Smartunit

New generation of intelligent blockchain platforms.

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Abstract

With the development of algorithm, computing capability and big data, artificial intelligence (AI) is in a period of high-speed development. The AI chain covers such aspects as basic level, technical level, and application level. It has such a wide coverage that a single company can't undertake every link in the AI industry. In-depth exploration in subdivisions and modular integration of inter-industrial resources become the major development paths of the AI field.

The initial proposal with respect to block chains is made by Satoshi Nakamoto and completed by members in the community. However, the block chain now is not what it used to be. Of course, it doesn't mean the original concept has changed; instead, it has developed into a new field based on the original concept. Nowadays, with the aid of block chains, people can keep accounts in a distributed way which saves not only manpower but also resources and money. With the popularization of block chain technology, the value of tokens will definitely be higher and higher, which allows us to invest with block chains. For now, various loan companies and trust companies in the market use only one piece of paper or a contract as the evidence of lending, which is not reliable. In terms of the block chain, we could simply use its function of distributed accounting to make the very piece of paper be acknowledged by the whole network, which means the block chain can also serves as a smart contract. We can say that, with the advent of such new technology, many traditional drawbacks are readily solved.

Besides applying block chains to more and more fields, we could also expect a further drive from AI and machine learning

which can improve the basic architecture of block chains. Intelligent transaction verification is under way.

Look back in history, here are some examples and perspectives of celebrities.

Karin Flieswasser gave us an excellent overview, helping us to reflect the ever developing relations between AI and block chains: “The combination of AI and block chains, by economic reconstruction and information exchanges, will boost the ‘Fourth Industrial Revolution’. From healthcare to the government, their powerful combination, though slow, will no doubt be transformative.”

Fileswasser also provided 10 examples to illustrate how AI and block chains cooperate to address complicated work in a more efficient and economical way than traditional database and security technology.

In the domain of precision medicine, Google DeepMind is now developing an “audit system for healthcare data”. And block chains will keep the system secure and sharable, while AI allows medical workers to obtain a medical predictive analysis from patient data.

DeepMind’s block chain technology has passed the test on data of NHS. DeepMind now is deploying AI applications to assist Moorfields Eye Hospital to spot signs of eye diseases. Use cases of precision medicines can be expanded: AI provides intelligent search and analysis while block chains offer a secure trading platform.

The decentralization mechanism based on block chains in this article is designed to address problems aforesaid. One of block chains' core advantages is that its combination.

Catalogue

1. Background

Artificial intelligence (AI, also machine intelligence, MI) is intelligence demonstrated by man-made machines, and it generally refers to the human-like intelligence technology powered by normal computer program. Artificial intelligence is having been paid close attention by the capital market since its concept was first extended. With the development of AI technology, Start-up companies, Internet giants, tech giants and even traditional companies are flocking to AI businesses, arising this tech unicorn. Meanwhile, AI technology has been applied in multi industries and scenarios. Technologies such as voice recognition/natural language processing, computer vision, robot etc. have achieved certain levels and lead AI application.

Companies nowadays applying AI general technology such as computer vision and intelligent speech semantics are extending up and down in the vertical industrial value chain, to integrate hardware, algorithm and software etc. into end-to-end solutions as well as open platforms to attract developers and B-end customers to build the industry ecosystem.

The application developed by AI technology has become the focus.

Financial industry has become the first application field of AI technology, benefited from the large data base, big innovation capacity, robust purchasing power, and explicit demand pain points. In security industry, attributed to the constantly emerging saboteurs' attack techniques while traditional defense keeps simple, a dynamic defense system powered by AI technology has to be provided; in medical industry, patients' condition vary from each

other, so we need big data to do statistics, and then perform dynamic diagnosis through AI; the Internet of vehicles collects operation information on the road via big data, and then realizes automatic driving via AI, performing intelligent functions such as dynamically judging safety distance; and the newly-defined retail industry, is also gradually gaining momentum driven by capital. The five major industries will hopefully become the leading application areas of AI in the future.

And Token, is a must in block chain.

As mentioned above, the distributed ledger in block chain surpasses a lot since the traditional trust mechanism is far too weak. If the fund flow to a platform is not an official currency, but a token, then all transactions will be retrieved. As a result of that, severe corruptions in our society such as fund opacity, money laundering and embezzlement etc. will be eliminated. By applying such transparences, the trust between everyone will be enhanced thus making us a more wonderful world. This, boosts our project Smartunit.

Smartunit is a project created in such context integrating block chain and traditional industries, to make transactions transparent by taking advantages of the decentralization feature of block chain, and it will enhance trusts between service/product providers, and trusts between service/product provider and the users, so as to hold the authentic enterprise core of being honest, integrate and people-oriented.

with data can ensure a secure and transparent examination on changing data in real time, which can maintain clients' confidence in the validity of contracts, ownership and transactions.

2. Value Proposition

2.1 The History of Artificial Intelligence Development

The artificial intelligence (AI) is not a new concept.But was born in 1950s. In the past 60 years, the AI has not been developing smoothly, but experiencing ups and downs and successively through its golden age, first low, second prosperity and second low until the current third wave.

Let's look back on its development history.

The initial research on artificial intelligence is the product from a series of scientific achievements from the end of 1930s to the beginning of 1950s, during which there had been many landmark events.

In 1943, Warren McCulloch and Walter Pitts proposed the concept of the "neural network" for the first time.

In 1950, Alan Turing proposed the Turing test.

The Dartmouth Conference was held in 1956. In the Conference, the concept of artificial intelligence was formally established, targeting such main topics as follows: automatic computer, programming language, neural network, computational scale theory, self transformation (i.e. machine learning), abstraction, randomness and creativity, which opened the magnificent historical picture of the AI research in various directions.

In the second half of this period of history, namely, in the decades after the Dartmouth Conference, the artificial intelligence ushered in its first period of flourishing development. In this golden age, computers had obtained such capacities as follows: solving algebraic application problems, proving geometric theorems, learning and using English.

Moreover, there are several other landmark events.

In 1957, Frank Rosenblatt proposed the concept of "perceptron", which is the first neural network precisely defined with an algorithm and acts as the ancestor of many new neural network models later on.

From 1974 to 1980, a single-layer neural network can not solve the problems of non-linear segmentation and insufficient computer skills and correspondingly, the sensing data insufficiency again has limited the further development of the perceptron; moreover, such problems couldn't be solved at that time, so the perceptron development was almost in a stagnant state and thus the artificial intelligence research based on neural network began to ebb.

Beginning of the period of its second prosperity.

In 1980s, the "expert system" began to move from theoretical research to practical applications and the artificial intelligence entered its second prosperity. The expert system generally uses the knowledge representation and reasoning technology in the artificial intelligence to simulate the complex problems that usually can be solved only by the experts in the field.

In 1980, Carnegie Mellon University designed an expert system called XCON for Digital Equipment Corporation (DEC) and achieved great success. During that period, it could help the company to save forty million dollars a year. However, such expert systems as XCON initially most successful had their practicality only limited to some specific scenarios, featuring significant upgrade difficulty and constantly high costs for maintenance, which caused the second wave to cool down rapidly.

Finally, let's see the development in modern times.

In 1994, American scientist Jonathan Schaeffer's artificial intelligence program, Chinook, defeated the world champion of checkers for the first time.

In 1997, IBM's "deep blue" supercomputer defeated the chess world champion Garry Kasparov; in 2006, Geoffrey Hinton put forward the "deep-learning" neural network.

In 2011, IBM's Watson took part in the program "Jeopardy!" and eventually defeated its human contestant.

In 2016, AlphaGo defeated Korean master Go player Lee Se-dol and then AI has completely entered the public view.

Back to the present, currently, there is no doubt that the artificial intelligence is one of the hottest topics and we are now in the cusp of the present artificial intelligence. Smartunit was born in such a background. Compared with the past environment, in the current historical background, hardware or software is more excellent than before and simultaneously our projects can also achieve success more easily than before.

2.2 Analysis on Artificial Intelligence Industrial Chain

The internet and technology giants are most important forces for industrial development of artificial intelligence. With advantages in data, technology, and assets, combined with independent R&D and mergers and acquisitions, they make all-round cross-level plans in the field of AI to lead the development of the industry. In particular, the internet enterprises with advantages in comprehensive database like Google and Baidu have made overall plans in the artificial intelligence industry; the scene-based internet enterprises like Facebook, Apple, Amazon, Alibaba, and Tencent deeply combined artificial intelligence with their own businesses, to constantly improve functions of products and users' experience; traditional technology giants like IBM and Microsoft established intelligent platform systems for enterprise-level users; hardware giants like Intel and NVIDIA have established strong trade barrier and actively made plans in downstream industrial chain.

Artificial intelligence industrial chain can be classified into basic layer, technology layer, and application layer. In particular, basic layer includes certain infrastructures such as chips, big data, algorithm system, and network, to lay foundation such as network, algorithm, hardware laying, and data capture for the artificial intelligence industry. Upstream manufacturers like NVIDIA are vigorously developing relevant technology, so as to enter into the artificial intelligence industry and establish open source platforms. Users are more familiar with artificial intelligence technology layer, including computer vision, phonetics and semantic identification, machine learning, and knowledge map, which show a robust development momentum. Most artificial intelligence technology companies focus on one or several technical niches while enhancing

their technology strength. Eventually, whether artificial intelligence technology can be applied and generate big business benefit depends on multi-scenario application in application layer. At present, artificial intelligence technology has been applied in various scenarios, covering many industries, including finance, security, intelligent home, medical treatment, robot, intelligent driving, new retail and other scenarios.

In the artificial intelligence industrial chain, basic layer is controlled by giants, which have gained first-move advantage. The competition is fierce in segment fields of technology layer. Technology differences among major manufacturers are narrowing. Enterprises without technology advantage will be phased out. The application layer has a vast market, in which many enterprises are involved, through integrating various resources such as technology and software, developing vertical application, and solving industry problems, to realize the application of scenarios. In particular, technology giants like Google, Amazon, Microsoft, and Baidu have made plans in upstream, midstream and downstream industrial chain. Leveraging on their own advantages in data, technology, talents and capital, in the form of acquisition, investment, and independent R&D, they have made all-round cross-level plans. The involvement of giants will further put market resources to good use, break trade barrier, and test new business models, so as to drive the development of the whole industry.

2.3 Consumption Upgrade and Users' Experience

According to Duesenberry's ratchet effect, people's consumption habit will be irreversible once it is formed. In other words, it can be easily adjusted upward but it is hard to be adjusted downward. Especially, the consumption is irreversible in a short

term. The consumption upgrade will bring new opportunities for products and application. Meanwhile, it will also bring up higher requirements. Artificial intelligence can effectively improve productivity and efficiency, and improve more application scenarios. Similarly, the improvement brought by intelligence will effectively meet the demand of consumption upgrade. For example, the rising of intelligent customer service has improved efficiency and quality of traditional customer service. The live broadcast industry emerged to become a new form of consumption and entertainment for users.

Users' experience upgrade is another driving force for the development of artificial intelligence. Artificial intelligence technology can provide more natural human–computer interaction, so as to realize effective integration of products, services, content and hardware, to meet the demand of various activities under the trend of mobile internet and internet of things.

Consumer–grade application combined with artificial intelligence technology can better improve users' experience and maintain users' loyalty. For younger age groups born in 1980s and 1990s who already have become major consumption forces, they grow up with the internet, and have become accustomed to the internet service. They have natural requirements for intelligentized and personalized products, can respond swiftly and become early adopters and opinion leaders for new products and services.

3. The Present Status of Development

As the mechanism of human brain has yet to be completely explored, we have had to adopt the existing chips and software technology to simulate the brain–like computers whose operating mechanism are totally different from the traditional computers. The

chip has formally become the core of computer and are recognized as the "brain" of artificial intelligence. At present, due to the deficiency of smart chips, the functions of artificial intelligence are based simply on the cloud, as a result, the intelligence capabilities cannot be fully performed.

In the machine intelligence, the chip is the basic component that carries the computing function. With the extensive development and application of the deep neural network (DNN), the traditional CPU is hard to meet the computing requirement and rule of the multi-layer features. However, the deep learning and highly parallel structure of GPU computing have made them more efficient than general-purpose CPUs for algorithms, so the popularity of GPU computing has been increasing gradually. In addition, TPU and FPGA chips have also become the fastest growing artificial intelligence chips. The companies like NVIDIA, Intel, Qualcomm, ARM, Apple, Huawei, etc. are the major chip manufacturers around the world to design chips.

NVIDIA has emerged as the dominant player in field of artificial intelligence for its excellent performance of GPU in deep learning. It has also greatly enhanced the programming efficiency, openness and richness of GPU by establishing NVIDIA CUDA platform, and constructed a series of algorithms platform, including CNN, DNN, deep network, RNN, LSTM, learning network. Now, NVIDIA's chips are increasingly being used in devices other than computers, such as VR devices, drones, robots, and driverless cars, and more importantly, they are becoming the new core of artificial intelligence computing.

Looking Back on Development History of Chips.

In August 2016, Intel acquired deep learning startup Nervana Systems, a company located in the US, whose chip "Engine" was ten times faster than GPUs for deep learning.

At the GPU Technology Conference 2017, NVIDIA launched Volta, a next-generation processor architecture, as well as the corresponding deep learning accelerator.

At the end of 2016, AMD released three solutions of accelerating deep learning algorithms.

In 2017, ARM launched DynamIQ technology that can be optimized to deliver a boost in AI performance, redefining multi-core computing by combining the big and LITTLE processors into a single, fully-integrated cluster that was able to control independent frequency, open, close, hibernate session in each processor, while offering more efficient and seamless way to switch to the most suitable processor in different tasks.

In May 2016, Google released TPU (Tensor Processing Unit), a dedicated processor specifically optimized for machine learning, and also announced that the AlphaGo's core was built from this machine learning technology.

In 2016, Qualcomm released its neural processing engine SDK for artificial intelligence that was designed to support the popular deep learning framework Caffe, Tensor Flow, etc., and to provide powerful AI algorithms on high-end chips. It has also been committed itself to the development of highly efficient chips, making smartphones and autonomous vehicles truly intelligent.

In 2017, Huawei, a communications equipment manufacturer, unveiled a AI-powered smartphone chip Kirin 970.

At the same time, some companies tended to participate in this fierce competition, even they didn't have related background in the research and development of chips.

In 2015, Microsoft started to use CPU-FPGA hybrid chips to get the best performance.

In 2016, Amazon Web Services launched a host of new AWS featured products that were based on FPGA cloud computing. Chinese companies also followed in the footsteps of Amazon that Baidu cooperated with Inspur to design dedicated chip server motherboard, Aliyun announced to kick off a pilot program with Intel, Xilinx and other chip vendors to reserve FPGA products for its artificial intelligence system. Horizon Robotics, a startup company dedicated to providing artificial intelligence solutions, named its self-developed AI processor infrastructure as "BPU" (short for brain processing unit); Cambricon has more than 100 patents and its own instruction set system.

The applications of artificial intelligence being used today is no longer just a single type of terminal device. The embedded artificial intelligence devices have created urgent needs for high performance computing, such as chips dedicated to the car driving, traffic security computing platform for video monitoring, robots, UAVs, smart home and other products that need to be equipped with chips, so plenty of new and higher requirements have been put forward for the chip vendors. It is believed that the chips will provide more diversified services in the future.

4. Operation Mode

AI Interface Communication

AI service is a cloud service provided by companies or individuals with big data and AI service capacities. AI service makes relevant analysis and responses according to different user characteristics data to offer better services and user experience.

Therefore, Smartunit creates an account containing the status of user data for users apart from the address account of the block chain. Besides the user's transaction information, it also includes lots of user-defined information which can be stored in the block chain according to considerations of costs and privacy protection.

Take for example the Ethereum smart contract platform. Smartunit will develop a DApp on Ethereum. DApp is composed of a series of smart contracts, including invoking contract, agency contract and user information management contract.

Smart Contract

With an improved core infrastructure and a compatible edition of Ethereum, Smartunit has a block chain network more indestructible than that of Bitcoin and can realize infinite possibilities of the smart contract.

One of the greatest advantages of the smart contract is uninterrupted execution of a program or a contract. But the execution of some contracts depends on external factual data or evidence. In general, these factual data are provided by trusty third parties. A future trend is that a trusty third party will become many

trusty third parties providing AI to reach a higher participation rate and reliability.

The smart contract is executed in the determinacy of each node in networks like Ethereum. Any deterministic error will lead to network consensus failure, therefore, the deterministic smart contract executed in each node cannot directly invoke external services. They obtain external AI information and data by collecting information and executing the on-chain consensus process through the account selected by the on-chain smart contract. The smart contract will obtain the high timeliness and reliability of external information with a bridge provided by Smartunit to the AI service.

We will make future improvements on this basis, take advantage of AI's effective data acquisition and use off-chain consensus to draw conclusions in a more transparent way based on AI factual data. Whether AI can completely replace humans remains controversial. Humans' decision making process occurs in the brain, which is uncertain and incredible. AI is in a position to do better than humans in its skilled fields of deep learning and block chain determinacy. In the future, governance by the Decentralized Autonomous Organization (DAO) may be replaced by AI.

Profit Mode

The number of merchants on the Smartunit platform is increasing, but the number of tokens is constant, so tokens will have higher value.

5. Future Developmen Trend

Artificial Intelligence has brought forth reforms and reconstitutions to all walks of life. On one hand, new technologies are applied to existing products for innovation and development of new application scenarios; on the other hand, the development of technology has also overturned traditional industries and it is an irreversible development tendency that artificial intelligence will replace manual work, especially in the links with simple repetition and strong programmability like industry, finance and agriculture; whereas in national defense, medical treatment, driving etc., artificial intelligence could provide more accurate and efficient professionalized services due to its adaptability to the complex environment to replace or strengthen traditional manual services, i.e. service forms tend to be individualized and systematic in the future.

For AI applications, factors like technology platform, industrial application environment, market and user etc. affect the AI industrialization application market enormously. At the moment, typical application scenarios of artificial intelligence technology include but not limited to: security and protection, manufacturing industry, service industry, finance, education, media, law, medical treatment, house and home, agriculture, automobile etc. How to realize the innovation of artificial intelligence industry itself and apply it to specific scenes will be a critical point for development of all industries.

Security and Protection

The application scenarios of security and protection are varying from identity recognition, household security to anti–

terrorism and national defense. In modern society with population mobility, middle class rises sharply and the users' property accumulates gradually. The increased income enlarges risks while user security is deficient and security protection becomes a rigid demand for users. The diversity of identity recognition means is of great significance to security protection, thus the requirement of this field on image recognition is more demanding, asking for a multi-dimensional recognition with more means. The advance of AI technology greatly improves the diversity and accuracy of identity recognition means with great significance in security protection, particularly in the application of national defense security field that has national strategic significance.

Finance

The application of AI in finance is mainly concentrating on three aspects of investment decision aids, credit risk control and smart pay.

In terms of investment decision aids, AI technology will assist the financial staffs to rapidly capture effective information out of numerous information for further data analysis and automatic accurate analysis and prediction of market tendency utilizing big data engine technology and natural semantic analysis technology etc. to realize intelligent screening and management of information and aids of decision-making for staffs. On the other hand, AI also helps the financing institutions to establish financial risk control platforms and manage risk control for the purpose of risk analysis and decision-making, personal credit investigation rating, credit card management etc. of the investment projects. In the domain of smart pay, by utilizing the face recognition and voiceprint

recognition technology, “face swiping pay” or “voice pay” is available.

Manufacturing Industry

The application of artificial intelligence is likely to realize the transformation of semi-automatic production to full automatic production in manufacturing industry. Data connection in all production chains of commercial manufacture is made available via the establishment of industrial Ethernet, use of sensors and reformation of algorithms so that connectivity between man and machine, machine and machine is realized. For one thing, man-machine interaction is more convenient and for another, inter-machine cooperative office refines operation and timely forecasts product demand and adjusts capacity. Artificial intelligence also drives the machine to further replace manual work in manufacturing industry, enhances productivity and reduces production cost, as well as achieves smart customized services via low cost individualized production.

Smart Home

In smart home, AI will further promote the intelligentization of home products, including illuminating system, video system, energy management system, and security protection system etc. for the availability of household products development from perception to cognition to decision-making. On the other hand, with the establishment of smart home system, multiple products carrying artificial intelligence are likely to become the core of smart home, including robots, smart voice box, smart television etc. Smart home system will gradually realize the self-learning and control of house

and home so as to offer individualized services customized for different customers.

At the current stage, smart home is still in a transitional stage where mobile phone control is combining with multi-master with APP still the main control mode for smart home. But voice assistant and soft hardware products with voice interaction developed on the basis of AI technology has already started market education and the usage scenario via voice control and multi-product linkage is turning into reality step by step. In the future, artificial intelligence will boost smart home to develop from the combination of multi-master to inductive control and further to the machine learning and independent decision stage.

MedicalTreatment

Based on AI technology, medical treatment will form a diagnostician system, set up medicine search engine, help to realize medical diagnosis and health management. By means of image recognition, mapping knowledge domain etc., robots will aid doctors with decisions while the development of medical big data is available for digitization of patient information and improving the probability of discovering potential diseases with pertinent solutions. On the other hand, the use of medical robots and rehabilitation robots optimizes traditional operation and recovery processes. AI technology will create new disease treatment method for doctors and patients in the medical field.

Automatic drive

“Unmanned Automobile Brain” — the intelligence degree of AI decides the reliability of AGV. Google, Telsa and Baidu etc. all

continue carrying on with the research and development of unmanned driving technique. Though the travelling conditions vary and current technology is unable to be applied to everyday driving directly, AI technology has started to effect in this process as the ADAS system including automobile data recorder, diastimeter, radar, sensor, GPS is helping vehicles to perceive ambient conditions in real time and give alarm so that advanced aided driving is achieved to guarantee the users' travel safety.

In specific circumstances, UGV has been preliminarily achieved. For instance, UISEE has piloted run the low speed UGV in Guangzhou Baiyun International Airport.

6. Technology Overview

6.1 Layer of basic resource support

So far, the mechanism of the human brain has not yet been fully revealed and the human brain–analogous computer can only be simulated with the existing chips and software technology, but its operation mechanism is completely different from the traditional computers and the chip has become the core of computation as the "brain" of artificial intelligence (AI). At the moment, the AI functions basically based on the cloud and cannot fully realize the intelligence capacity due to the absence of smart chips.

In mechanical intelligence, the chip acts as the base part of the calculation function and with the development and application of the deep neural network (DNN), its multi–level computing needs can not be satisfied by means of any traditional CPU, but more and more attention has been increasingly paid to GPU because it is competent for parallel computation as the deep learning requires. In

addition, TPU and FPGA chips have also become the fast developing artificial intelligence chips. The major manufacturers involving in chips include HUAWEI, NVIDIA, Intel, Qualcomm, ARM and Apple, etc.

6.2 Layer of the path for technical implementation

The technical layer refers to the technology developed and realized to target different subdivision applications on the basis of the basic layer with the hardware and software capabilities integrated, including such major technical fields as the image recognition, speech recognition, natural language processing and other deep learning applications. Moreover, the fields involved include the machine vision, fingerprint recognition, face recognition, retina recognition, iris recognition, palmprint recognition, expert system, automatic planning, intelligent search, theorem proving, game theory, automatic program design, intelligent control, robot learning, language and image understanding and genetic programming, etc. In addition to the comprehensive technology giants, start-ups are also rising rapidly based on their own accumulation in technology and subdivision fields and at present, fierce competition exists among those technical-layer enterprises in such fields as computer vision and speech recognition.

The technology layer mainly covers technology giants, traditional scientific research institutions and new technology start-ups, with 2B, 2C or 2B2C as the dominant routes for development. On the one hand, it targets the enterprise level users and provides technical support for application layer manufacturers. On the other hand, it will research and develop corresponding software and hardware products to target consumers directly or provide man-

machine interaction technology for vehicle onboard, household and other products, so as to meet users' various needs.

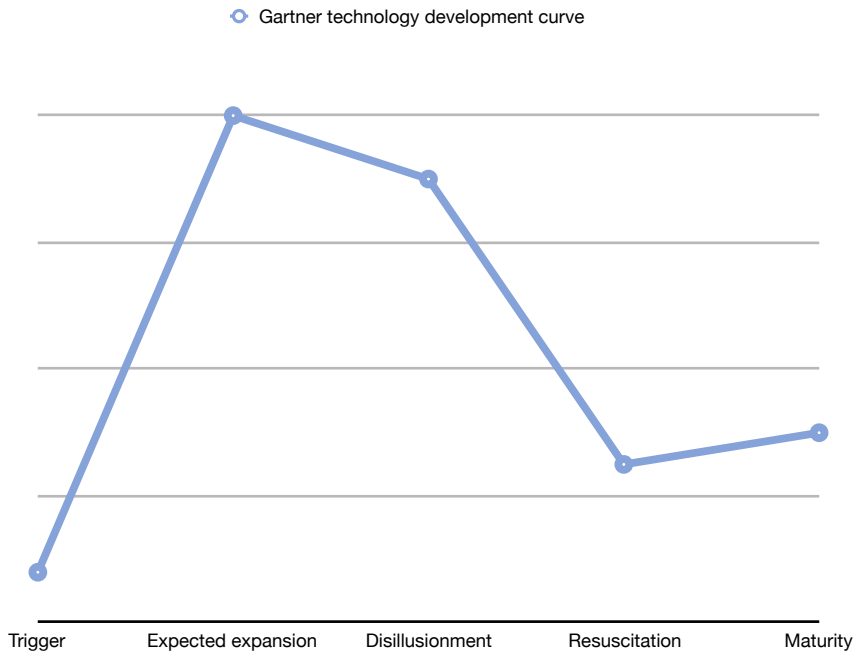

Table 1. Gartner technology development curve

The technology giants still master the technological, data and financial advantages, boasting relatively complete ecological chains; however, iFLYTEK and other traditional technology-oriented manufacturers own a strong research background, master certain capacity in research and development and simultaneously enjoy the government support, able to obtain a large number of data sources for strengthening their artificial intelligence technology in cooperation with relevant government organizations.

Startup companies can deep plough the vertical fields and the founding teams mostly consisting of technical experts can master the relevant research technology, so they can make up their capital deficiency by means of financing and relevant other methods, gradually accumulate capital, talent and technological strength,

specialize in the subdivision fields and thus put their technology into practice as fast as possible; furthermore, the technological innovation can also make up for the disadvantages of the traditional technology providers and giants, so that they could gradually mature their technology in competitions.

6.3 Application Path Layer

Artificial Intelligence (AI) can empower multiple industries with its technology for the deep integration between AI and certain industries, including AI + finance, AI + medical care, AI + security, AI + home, AI + education, etc, thus realizing the intelligence in traditional industries. Finance, medical care, security and other industries would firstly realize AI in the relevant fields and scenarios, cause they are closely related to user life, with massive optimizable and programmable work contents which are manpower&resource – consuming.

In each vertical area, with industry chain, channel and user data advantages, the traditional vendors are transforming through the access to the Internet with the new wave of AI. Meanwhile, venture companies are also developing rapidly by committing themselves to vertical fields, such as MOBVOI, UBTECH, TERMINUS and other unicorn companies, which lead the development of their respective fields, devote themselves to promoting technological progress, scenario application, as well as building a platform to continuously attract more manufacturers, providing more comprehensive services with powerful combination.

Application layer vendors are more likely to face the consumers directly, or follow the 2B2C development path, compared with the technical layer and the base layer, they have collected more user

data, but still need to further perfect the product to meet user needs.

7. Market Opportunities

For 2016–2022, the Global Cryptocurrency and Blockchain Market would witness a compound annual growth rate of 34.52%, according to the experts estimation. Basically the cryptocurrency market can be analyzed in two aspects – industries and regions. The development of the market has been accelerating with increasing online transactions, fewer transaction costs, convenient and fast transaction process, as well as changes in the perspective of buyers and sellers.

With the application of AI technology, every single field benefited a lot from it, which facilitates the development of AI technology.

In terms of policy environment, most countries have introduced a series of policies to support the top-level planning of AI technology development, boosting the development of AI technology, promoting the innovation of AI technology and industry convergence.

As to technical environment, AI technology matures with breakthrough in intensive learning, computer vision, natural language processing, laying technical basis for the combination of AI and finance. The huge interwoven network of the society created a large amount of data in the long-term development process, such as user identity data, asset data, transaction information data, etc. The strong dependency on data makes AI fully prepared to be applied to every single field.

8. Tokens Mechanism

8.1 Introduction of Virtual Token Market

Up to December 2017, the total market of virtual token reached 700 million dollars. By 2018, one percent of the net users have their own virtual token wallets. As a result of the advantage brought by block chain technology, the market penetration rate of virtual token will be as high as mobile phone and broadband network. It will facilitate cross-border transaction, lower the commission fee and improve safety. It is estimated that by 2025 the penetration rate of virtual token will increase to 5% of the world population, providing great support for asset token transaction. Until then, the virtual token market is expected to exceed 5 billion dollars.

As asset token has the advantage of traditional virtual token, the feature of low volatility and portfolio optimization, its total value will take at least 80% of the whole market by the year 2025.

With the improvement of technology and computing capacity, the commission fee of block chain technology transaction is probably be cut under 0.001% of the asset price within 10 years. Our anticipated lower commission fee will tremendously promote the trading volume of asset token. Moreover, the illiquid asset before tokenization will lose its “illiquidity”, which will increase its market value by 10–40% by then. And the trading volume of token (e.g. stock token, bond token, commodity token and property token) correlated to the asset price is expected to exceed over 10 times of original asset market value.

8.2 Tokens Application

The commission fee of block chain trading is obviously lower than that of traditional economic entity structure. For example, the average acquisition fee in the U.S. is 2% of the trading volume. However, the commission fee on Ethereum is only 0.00257%, which means it saves 99.8% of the commission fee.

At the same time we have to remember that their ability to fight for limited computing power lead to growth in trading volume and expansion of commission fee. As virtual token improves the block chain technological design and computing ability, we believe that commission fee will drop with the updating of technology and improvement of calculation. According to Moore's Law, the quantity of transistors per square inch of integrated circuit doubles once a year. Although it slows down in recent years, computer's calculation power is continuously speeding up.

According to FT, Brian Krzanich, Intel's executive director, it is estimated that the transitional period of two technologies would be reduced to half a year from two years, which meant an at least 20% decrease in cost annually. And the improvement of hash algorithm should also reduce the computing complexity. So, from any aspect, token as currency product, which takes place of issuing currency, is stepping forward to lightweight development.

8.3 Token Distribution

SMU token will end after two rounds of sales. The quantity ceiling of marketable tokens is 20 billion, and token's hard cap for sales volume is USD 23,000,000. Should any limit be reached, the ICO shall stop.

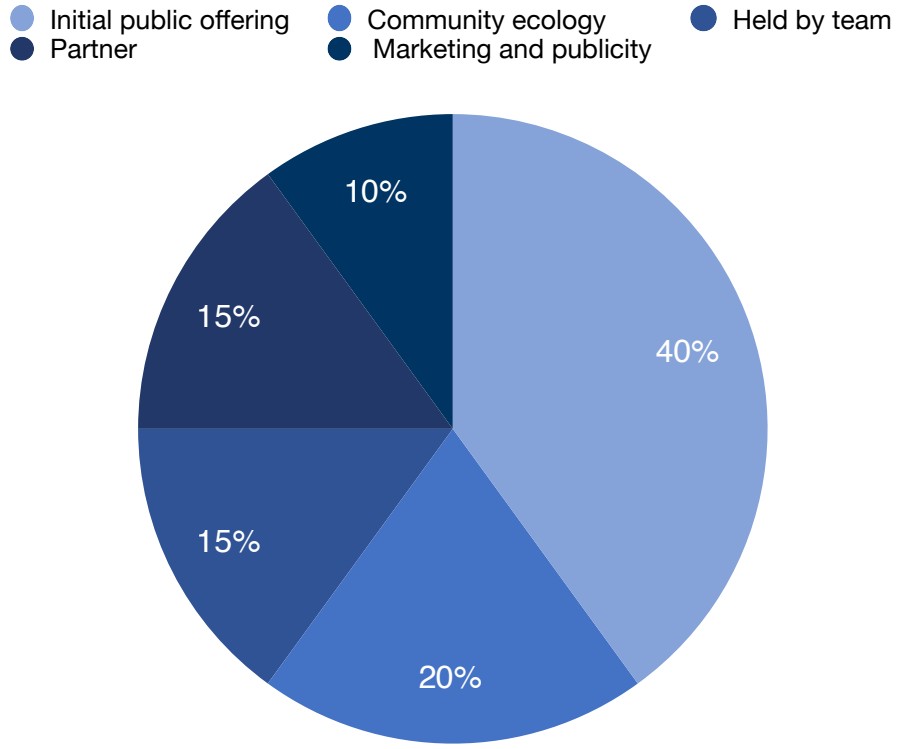

Figure 1. Distribution Plan for SMU Token

In the first stage, investment invitations are made to institutions only, which is not open to the market. And in the next phase, ICO investment in advance is well under way. In such process, 1 ETH = 65,000 SMU. The third stage refers to sales to ordinary investors; the offering price is 1 ETH = 50,000 SMU; the soft cap is 5,000 ETH, and the hard cap is 30,000 ETH. To promote the circulation of SMU tokens, the minimum purchase is only 0.1 ETH. See the launch date and deadline at the official website.

The SMU token agreement is in conformity with the ERC20 standard which allows this token to be transferred or deposited via any Ethereum wallet, so that holders of virtual tokens can purchase the token and asset holders can participate in trading activities.

Given local laws and policies may differ, please invest rationally under local provisions.

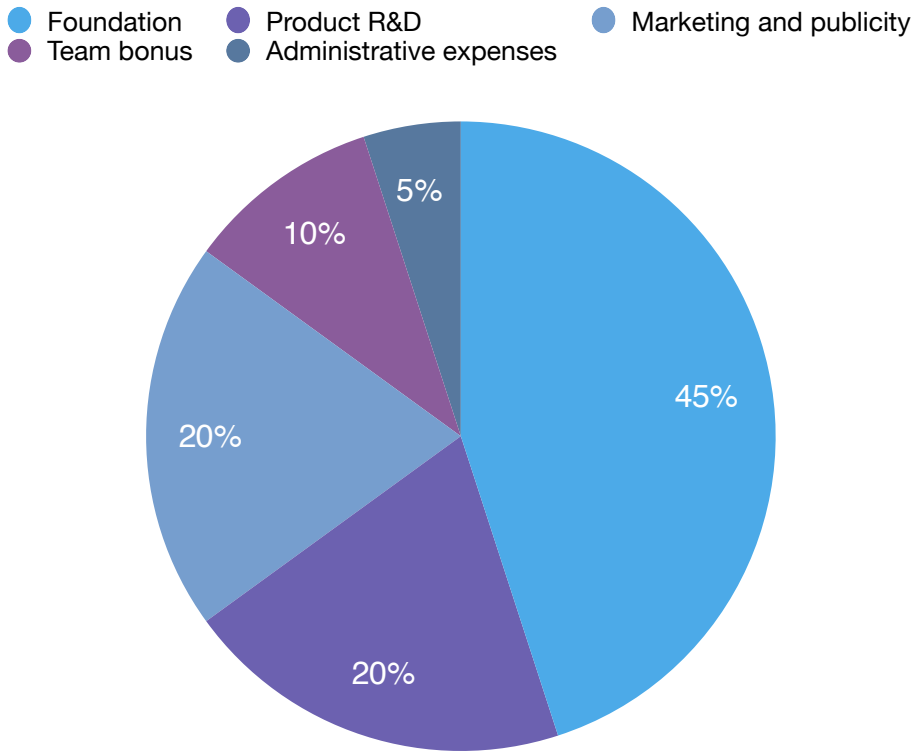

Figure 2. Income Distribution Plan for SMU Token

The income of token sales will be used to strengthen rights of virtual token holders and to develop the platform; 45% of the income is used for the foundation, 20% for product R&D, 20% for marketing and publicity, 10% for team bonus, and 5% for administrative expenses.

9. Team

The Smartunit team is founded a group of industry experts, with expertise in blockchain and finance, is rethinking the business of the blockchain in the future.

Erik Matti
Founder

Early entrant into the blockchain scene. Immersed within the machine learning for 8 years. worked as an engineer in Google for 4 years. Contributor to Deep Instinct, Strong believer in transparency, our code genius.

Alex Drummond

Co–Founder/Core Developer

Experienced in front–end, solidity programming, digital transformations and Business Process Automation for 8years, big fan in blockchain. Our senior specialist.

Michael Forsyth

CFO

Double Master of Finance, 6 years experience of corporate finance director, had been an executive at HSBC, Standard Chartered and other banks. Good at using systematic tools to identify potential risks with a mature and stable team.

Joshua Duffy

ClO

A loyal follower of blockchain technology, a veteran investor in early blockchain projects and one of the pioneers of early bitcoin technology. Continuous entrepreneurs.

Ryan Huang

Web Developer

More than 10 years of development experience. Former Google Engineer. Diving into the deeps of AI, Machine learning and Deep learning. In the field of communications also have a lot of his own unique understanding.

Jacob Agatep

Web Desinger

Photography enthusiasts, painting lovers, engaged in many years of design, good at combining art and technology.

Tyler Brandon

iOS Developer

Who worked at Apple for four years before moving on to other companies across the field and now as a member of Smartunit.

Jack Lee

Planner

Who worked in the real estate industry, has 5 years of sales experience and record of annual sales of more than 5 million Australian dollars in the performance.

Our Advisors

Jamie Lee

Continuous entrepreneur. Alibaba's early investors, aware of the potential of the Internet. Former Goldman Sachs senior partner, has extensive financial experience, and now as an independent investor.

Jones Yang

Famous Australia real estate developers, worked closely with Lendlease, Billbergia and other famous enterprises. Has many real estates in Macau, New York and other places, now as an individual investor looking for outstanding projects.

Dr.Smith

Faculty of engineering professor at Ku leuven University, a former consultant at Viewerslogic Israel, working in internet industry

for more than 20 years, provide technical advice and support for the Smartunit.

10. Legal Risks and Explanations

SMU is a virtual token released on the ETH platform in accordance with the ERC20 agreement. Such digital token created on the block chain is one part of the decentralized software agreement. SMU does not accord to its holders the ownership, company interests or any rights with respect to company control, decision making and direction resolution. Before purchase, individuals, companies and other organizations shall take all the risks, costs and interests into full account.

We do not guarantee the future performance or value of SMU, including its intrinsic value and sustained gains. Token purchasers shall accept the only potential risk in its purchasing, and acknowledge that unknown significant changes may occur, given the platform is still under development.

You shall know, understand and agree that SMU is not securities. It has never registered in any governmental entities as securities, and shall not be regarded as securities or registered as securities in any governmental entities.

The block chain technology is under supervision and control of various global regulators. SMU token may be governed by one or many requirements or measures, including but not limited to limitations on use and holding of digital tokens. This may slow down or restrict SMU token's function or buy-back in the future.

SMU token is among no types of official investment or legally binding investment. Under unforeseeable circumstances, all individuals and parties involved in SMU token purchase shall be at their own risks.