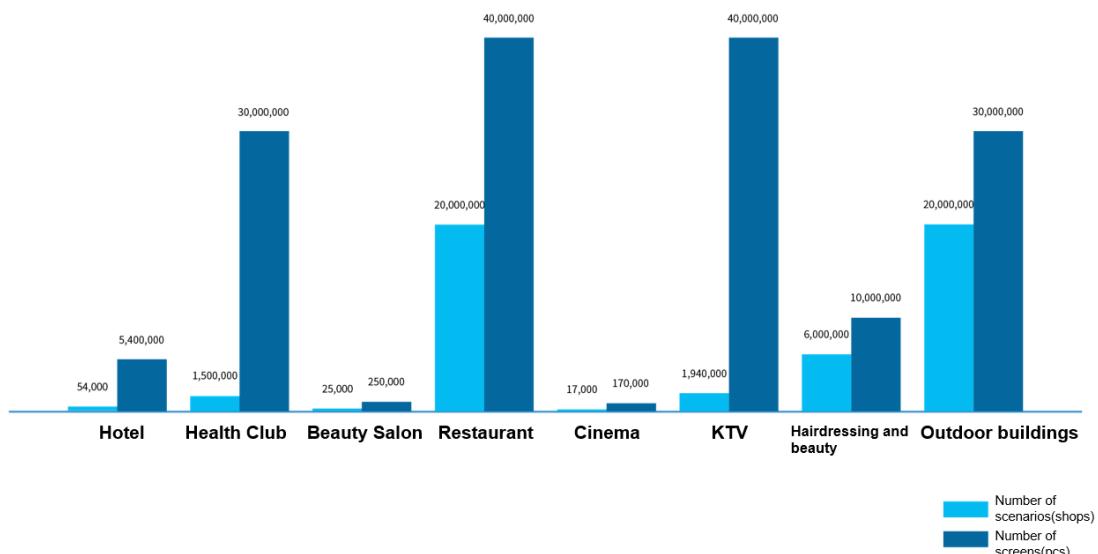
media has grown rapidly. (Figure 1: Proportional Trend of Digital Offline Media)

电视
-3.7%

杂志
-30.5%

影院视频
44.8%

互联网
29.7%

0

数字化线下媒体

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As the infrastructure of large-scale interconnection of digital screens - 5G peak network rate reaches 10Gbps, with its network transmission speed 10-100 times faster than 4G, the network delay shortened from 4G' s 50 milliseconds to 1 millisecond, meeting the demand for connecting the network at the rate of 100 billion, and causing the energy consumption per bit of the whole mobile network dropped 1,000 times. With the commercialization of 5G, we will enter a smart Internet era where mobile Internet, smart sensing, big data and intelligent cloud are integrated. Through technological channel of Blockchain, how to connect the dotted offline screens together, how to make more value in the same time period, and how to allow the huge population suffered huge screen radiation to reach consensus at low cost, and thus cutting the credit cost to the lowest extent, and finally reaching the coming target depends on creating the strong propagation screen matrix that has not existed before, and create more abundant application scenarios for the consumers in all the scenarios.

1.2 Interconnect the Pervasive Screens and Increase the Value of Digital Screen

According to the data released by several authoritative institutions, such as the world largest hotel data provider STR Global, International Society of Aesthetic Plastic Surgery (ISAPA), world largest third-party payment platform Alipay Koubei, and world famous market research company AC Nielsen, etc., in 2018, the total number of shops/buildings of public scenarios, including outdoor buildings, hotel, plastic surgery hospitals, health clubs, restaurants, cinema, KTV, hair salon, gym, café, and bar, etc., has exceeded 190 million, the conservative estimation of screen numbers is around 300 million, and the consumption market scale can be the considerable number of approximately USD 80 trillion.

Brief Introduction to Market Space of Some Offline Screen Operation Scenarios

Achieve the desired effect of information circulation and sharing through Internet and platform operation of numerous scattered screens, and enhance value of public

culture through networking and Blockchain technology modification, and aiming at obtain such ecological value that the publisher of contents can trace the copyrights, the revenue of Token cannot be tampered, and no fees incurred to the third party.

The platform based on the intelligent management system of Blockchain technology protects the rights and interests of content parties and users for forming a social circle with common values.

The essence of offline digital screen transformation is to transform the existing centralized businesses, and create capacity through Blockchain: In some existing offline screen scenarios, the original centralized businesses run well, and the target of application of Blockchain does not lie in transforming the existing infrastructure of hardware, but provides another capacity, namely Token economic incentive mechanism, which achieves the measurement of the acts, information, value and data of the consumer group in the previous scenarios. The Token can rapidly circulate, have definite price and considerable value increase potential, which will create very attractive incentive for users and generate community consensus .

1.3 Blockchain Technology Gets Ready

Blockchain technology is the technology that carries out direct point-to-point transaction by "decentralized" and "trustless" channel, adopts data storage, delivery and verification in "distributed structure", replaces the reliance on centralization with data block, and thus allows the transaction information saved on the node to be confirmed rapidly and all the participating members to jointly maintain a reliable database. The database stores all the previous transactions, which

are open, transparent and stored in a distributed manner. The channel with the cryptography protocol is adopted to ensure that it is probably impossible to tamper and counterfeit.

The application fields of Blockchain have developed from V1.0 programmable currency and V2.0 programmable finance to V3.0 programmable society at full speed. That is to say, the application of Blockchain is not only in the digital asset fields of smart contract, equity, securities and group-raising, but also have expanded to the colorful life of the people for Internet of Things, intelligent manufacturing, supply chain management, social contact, social welfare, electronic goodwill, and culture & entertainment, etc. The extensive application of Blockchain will bring new opportunities for the development of new-generation information technology, such as cloud computing, big data and mobile Internet, and be able to trigger a new round of technological innovation and industrial reform.

2. X-power Chain Came into Being

2.1 Current Problems of Offline Digital Screens

2.1.1 The majority of the screens are not based on smart operating system, and have limited value space

Internet is the basis for realization of Blockchain technology. Only screens connected with Internet can have greater value space. As X-power Chain is being applied more extensively, the sub-chains in the fields of payment settlement, copyright tracing, identification verification, advertising & marketing, DAPP open platform, etc., will establish the respective Blockchain systems. Faced with a number of settlement restrictions, the screens are isolated and the information is not communicated, which prevents it from fulfilling the value, and significantly restricts the development space of X-power Chain.

On the hundred millions of dispersive screens in the world, Internet connection can achieve the preliminary expansion of value, and connect the world. And X-power Chain is the key to achieving Internet of Things, the medicine that releases various screens from separate, dispersed and lonely islands, a magic weapon that may realize deep link among people and the bridge of expansion, connection and information communication between the screens.

2.1.2 With centralized media advertisement, weak value embodiment

Advertisement is overwhelming in people's life. Incomplete statistics show that

more than 80% is irrelevant content. Clients choose "automatic blocking" or various means to block ads. The screen user's traffic does not bring the expected advertising performance to the advertisers.

In global Internet advertisement market in trillion-dollar level, centralized media occupy the majority of the marketing budget, such as the search engines and design media. Since the scenarios of the media are unitary and the audience group of advertisement is not well targeted, the user acquisition cost is very high. The user registration in special type can even be several hundred yuan sometimes.

For the advertisers, except for high marketing costs, they need to negotiate with the media and agencies for advertisement resources, which increase implicit costs and add 25-40% burden for the brand. In addition, such problems as the launching efficiency of digital media is low, the effect cannot be measured and examined, the price standard is not unified, and the input and output is failed to measure are disturbing advertisers.

However, the media enjoy an extremely beneficial environment in terms of market demand and the trend of digital development. Compared with the previous advertising format, the large screen brings a strong visual impact to people with its unique size and specification, clear image quality, dazzling color, etc. It can reach high achievement rate with its strong attractive force and wide coverage, resulting in qualitative upgrading of advertising effect which is what the advertisers expected.

2.1.3 Unitary supply-demand relationship of offline digital screen content system

Currently, the contents of screen are mainly in the form of being planned, assessed and confirmed by the project owner, which makes the contents vertical and unitary, and fail to meet the multiple demands of the users.

The major problems are as follows:

- The overwhelming majority of the screens are not connected with Internet, which makes the content update slow, fails to meet the people's demand in acquiring information in real time, and thus leads to the drop of attention grade.

- Since there are plenty of copyright owners and complicated structure, the single platform cannot acquire the corresponding copyright authorization efficiently, and thus affect the content broadcasting.

- The public screens have unitary function, and the existing screens tend to have certain function and make the audience feel tired.

- Most of the screen sources are not fully used, and failed to generate interaction with users in front of screens.

2.2 Innovative X-power Chain Redefines "Offline Digital Screen"

Blockchain technology does not create value but has the core of creating capacity. In Internet field, it can divide use right and ownership of big data. X-power Chain, by

creating three ecosystems of content ecology, Dapp ecology, advertising ecology, X-power Chain joins together with global users to explore, mine and display the potential values of these ecologies, to form community consensus sharing with users in ecosystems, and to redefine the value of hundreds of millions of scattered screens.

2.2.1 Accurate advertising system based on Blockchain

X-power chain is committed to building the screen big data system, breaking down each screen by means of WI-FI probe and image recognition, etc., recording the traces of user consumption, entertainment and study. Real Time Bidding based on advertisement classifies the screens and users by a refined way, and achieves accurate marketing with performance of the advertising.

Characteristics and advantages of public screen advertisement based on Blockchain technology:

- The advertisement content is transparent and the source is traceable.

- Automatic release & removal and automatic settlement through smart contract

- Save costs, free of agency and agency fee, and thus greatly reduce the costs

- Integrate all the screen resources, save the time and communication costs of the advertiser, and increase advertising efficiency

- Achieve accurate advertising with multiple sniffing technologies, and improve advertisement performance

- Load the playing data in the chain, allow the users to participate and view, and prevent false network traffic

- Support advertisement space auction, and maximize the value of advertisement space

- Blockchain + smart contract create capacity for the new business pattern, and support multiple advertisement distribution patterns

2.2.2 Build person-screen interactive connection, linking person life circle

Equipped with user-centric system of personal token, X-power Chain links screens at homes, cinema, hotels, health clubs, beauty salons, gyms, etc. on cloud. The people, having long standing time in front of these screens, can fully obtain or consume XPO, and enjoy personalized services from these screens.

On one hand, the offline screens have the inherent properties of accumulating audience and creating the circles. X-power Chain allows the users to develop shared values in the form of interactive live, VR/AR experience, 3D film, reward and Q&A, etc., with the content output property of the screen, and redefines the social circle. People-centered, starting from the home screen, and making data at various screens interconnected.On the other hand, when publishing the contents, the developer needs to reserve part of the income according to block-developed proportion on X-power Chain, and the remaining income is traceable and viewable, without the

third-party platform sharing the interests. For example, when the user requests the broadcasting of a film, the developer can clearly know the time, location and duration of viewing, as well as the income from the accounts book records.

Moreover, X-power Chain keeps all the source traceability available for check in the form of distributed bookkeeping, including but not limited to copyright, transaction, and value-added service information, etc.; the smart platform management contract with complete ranking, scoring, and comments, etc. will guard the ecosystem for every minor change.

2.2.3 Brand-new DAPP app store is developed for public screens

X-power Chain draws on the wisdom of the masses, opens DAPP app store platform to the global developers, enables the global developers to develop quality App for value-added services for billions of offline users, adopts the node of screen and PDPOS system of X-power Chain, and reaches consensus efficiently for the nodes in the ecosystem.

The users can upload various Apps/mini programs on DAPP app store platform for the online consumers to use. For example, the global heated interactive contents: video, live, audio, e-commerce and games etc.; scenario function service: smart ordering, call service and payment, etc.; information release: advertisement, public welfare publicity and personal information delivery, etc.

All the screens of X-power Chain allow the automatic system upgrade on Internet, solve the technical update and iteration difficulties with DAPP release, remove the coordination and communication cost with the third party, improve timeliness, and

provide more guarantee for the developers.

X-power Chain content ecosystem and DAPP app store have the following features:

- The users can obtain concurrent experiences before different screens

- The users can open the program and use immediately, and do not need to download and install the App for a single scenario

- The screens in the ecosystem are interconnected, and the user information records are synchronized in Blockchain in a anonymous and encrypted manner

- A personalized system specifically is customized for every user, which pushes accurate contents

- Leave upon use, and pervasive
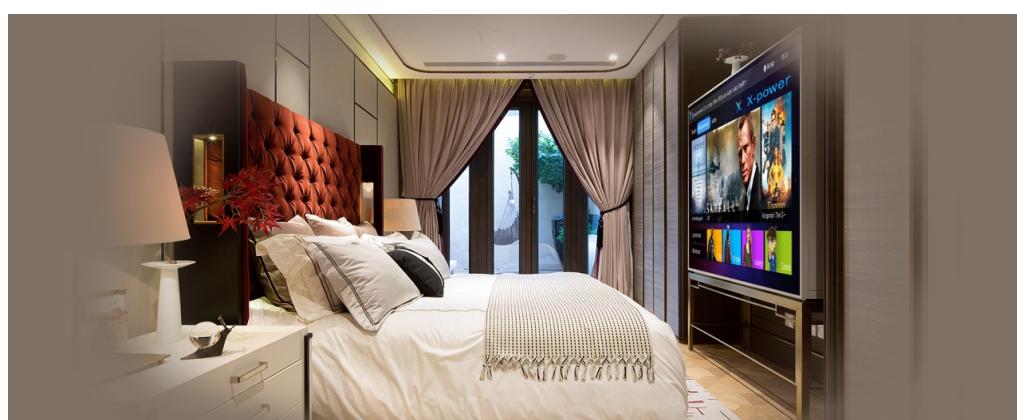
2.3 X-power ecology infrastructure Layout

If the year of 2017 is the "path finding" year of Blockchain, 2018 will be the "first year" of Blockchain application. 2019 will be the year witnessing the further improvement of Blockchain technology and involvement of more tycoons. X-power Chain is actively and quickly carrying out the settlement of Blockchain scenarios, modifying and deploying at more than 400,000 screens in various cooperative scenarios, such as outdoor, buildings, shopping mall, hotel and KTV, etc. Currently, more than 100,000 public screen nodes have been settled throughout the world.

X-power Chain provides infrastructure and basic network, and then carries out app development and deployment on this network after interconnection: To provide the

infrastructure including advertisement ecology, DAPP app store, and content ecosystem, etc. In the future, as long as user completing link to X-power Chain, the services offered by X-power Chain will be shared, such as acquisition of the apps for various scenarios from the app store, control of various devices, and accurate recommendation according to the personal property, portrait and action by the action preferences after leaving the current screen and moving to the next screen. That is to say, X-power will extract the view trace, consumption data and positioning data of every node, create anonymous portrait of every user, and lay the foundation for improving the whole large screen content ecosystem and building user customized recommendation. XPO token can circulate on the platform as the carrier of value circulation of community content.
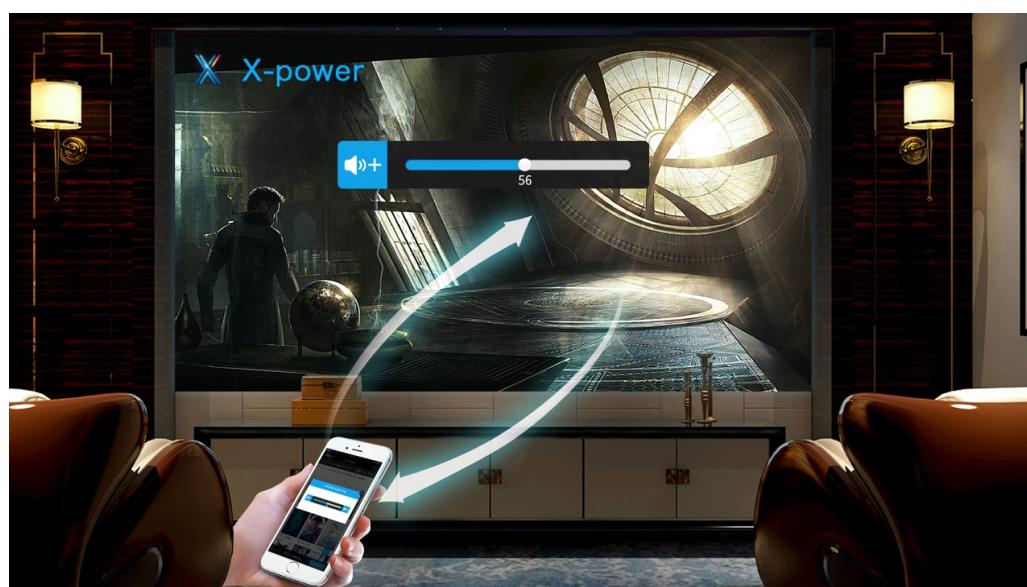
The following picture takes the example of the public scenarios, including building, hotel and club. With the upgrade from more than 30-inch traditional cable television screen into 120-inch smart Internet screen, the activities include interaction, games, live broadcasting, and e-commerce, etc. there will be more abundant reality and virtual screen scenario interaction:

Schematic Picture of X-power Chain Settlement Scenario: Hotel

Schematic Picture of X-power Chain Settlement Scenario: Club

X-power Chain Interactive Connection between Cellphone and Large Screen System

Augmented Reality (AR) Interaction in front of X-power Chain Shop Screen

3. X-power Chain Implementation Logic

3.1 Business Logic: Personal X-power Screen Platform Based on Blockchain Technology

Based on smart operation system, X-power Chain adopts encryption mode for massive materials, partitions the materials based on Merkle Tree, and stores them in storage nodes. If there is a need to view relevant materials, what to do is find a reliable node on the chain, download the corresponding Merkle Tree, download relevant materials for verification from the online node nearby, and can use it.

As for material processing speed, based on dispersed cluster idea, X-power arranges the rules and deploys the smart devices and servers in a unified manner, distributes computing capacity for the cluster, processes the computation required on the nearby reliable nodes selected by voting at high rate so as to ensure the rapid processing of data and swift achievement of consensus.

Based on Blockchain and the swift consensus mechanism, X-power Chain creates capacity for DAPP open platform, content platform and advertisement platform of screens. By creating more functions for screens, it allows the screens to serve the society and the public better, expand the use scenarios of screens, and increase the commercial value of the screens.

The capacity creation of X-power Chain for screens is mainly demonstrated by the three kinds of business logic as follows:

3.1.1 X-power Chain Personalized Content Ecology

Upon connecting all screens to network by opening unbounded screens by X-power,

users can commit to create "Your World, Your X-power Screen", by using their all behavior trace and consumption up-lining. Realize diversification through precision technology. There are seven gameplays in ecosystem: 1. Health record. Registering personal accounts, with health records may be viewed at any scenario, 2. Game experience. All different games in the ecology can be paid by XPO. 3. Interactive live broadcast, watch concert. 4. Entertainment & watching film. Films with copyright played on screens support paying with by XPO. 5, Screen blessing. 6, Knowledge payment. 7, Lots of welfare activities. With the support of intelligent management system based on Blockchain technology, the platform ensures forming anonymous portrait for each user with the rights and interests of content party and users, the Token revenue on platform cannot be tampered, and no fees incurred to the third party. All these lay a foundation for perfecting the content ecosystem of the whole big screen and creating personalized recommendation for users.

While providing developers with an open platform for applications, X-power Chain also supplies the person or organization with excellent content output capacity but not equipped with development ability with complete content opening platform. The exporters of these contents can push the quality experience contents (such as films & TV programs, articles, interactive games, live broadcast, VR experience, etc.) to terminal users via the platform. At the same time, the terminal users may freely choose their favorite experience contents to consume.

On the opening content platform of X-power Chain, the providers of excellent experience contents may directly obtain the rewards paid by the experience consumers under the convention of decentralized intelligent contract, which may

fuel the impetus for launching excellent contents. At the same time, X-power Chain will continue to expand and enhance the functions of content opening platform, so as to serve the exporters and consumers of the experience much better.
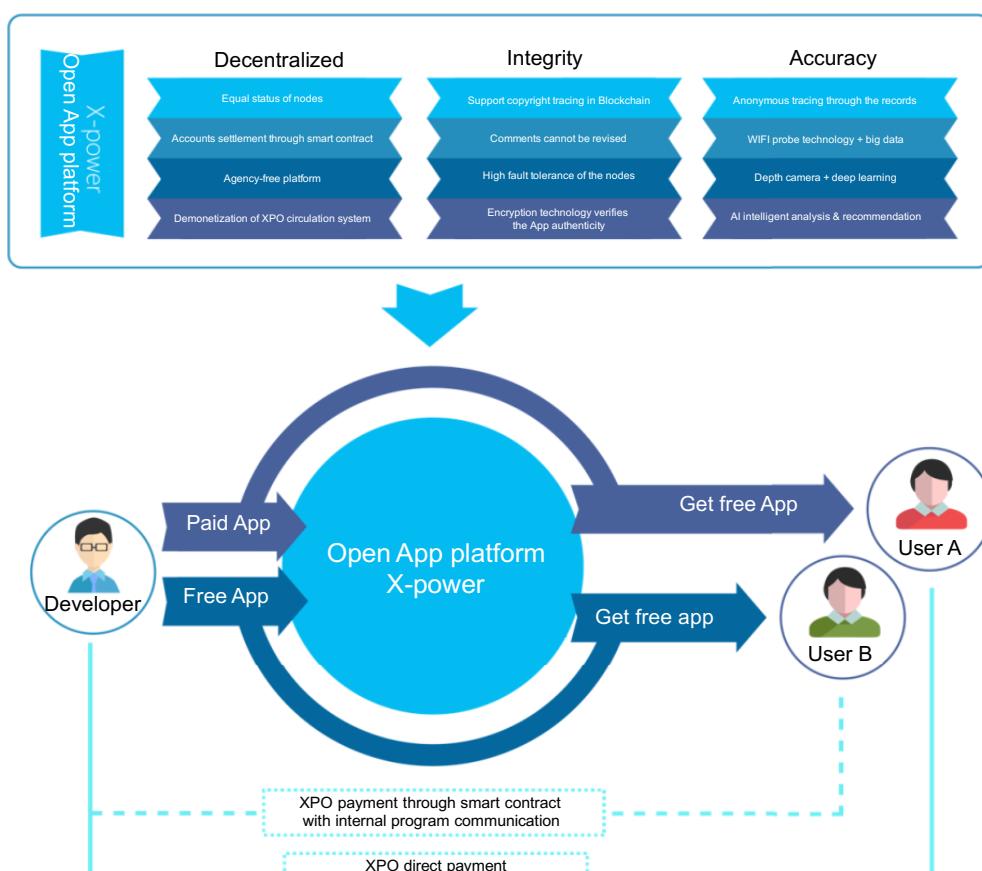
3.1.2 X-power Chain DAPP open platform

X-power Chain ecosystem is connected with various smart terminals of consumption scenarios, and builds decentralized App distribution platform based on Blockchain technology. The developers can publish the Apps they develop on open App platform for the end users to use. The open App platform of X-power Chain has the following features:

- To support cross-platform development languages, provide corresponding API and SDK for the convenience of the developers to publish the contents across the platforms

- To provide decentralized experience consumption payment system based on smart contract. The consumption of end users can be distributed to App developer and promoter in the prescribed proportion

- To provide anonymous user portrait and group positioning interface, and help the developers to carry out accurate release

On the open App platform of X-power Chain ecosystem, JAVA language similarity can be creatively adopted, lower admittance threshold, allowing one hundred million people to make development, the security problem about up-link of public chain can be prevented to an extreme extent, all the contents of contents, advertising, DAPP ecology's contents are traceable and trackable, the whole value of Token can be

transferred, the issue of linking global developers and global screens can be solved, global communication and token circulation can be achieved, as well as earning high rewards for development, attracting lots of excellent developers to join in. The excellent developers may continuously develop out excellent experiences application for terminal users to use within ecosystems, and thus forming virtuous circle.

X-power Chain Open App Platform Chart

3.1.3 X-power Chain open advertisement platform

With the application of Blockchain and corresponding smart contract technology,

X-power Chain gives public screens more diversified advertisement display logics. For example, the advertiser can set up corresponding smart contract to advertise on public screens and give corresponding reward to the advertisement viewers according to the contract provisions so as to reach better performance; meanwhile, the advertiser can set up corresponding smart contract to conveniently develop the agency nodes (i.e. network celebrity, and opinion leader, etc.), promote the products with their influence, and distribute the commission in accordance with the contract provisions.

Advertisement content publishing of X-power based on Blockchain technology does not require the release, removal and advertisement broadcasting certification from any third-party institution. The advertisement is published to the targeted users among the seven billion users at designated time according to the requirements of the advertisers. It will be recorded at each node and irreversible. It does not meet the advertising requirement of the advertiser, but also protects the rights and interests of the advertiser and saves the third-party test fee. On X-power platform, the contents are traceable, and the users can comment. The ranking system is adopted and the contents with poor comments will be removed.
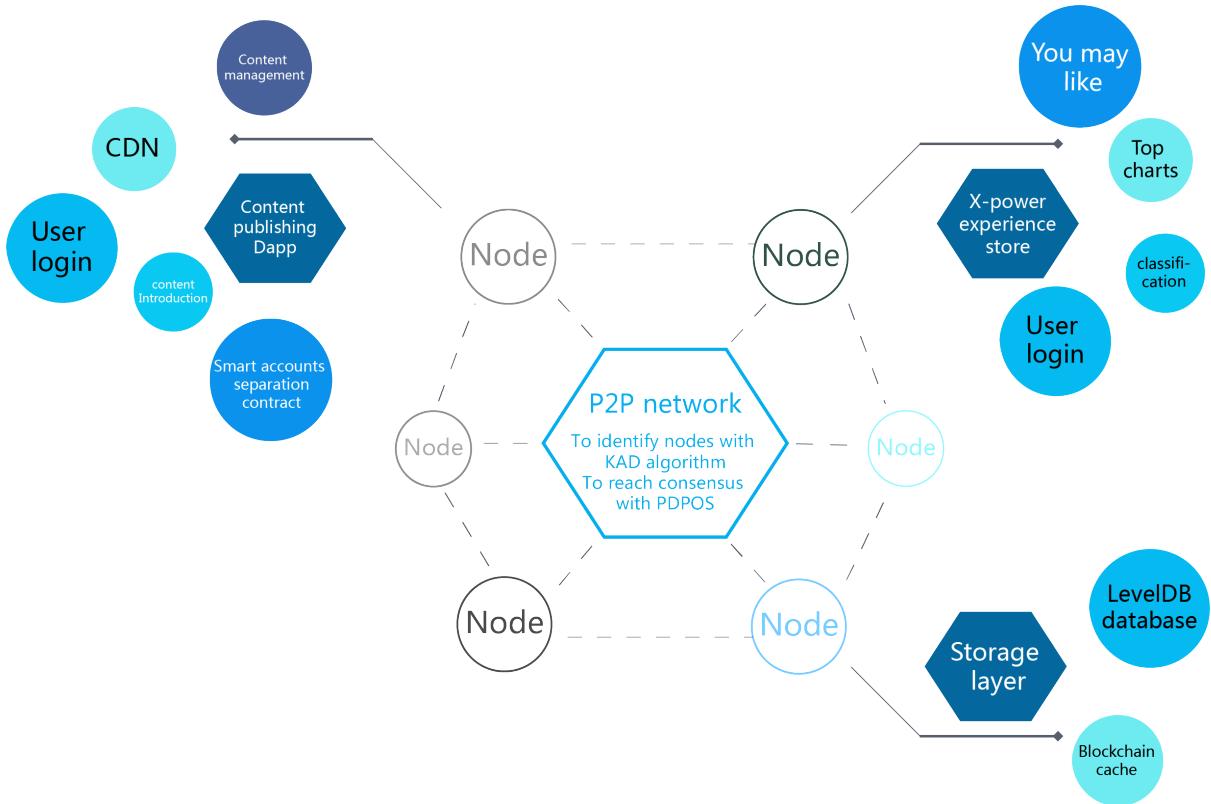
More importantly, the rights and interest for all the content and advertising are fulfilled with XPO. Meanwhile, since X-power supports the sub-chain independent computation, Token of the sub-chains can be exchanged into XPO to meet the demand of advertisement or accurate content publishing.

For different advertisement spaces, auction ranking mechanism and locked position mechanism will be introduced so as to ensure the continuity of advertisement

publishing, the continuous upgrade, maintenance and coordination of quality resources of the platform, and the interests of the advertisers, and achieve the maximized performance of advertisement publishing.

3.2 Underlying Logic: X-power Chain

X-power Chain Blockchain is the infrastructure of X-power Chain, and maintained and developed with the core code maintained by the community. X-power Chain is a public chain, of which all the nodes can join X-power Chain ecosystem. The functions include providing accounts keeping node, maintaining core coed and participating in community operation, etc. To meet the business needs of X-power Chain and consider the subsequent extendibility, X-power Chain has the following major functions:

X-power Chain App Publishing Platform Process System

3.2.1 Decentralized DAPP app store platform

The DAPP publishing platform of X-power Chain is a decentralized App store that based on Blockchain technology. The system is composed of these parts: Content publishing DAPP for publishing the content on X-power Chain; X-power experience store for the operation of X-power Chain hardware, in which the user can choose the contents they like, such as App, games, videos, and audio, etc.; underlying P2P network or the maintenance of node network necessary for X-power Chain operation. The nodes identify each other with KAD algorithm and reach consensus through PDPOS to achieve storage and sharing of Blockchain data; storage layer containing cache and persistent database based on Level DB.

Firstly, the user publishes the contents with content publishing DAPP. The content data is distributed by CDN in the world, of which the digital signature will be saved on X-power Chain. The data is stored and shared on its P2P node network. After entering X-power experience store, the user can get the data for categories, top charts, and you may like and the date of specific contents based on the services provided by the nodes. And the installation file of Apps can be acquired from CDN nodes.

The underlying layer of X-power Chain adopts Hash as target storage key. Hash function used in Hash algorithm is irreversible. That is to say, for h = hash(x), inverse operation for the result h of Hash operation cannot get the input x. The mathematic uniqueness of Hash value allows it to be the universe unique identifier of certain target.

Hash functions used in X-power Chain are all SHA-3 (Secure Hash Algorithm 3, wikipedia). SHA-3 was officially released by National Institute of Standards and Technology (NIST) in August 2015. As the latest standard of Secure Hash Algorithm, compared to SHA-2 and SHA-1, it adopts completely different design ideas and has relatively good performance. Though SHA-2 has no successful conquering case currently and there is no trend of immediate replacing of SHA-2 by SHA-3, X-power Chain considers the conquering case of SHA-1 and determines to adopt SHA-3 with brand-new structure and ideas as the latest SHA plan.

Data coding of X-power Chain is RLP (Recursive Length Prefix) code, of which the definition is stated in wiki. It can code a byte array of arbitrary nesting as a "flattened" [] byte without nesting. The value range of 1 byte is 0x00 - 0xff, and can

indicate any character and thus linearly indicate any data. For the simplest form, for example, for a character string, every character can be indicated by binary system of ASCII code and the whole character string will be one []byte. RLP coding method has the code output form of [] byte whether the input is any element or array in various nesting form. Since RLP is reversible, it provides mutually inverse coding and decoding methods. X-power Chain adopts it as the coding method of data serialization and deserialization.
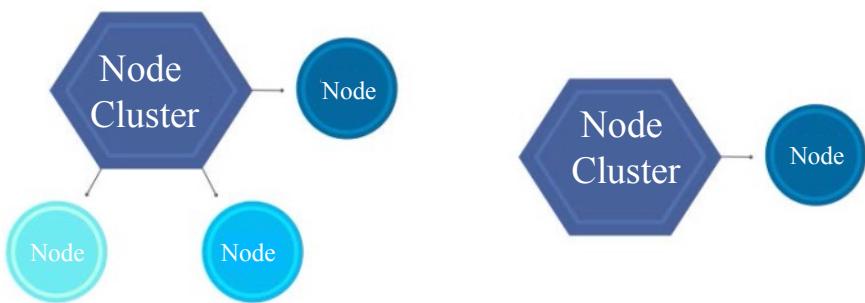
The application of Hash algorithm in X-power Chain is to make SHA3 Hash operation for the RLP coding value of certain type of target, which can be called RLP Hash. X-power Chain selects third-party database LevelDB that especially store and read [k, v] key-value pair in underlying storage, and v in [k, v] is RLP coding value of certain structure target. Normally k is SHA-3 Hash value of v after RLP coding.

3.2.2 X-power Chain consensus algorithm
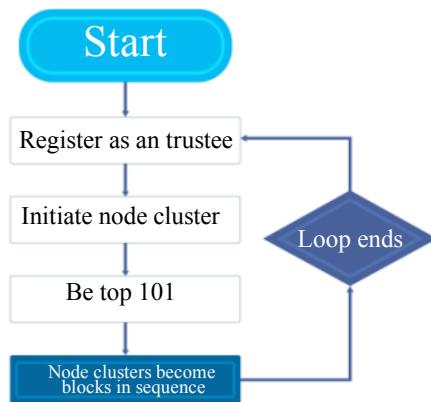
X-power Chain endeavors to achieve high TPS (Transactions per Second). In X-power Chain, the rapid generation and synchronization of block is the key to high TPS. After analyzing the consensus algorithm used by the existing Blockchain and based on DPOS consensus algorithm, X-power put forwards PDPOS algorithm, which is steadier, and can improve the participation of nodes through the introduction of node organization way of node cluster.

At first, register the normal node of X-power as a trustee; file the application of node cluster and then unit other nodes to carry out publicity and canvassing. One node cluster (see Diagram of Node Cluster) shall be with at least one node and it is agreed

that there shall be no more than N router converters for nodes under the same node cluster. In the canvassing process, all votes shall be included into the node cluster. At last, select the top 101 node clusters as the node clusters for processing blocks. The process of the whole consensus mechanism is as below (see Main Flow Chart of PDPOS Consensus).


Diagram of Node Cluster

Main Flow Chart of PDPOS Consensus

In the process of blocking, node cluster will be responsible for each blocking. The
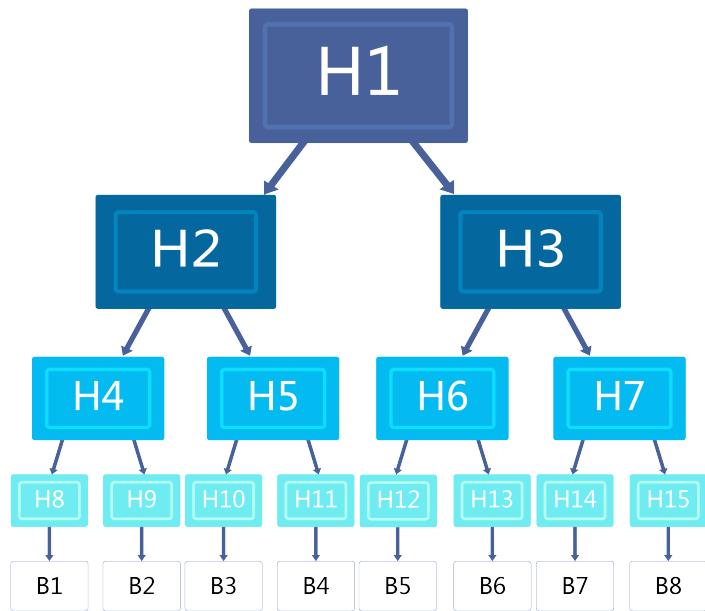
internal node will determine the priority of blocking according to the votes in descending sequence. Meanwhile, the node cluster internally uses the heartbeat method to periodically refresh available blocking nodes to ensure that there is node available for blocking when it is the turn of the node cluster.

3.2.3 Distributed storage protocol
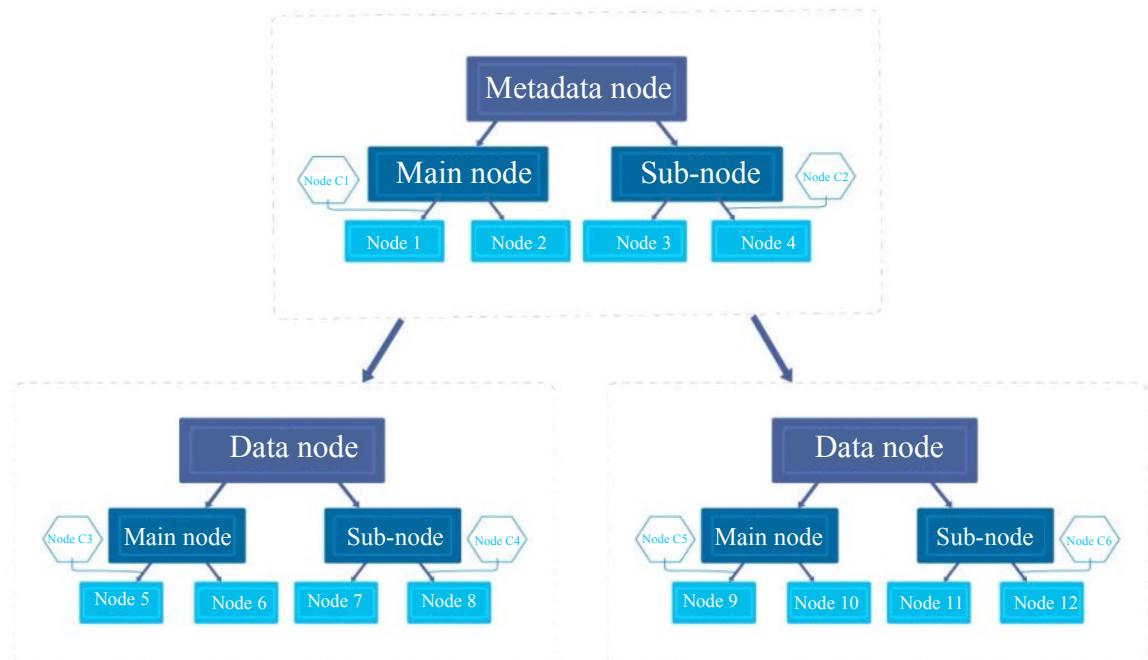
The increase of transaction data brings about the increase of data to be stored. Out of this consideration, X-power, based on the existing distributed storage protocol, makes improvement, achieves its own distributed storage architecture and protocol X-DFS and realizes dynamic adjustment and deployment of nodes while the volume of data increases constantly so as to guarantee the integrity of data storage. Meanwhile, based on Merkle Tree, X-power also realizes blocked storage of files, distributed storage of data and ensures the security of data storage.

File Name	Date	File Size	Size of Block	MT	Data node Storage

Diagram of Data Structure of File Metadata

*Merkle Tree Diagram of File Block Storage*

Diagram of X-DFS Distributed Storage Architecture

Metadata node saves the size of file and dimension of block and the Merkle Tree (MT in abbreviation) of file block data saves the data nodes and other information.

For details, see Diagram of Data Structure of File Metadata. The nodes saving data also save the node index information of each file block. The storage of file block in data nodes will be introduced in detail later.

In the Merkle Tree Diagram of File Block Storage, leaf node represents the data of each file block, B represents file block and H represents the corresponding Hash value. This way allows block storage of file and integrity checking of block while reading. For file block Hash saved through Merkle Tree, while saving file, it can be confirmed that data are not tampered.

In data node, deploy eligible data node in a way of main and secondary node. Define the warning level of each file block into stable, warning, dangerous, and backup file according to the level. Automatically find the replacement node, determine the file content to be backed up according to the metadata node, and confirm backup of the file according to metadata node.

Define the integrity of data according to the growth situation of total volume of node data: space required for total nodes/total space of existing super node. When the value is around 0.7 (define the different warning levels into safe, warning, dangerous). To ensure that the value is smaller than 1, develop neighboring nodes and provide data storage service.

When the data to be saved becomes more and more, a single node will be unable to save the integrity of data. In this way, block the file and number it through the scheme above. Partial nodes based on Merkle Tree will be in charge of management of file block hash value and some will be responsible for saving detailed data.

3.2.4 Smart contract and DAPP

Development of Intelligent Contracts

Szabo noted that "A series of promises that are specified in digital form include the agreements binding all parties to fulfill these commitments". Until 2008, with the first cryptocurrency bitcoin's coming into being, modern Blockchain technology has been introduced. The Blockchain was originally developed as the underlying technology of Bitcoin, and the various blockchain forks caused great changes. Intelligent Contracts could not be accepted by the Bitcoin blockchain network in 2008. But five years later, it came into being by virtue of Ethereum. Since then, a variety of different forms of intelligent contracts emerged, of which the Ethereum intelligent contracts became the most widely used one.

What is an intelligent contract?

An intelligent contract is a kind of special agreement designed to provide, validate and enforce contracts. Specifically, that is the important reason why blockchain was called "decentralized". It allows us to perform the traceable, irreversible, and safe transactions without the need of third parties' involvement. An intelligent contract contains all information about the transaction, and the result operation can only be executed if the requirements are met. The difference between an intelligent contract and a traditional paper contract lies in that the former was generated by computer. Therefore, the code itself explains the relevant obligations of the participants. In fact, the participants to an intelligent contract are usually strangers on the Internet and are subject to binding digital agreements. In essence, an intelligent contract is a

digital contract that will not produce results unless all the requirements are met.

Programming language and program

In order to write intelligent contract, you must use the Smart Contract Language (SCL), which is a kind of programming language that write intelligent contracts directly or compile into intelligent contracts. It runs on Ethereum virtual machines. It is a high-level contract-oriented language with its syntax similar to JavaScript, mainly for Ethereum EVM.

Ethereum Virtual Machine (EVM) is the operating environment of intelligent contract on Ethereum. It is actually completely isolated, which means that code running on the EVM cannot access the network, file systems, and other processes. One intelligent contract has limited access to other ones, and usually operates separately on blockchain network.

There are three main steps in writing an intelligent contract on the Ethereum network:

1. Compile with high-level language of Ethereum.

2. Compile to bytecode with EVM compiler

3. Upload to blockchain network via user's terminal of Ethereum

Solidity is a turing-complete computer language. X-power Chain supports Java-based intelligent contract, easy for developers worldwide to access.

Meanwhile, there are diversified business demands in X-power Chain ecosystem. The developers from different industries can build sub-chains suitable for the respective industry with smart contract and the open-source technology provided by X-power Chain. The sub-chains can issue independent Token and exchange through X-power

Chain Token: XPO.

3.2.5 Token for circulation in main chain of X-power Chain: XPO

XPO is the circulating Token in X-power Chain ecosystem with the total circulation amount of 10 billion. The major functions are:

XPO acquisition:

(1) Transaction fee reward for accounts keeping node. The owner of the mining block shall acquire all the information fees paid for the information packaged in accounts keeping block.

(2) Extra bonus for transaction nodes. The bonus will decrease progressively year by year till reach 0.

XPO consumption:

(1) The execution of smart contract consumption (including transfer, execution of advanced smart contract, and establishment of sub-chains, etc.)

(2) As the mainstream circulating token of X-power Chain ecosystem, XPO can support the business consumption of other sub-chains in the ecosystem, and can support the exchange of Token between the other sub-chains.

3.2.6 Sub-chain support and management

To meet the complicated business status of X-power Chain, and release the accounts keeping pressure of the nodes on main chain, X-power Chain supports the establishment of sub-chains through smart contract. The sub-chains for different business scenarios will have logic structures in different forms and accounts keeping

at different accounts keeping nodes. If certain business has highly synchronous demand in the fixed businesses including transaction, the designated part of smart contract can be written in transmission layer in order to improve Blockchain efficiency.

Since X-power Chain supports the independent accounts settlement of sub-chains, the sub-chains can issue independent Token and have it circulate in the sub-chains. Meanwhile, Token of different sub-chains can be exchanged with XPO in two-way manner in main chain exchange so as to meet the end users' consumption demand for different experience scenarios.

For example, a level-based game issues the exclusive Token in its sub-chains. After the users download and experience the game in public scenario of X-power Chain, and gain Token through passing the levels, they can exchange the Token into X-power Chain main Token XPO in X-power Chain community central exchange, and save in X-power main chain. Then they get in other scenarios and experience another App. For example, when they watch movie and need to pay the view fee, they can pay with XPO. In other scenarios, such as hotel, when they need to pay to skip the advertisement in the process of watching a video linked to X-power content, they can skip the advertisement through XPO payment. Or, if a smart electric meter linked with X-power Chain warns the remaining electric quantity, the electricity purchase can be made through XPO if the owner sets the automatic electricity purchase service.

Moreover, for the sub-chain businesses in X-power Chain ecosystem, XPO crowd funding can be initiated through X-power Chain smart contract to raise the startup

fund for the project and provide more space for the developers.

3.2.7Accounts keeping priority

In the current mainstream Blockchain network (i.e. Ethereum), all the miners will mine in the whole network. The mining standard is benefit-driven. That is to say, since the transactions with high gas fee will be prioritized, the transactions with high gas fee will be processed firstly. However, when plenty of transactions with high gas appear in Ethereum network, the transactions with low gas will queue and even fail. X-power chain introduces accounts keeping priority mechanism to solve this difficulty. During accounts keeping of Blockchain, the network bandwidth, storage and computing resources are distributed to the traders according to the XPO shares. In need of higher priority, the way is to purchase more XPO. For the users who do not hold XPO, the system will distribute relatively low network bandwidth and computer resources to ensure the normal transaction.
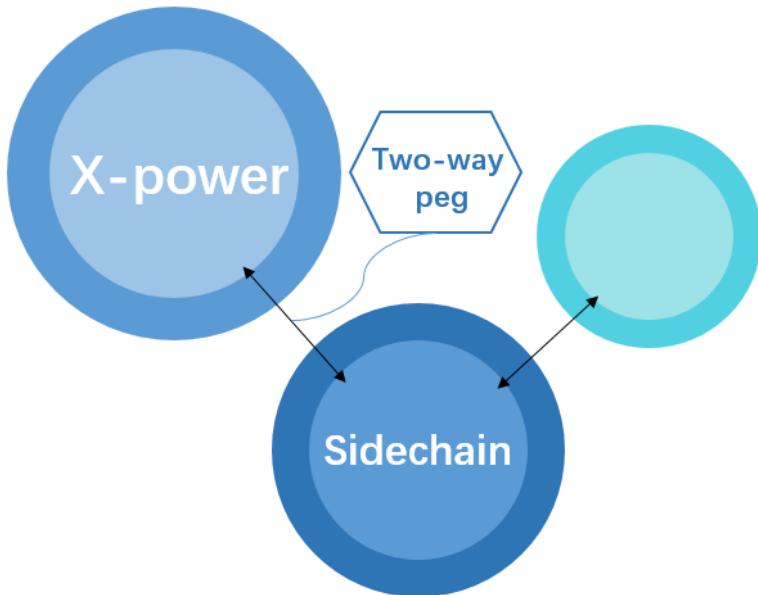
3.2.8 Sidechain

To ensure the asset circulation between X-power Chain and other Blockchain, X-power Chain supports relevant sidechain protocol.

The idea of sidechain was initially proposed in December 2013. The first version of sidechain protocol was released in the whitepaper released in October 2014, namely *Enabling Blockchain Innovations with Pegged Sidechains*.

Sidechain protocol adopts X-power Chain as the main chain and other blockchain as the sidechain, which achieve the circulation of XPO from main chain to sidechain

through two-way peg.
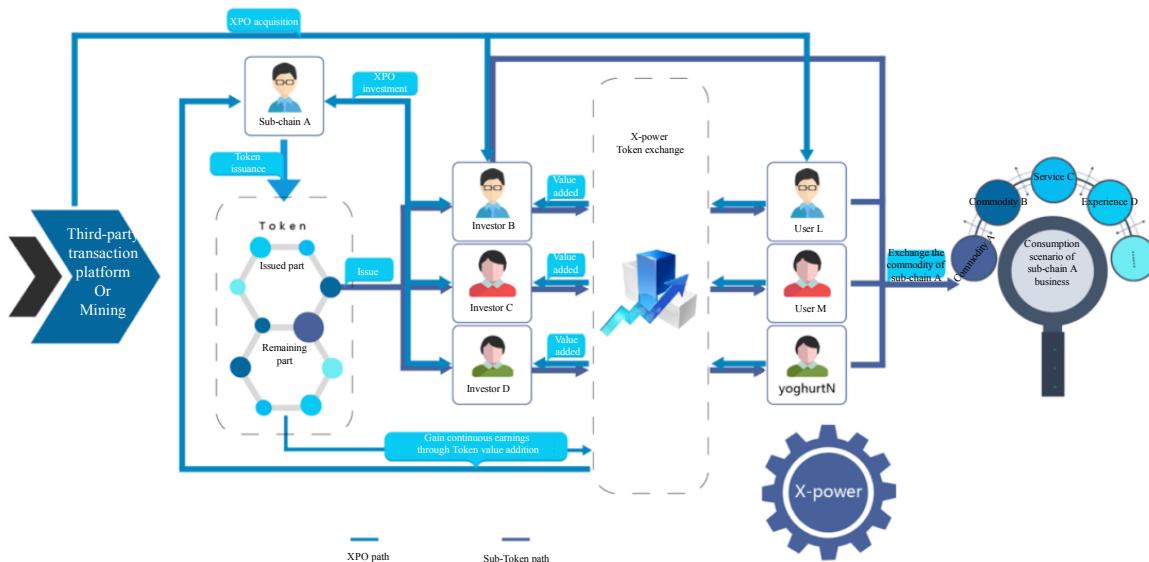
Sidechain Realization Chart

By means of two-way peg, XPO on the main chain, X-power Chain can be locked, and XPO in equivalent number can be generated on the sidechain. The new XPO cn circulate on the sidechain, till XPO in equivalent number is locked on the sidechain through two-way peg, and returns to the main chain for circulation. The core theory of sidechain is that it freezes the asset in one chain and generates it in another chain. A feasible method is the verification method based on Simplified Payment Verification (SPV) proposed by Blockstream.

3.2.9 X-power Chain decentralized exchange

In the process of continuous growth and expansion of X-power Chain ecosystem, there will definitely be new business lines successively joining the ecosystem, which can issue their respective sub-chain and exclusive Token. In X-power Chain

ecosystem, the users will have demands in different Tokens during the consumption in different experience scenarios. To allow the users to get the required Token in a more efficient and convenient manner, X-power Chain

establishes a Token exchange of X-power Chain ecosystem, where all the Tokens issued in the ecosystem can be freely and efficiently exchanged.

Schematic Picture of X-power Chain Ecosystem Sub-Chain Model and Ecosystem

Exchange

4. X-power Chain Application Description

4.1 Smart Contract Restructures Supply-demand Relationship

4.1.1 Global user ID and point system

User ID is the access certificate in X-power Chain, and falls into two categories of normal user ID and developer ID. Normal user ID can support content purchase and experience in X-power Chain. Developer ID: The users with development ability can register developer ID and then publish the content in X-power Chain for all the users in the chain to use. The user ID will be recorded in X-power Chain upon registration and cannot be revised. Meanwhile, the points and credit records of the user will also be recorded in the Blockchain.

4.1.2 Global content generation standard

The categories of the contents in X-power Chain include but not limited to App, video and audio, etc. The operating system compatible with X-power Chain includes but not limited to Android. Currently, the display devices compatible with X-power Chain are mainly fixed large-size display devices, such as television, projector, and smart touch screen, etc. Based on the present software and hardware configuration, the developers should adapt correspondingly when generating contents, such as resolution ratio, operating habits (synchronous support for screen touch and remote operation), and focus processing, etc.

The remaining is embedded device, which has very limited memory and instruction cycle, such as some home smart control panel or device, including smart

loudspeaker and smart refrigerator, etc. The devices normally carry out some simple interaction with the server to obtain instruction or data and communicate with terminal devices. Normally, the standards of the manufacturers should be adopted for the software of these devices.

4.1.3 Global content assessment, publishing and ranking system

The developer publishes the content for X-power Chain through DAPP, fills in the content introduction, sets smart contract rules for profit distribution, adds wallet address in X-power Chain, submits and publishes. X-power Chain endeavors to establish a self-governance community based on the rules of smart contract and artificial intelligence, etc., which automatically assesses, publishes the contents and eliminates substandard contents.

X-power Chain embeds some assessment rules. With the continuous upgrade of the platform, the self-restraint rules will be improved and more will be added. Currently, the following rules are supported:

1) To ensure the uniqueness of the contents through verifying the digital signature (in case of App, the internal resources will be decompressed for separate verification);

2) To identify possible right infringement and pornography contents etc., with machine learning algorithm;

3) To arrange true machine environment and simulate the application operation for App, games and virtual scenario experience, etc. to guarantee the operability of the App;

4) X-power Chain will continuously improve the rules and add more smart assessment rules in compliance with the local rules and regulations in different countries or regions to achieve rapid assessment while ensuring the security.

The contents that pass the aforementioned tests will be published in X-power Chain. The smart contract set in the publishing process is the collection of code (its function) and data (its status) and exists in specific address in Blockchain of X-power Chain after publishing.
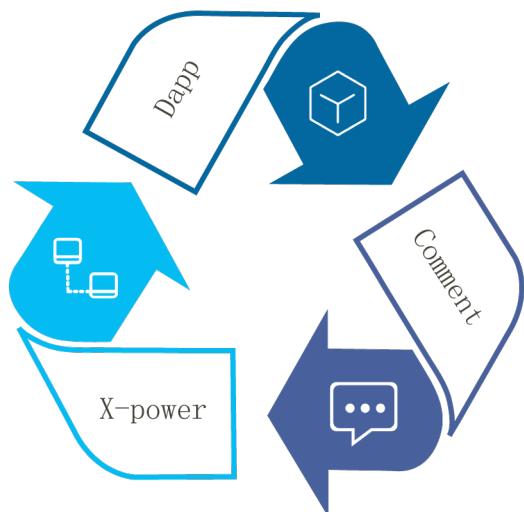
The wallet address provided by the developer when publishing the content is for the subsequent profit distribution. The content profit distribution in X-power Chain is based on the embedded smart profit distribution contract. When the user pays for the content, the smart contract will be triggered for automatic profit distribution.

If any problems affecting the user experience in the process of using the aforementioned published contents are found, the user can use the rating and comments function to rate and comment on the content. The records of rate and comments will be permanently recorded in X-power Chain, and no user can change the rating and comments. With the unchangeable rating and comment mechanism, the contents with high rate published in X-power Chain will be continuously recommended to the user; and the contents with low rating will be put in lower position as the rating drops and finally be eliminated.

Below is the use and user feedback loop chart of an App after publishing. After the user uses the App and leaves the rating and comments, which will be recorded in Blockchain, the next user can see the integrated rate and every comment. In this

loop, the management of App life cycle in Blockchain is achieved. The rating of the App that meets and satisfies the user experience will grow and gradually stabilize. And the rating of the App with low rating will continuously drop till being removed from the user.

Use and User Feedback Loop Chart of an App after Publishing

4.2 Accurate Recommendation Increases the Value

4.2.1 WiFi sniffing technology

WiFi sniffing technology is a technology based on WiFi detection technology to identify the node information of the cellphones, computers and other devices with WiFi activated near the access point. When the node enters the sniffing area, the information of the node can be detected though the node is not connected with Internet, and device information can be obtained, such as MAC address of the device.

In current society, the cellphone is an indispensable portable device in daily life. The

identification information (MAC address) can be anonymously obtained with WiFi sniffing technology. With the anonymous gathering of MAC address of multiple scenario nodes and big data analysis, the portrait of the device owner can be developed; the more abundant the data gathering scenarios are, the larger the data volume is, the more accurate the portrait is. After obtaining the user portrait, the system will push the accurate recommended experience contents in smart contract algorithm, which allows the user to obtain quality experience without extra operation in X-power Chain scenario.

4.2.2 Anonymous storage of big data

The acquired data including user portrait will be stored in encryption mode. When the user browses in X-power experience store, accurate recommendation will be provided for the user according to the user portrait to improve the user experience.

4.3 Cases of X-power Application Scenarios

4.3.1 Process of product development, launch, promotion and return for public scenario by individual developers:

1) Individual developer wants to develop a DAPP for experience improvement for public scenario development;

2) He successfully develops a DAPP to identify the user with WIFI probe and face recognition technology with the technical support from us and thus provide corresponding full-scenario services;

3) The marketing should be carried out upon the launch of the DAPP. He uses XPO to

exchange some marketing resources, gets user portrait through WIFI probe and face recognition technology, accurately pushes to target users, and achieves good performance;

4) The users consume XPO to get corresponding services and the screen owner and developer undertake profit distribution through smart contract.

4.3.2 Advertisers releases accurate advertisement through X-power Chain

1) A famous vehicle enterprise wants to publicize its vehicle brand throughout the world;

2) The vehicle enterprise selects X-power Chain for advertising due to X-power Chain's screen influence in the world;

3) The vehicle enterprise pays XPO as the advertisement fee and the currency exchange issue is spared;

4) The screen terminals receiving advertisement in X-power Chain ecosystem set the screen location, type, available position and the quotation recorded in the Blockchain. The vehicle enterprise can choose freely;

5) After the advertisement is post, the vehicle enterprise pays XPO according to the contents of smart contract.

5. XPO Circulation Volume, Background and Value

5.1 XPO Circulation Volume

The total number of XPO exchanges is 10 billion, and the specific distribution is:

1) 10% of the private sale: 4% of them will be released after IEO ; four months   after IEO, 6%   will be released,and it will release   1/12 ervery month until one year later.

2) 20% of market promotion & community construction.

3) 15 % of commercial cooperation.

4) 15 % of Team , which will be released four months   after IEO,and it will release 1/12 ervery quarter until three years later.

5) 40% of Mining , which will start two months   after IEO,and it will release until twenty years later.

5.2 XPO Issuance Background

From the perspective of the definition, crypto-currency token represents accounts keeping right of a Blockchain. The encryption is the accounts keeping right of a Blockchain. When you own the   "token" , you have a key that allows you to redistribute the figure.

To ensure the infrastructure of X-power Chain, daily operation and provide ultimate experience for the users, XPO token based on ERC20 is issued.

After registration, the user can create personal wallet in the account, check XPO balance in X-power Chain wallet, and finish the operations of input, output and others.

5.3 XPO Application Value

The value circulation in X-power Chain is settled by XPO. The normal scenarios are as follows:

1) When the users use paid contents in X-power Chain, such as download App, play games, watch paid videos, listen to paid music, and experience games of virtual scenario, etc., they can pay XPO and the payment will trigger smart contract related to the content. The accounts separation will be carried out in the proportion. Part of the earning will be transferred directly to the developer's wallet and the other part will be transferred to wallet of X-power Chain Foundation to support infrastructure and operational expenses of X-power Chain;

2) If the developers embed advertisement in the App or game, after the advertisement is displayed, the smart contract will be triggered and corresponding fee will be transferred from the advertiser's wallet to the developer;

3) XPO will be used for offline service purchase for offline scenarios in the future;

4) XPO will be transacted in the exchange for currency exchange and token-token transaction in the future.

6. X-power Chain Development Roadmap

The future plan of X-power Chain shall be carried out for two main orientations, namely basic technology and business application scenarios. As the global public chain, X-power Chain will certainly take the primary orientation of the development and update of Blockchain technology; meanwhile, it will solve the application issues in business scenarios with Blockchain technology and apply community contract spirit in more scenarios. The business progress will be timely updated on the official website (http://xpower.one).

1) The basic platform establishment of X-power Chain contains the establishment of Blockchain underlying technology and the establishment of ecosystem community, etc. (time milestone: 2019.3-2020.12)

2) Launch of X-power Chain main chain (time milestone: 2020.12)

3) Node mining support in X-power Chain (time milestone: 2021.1)

4) Intelligent contract-based decentralization payment system (time milestone: 2021.1-2021.12)

5) Construction and operation of X-power Chain global application distribution DAPP platform (time milestone: 2020.5-2023.6)

6) Distribution system of X-power Chain global personal contents, including evaluation, goodwill system, etc. (time milestone: 2022.1-2023.6)

7) Time milestone: 2023.7-future.

8) Upon the basically completion of the entire ecological infrastructure, the Foundation will improve its long-term autonomy incentives measurement.

7. X-power Chain Governance Structure

7.1 Introduction to the Foundation

X-power Chain Foundation is the operational entity established in Singapore, and devoted to the establishment and promotion of X-power Chain. The founding team has always targeted at the objective of "decentralization", highly recognized the essence of distributed self-organizing establishment of Blockchain, absorbed the factors of traditional company governance structure, and continuously pursued the fulfillment of the ideal project objective through promoting the continuous upgrade and self-governance of ecosystem community. Therefore, X-power undertakes that it is not the tool for some organizations or individuals to pursue the interests at the beginning of the project. The mission of the non-profit foundation is equal, objective and transparent operation of the whole X-power Chain ecosystem, and support for the work in the ecosystem.

X-power Chain Foundation, located in Singapore, is governed by the laws of Singapore. As a non-profit organization, it does not have the right to participate in any activities related to business interests in accordance with the laws of Singapore. The "profits" gained by the Foundation will remain as surplus to be used for the expenditure for the operation of other activities, and not be distributed to its members or other profit-making organizations.

7.2 Organizational Structure of Foundation

In order to reasonably use the resources and capital of X-power Chain Foundation on

the basis of equality, objectiveness and transparency, continuously promote the rapid development of X-power Chain ecosystem, and expand the application range and community scale of X-power Chain ecosystem, the Foundation sets up the following organizational structure:

Strategic Decision-Making Committee

Strategic Decision-Making Committee is the supreme decision-making organization of X-power Chain Foundation and responsible for the final decision-making of the affairs of the Foundation. Decision-Making Committee is composed of natural persons in odd number, who shall have equal decision-making right. The Committee mainly decides and deliberates over the important affairs of the Foundation, such as strategic plan and financial budget, etc.

The first session of Decision-Making Committee members is directionally invited by X-power Chain founding team and finally determined. After the first tenure of Decision-Making Committee members expires, the community shall vote the second session of Decision-Making Committee members and have the right to restructure the structure and personnel of X-power Chain Foundation.

CEO

The Foundation CEO is elected by the vote of Decision-Making Committee and accountable to Decision-Making Committee. The major duties of CEO are to establish the team, hire core professional personnel, lead the team to gradually implement the resolutions and provisions made by Decision-Making Committee and report the implementation progress to the Committee at regular intervals; comprehensively arrange core business of business line, and maintain correct and

effective operation of the Foundation.

Product and R&D Department

Product Design and R&D Department of X-power Chain shall be responsible for design and R&D from underlying technology to upper application, and provide powerful support for project incubation and launch. In daily work, R&D Department shall carry out relevant product design, and keep good communication with Operation Department in order to guarantee the rapid response and settlement of the demand; meanwhile, continuously take in the latest cutting-edge technology in Blockchain field and ensure the R&D quality and speed of the project.

Market Operation Department

Market Operation Department is responsible for the plan, organization, implementation and control of the affairs in X-power Chain ecosystem, and external publicity of X-power ecosystem. It needs to actively explore many partners, closely connect X-power Chain system, ecosystem members with the partners, and thus build the open, distributed and global excellent experience ecosystem chain; meanwhile, Market Operation Department shall build the internal ecosystem of the community to develop X-power Chain community into a self-governance system with positive interaction, free information flow and full symmetry. Another important duty of Market Operation Department is to continuously publicize X-power Chain ecosystem concept and achievements to the public by various market means and thus continuously enhance the influence of X-power Chain ecosystem and expand the scale of X-power community.

Financial Department

Financial Department shall supervise the relevant financial affairs of X-power Chain Foundation, including capital management, accounting, cost control and audit, etc. Since the digital asset project has relatively high risk, Financial Department is also responsible for risk control and shall carry out analysis and evaluation for project operational and financial risks. X-power Chain Foundation will hire the audit practitioners with relevant professional Blockchain experience in order to guarantee the stability of its financial system and the openness & transparency of XPO use.

8. X-power Chain Community Establishment and Operation

8.1 Community Establishment

X-power founding team and the Foundation establish X-power Chain community by recruiting the members with the same values and pursuit. These members will endeavor to establish X-power Chain ecosystem and community together with the Foundation, provide quality information and thus get equal incentives together.

8.2 Community Establishment and Expansion

X-power Chain Foundation, core members, and partners will be responsible for the infrastructure establishment and maintenance of X-power Chain community, including:

Technology system: After the completion of X-power Chain community, X-power source code will be released for the community members to visit, learn, and jointly improve.

Application scenarios: X-power Chain has had many launched application scenarios, which will be released in batches. Meanwhile, the Foundation and the core members will continuously improve X-power Chain ecosystem quality and bring more extensive application.

Operational system: The Foundation will establish an entity which specialized in the ecosystem operation and responsible for X-power Chain ecosystem establishment, development, maintenance and publicity.

With the continuous development of the ecosystem, it will attract more members to join. With the good self-governance rules of X-power Chain ecosystem, the expansion rate of the community will continuously increase, and the community members will get more incentives.

8.3 Community Voting Mechanism

In the process of continuous improvement of X-power Chain ecosystem, the contribution of every community member is essential. Therefore, X-power Chain adopts community voting mechanism for the voting of core logic and business orientations. It adopts specialized smart contract for broadcasting and voting and thus creates dynamic voting process; and in this algorithm, dimension-lowering convergence is made for voting rights of the accounts to allow the voting result of community members relatively fair, and effectively restrict the act of attempt to hold plenty of resources to make malicious self-interest resolutions.

Since X-power Chain adopts PDPOS consensus mode, the vote generation of super nodes should also be in accordance with the voting mechanism of the community.

9. X-power Chain Team

9.1 Management team

Foundation CEO, Lyle Kim

He, a Korean, is a professional in Blockchain sector, winner of MBA from Asian University, and Certified Public Accountant of the United States, having a good command of Korean, English and Chinese. He used to take important management positions at Korean Government, ITC Business, and some non-profit organizations, as well as serving at Korean Embassy in China, the United Nations Development Program, etc. He owns over ten years' experience in the fields of international taxation, financial analysis, financial management, etc., as well as years' management experience in leading blockchain team.

Chief Officer of Product and R&D Department, HSIEH HSIAO-HSIN

He, an Canadian, graduated from Canada University, major in Computer Engineering Science. He used to serve at SAMSUNG Taipei company as the manager of electrical business department, and later started his business engaging in creation of new hardware and commercial application projects at Canada and Taiwan region. He has over 8 years working experience for American Private Security company, and now he is the senior technical director at TAIWAN YUANXINA company. As a senior engineer in blockchain sector, he acted as the director of technique team, working on AI, senior algorithm research, etc., accumulating rich experience in high-tech field of blockchain.

Chief Officer of Market Operation Maria Gao

She, an American, and graduated from the University of Southern California, majoring in management of international business with profound attainments in marketing and computer science, is a researcher in blockchain sector. She used to win Trojan Scholars Award that created many Forbes celebrities and has abundant experience in leadership and transnational team coordination. Acted as chief officer of Clarkston Consulting and Everwell For Life CEO.

Chief Financial Officer, Rebecca Wang

She, a Canadian, won Master's Degree of management and accounting in Canadian top university, University of Toronto. She is a Canadian chartered professional accountant, used to work at MNP LLP (the fifth largest accounting firm in Canada), participated in financial statement audit of many enterprises listed in North America, and has rich experience in financial management, risk control, and Blockchain finance.

10. Strategic Partners and Investment Institutions

10.1 Strategic Partners

Currently, X-power Chain has cooperated with more than 10,000 enterprises, which are global physical public scenarios (hotel, restaurant, health club, café, KTV, and bar, etc.) Below are some examples:

10.2 Investment Institutions

8 DECIMAL CAPITAL

Dedicating to the value investment to global blockchain projects and the equity investment to upper, middle and lower reaches of industries, 8 Decimal Capital holds capital totaling 35 million dollars, two controlling companies and one controlling foundation. 8 Decimal Capital has a core investment team consisting of experts from front line VC (Venture Capital) and PE (Private Equity) home and abroad, including foundation advisor Zhang Fan, the founder and partner of former Seaquoia Capital. Focusing on post-investment management, 8 Decimal Capital enjoys extensive property resources, hoping to grow together with other entrepreneurs, and create big value for the society.

ENCRYPTION VISION CAPITAL

Encryption Vision Capital, invested by listing company, traditional financial institute and the management of several enterprises, is a fund company specializing in investment in encrypt digital currency. In addition to Token investment, Encryption Vision Capital desires to contribute itself to supply enterprises in blockchain field with a series of services with its layout of equity investment spreading over upper and lower reaches of such sectors as exchange, media, quantification, superb nodes, etc.

Imagination Fund

Imagination Fund is engaging in the projects of blockchain sector.

GENESIS

Genesis Capital Group, a financial institute taking lead in China in serving blockchain

industry and composed of three blocks of digital currency fund, in-depth incubation and investing bank, is engaging in risk investment in blockchain industry, dedicating to mining quality early stage project, and capable to supply potential start-up projects at any stage in blockchain sector with overall and full life circle quality services.

TURE WAY CAPITAL

True Way Capital, a professional investment organization focusing on blockchain field, is engaging in building ecological layout in the sectors of mining pool, trading platform, technology media, technology applications, etc., committed to investing in and incubating the outstanding start-up teams in blockchain field, and devoted to promote the technology innovation and development of blockchain industry.

Cases of investment:

CyberMiles（CMT）、JEX、Coindom（CCC）、OneRoot（RNT）、GIFTO、Zipper OS、TopChain（TOPC）、Game.com（GTC）、RenRen、Nebulas（NAS）、BAIC、TrueChain、QUNQUN、WaykiChain 、HotChain（HOTC）、TokenClub、All Sport（SOC）、ARMADA MINER（AMUT）、DBX、FansTime

FENGKUANG CAPITAL

Fengkuang Capital, an incubating growth investment institution composed of many blockchain founders, established itself in promoting the development of blockchain industry. It has a team composed of blockchain experts and technicians from BAT, owing blockchain financial analysts with over 15 years' financial experience. It can offer help and coordination about needed elements for more projects in the process of auxiliary investment. Presently, the projects completed or quitted by Fengkuang Capital totaled 25.

HUARUIXIANG CAPITAL

Huaruixiang Capital, funded by several listed companies, is an investment institution engaging in blockchain field.

11. Contact Details

Official e-mail: pr@xpower.one

Official website: http://xpower.one

Legal Terms:

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Disclaimer:

This document only introduces the conditions of the project. The contents are for reference and do not constitute any transaction advice.

The investment in the project means the participant has the capacity for civil conduct, and the contract with X-power Chain is true and effective. The parties cooperate on the basis of free will.

X-power Chain will try the best to guarantee the settlement and implementation of the design contents of the projects, provided that there may be revision and

upgrade of the document contents due to technical reform or other force majeure factors. Please be informed of the latest information from official website.

X-power Chain platform has explicitly stated the potential risks to the participants. Once the participants make project investment, it shall be deemed that they have understood and recognized the project statement and accepted the potential risks.