BitSasci

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The world's leading WEB3 based digital currency trading platform

BitSasci

C O N T E N T S

Chapter 1: An Overview of the Market Background

1.1 The double cycle of digitization and token economy

The development of technology has greatly changed the way of human life and production, and has become the main driving force for the continuous expansion of economic globalization. Digital technology has promoted the economic revolution and produced the digital economy. The digital economy has become a new engine of economic growth in the new era, bringing great opportunities for transformation to the global economy, and improving the efficiency, productivity and the global competitiveness of enterprises. Before the tuyere of The Times, on the one hand, policy and capital are aimed together; on the other hand, various industries begin to

re-examine the future development of the overall industry with digitalization as the core, and the digital economy driven by digital transformation is growing rapidly.

According to data released by market research firm IDC, the explosion of digital economy has become a global trend, and the global digital economy is expected to reach 45 trillion US dollars by the end of 2025. The era of digital economy is fairer, more transparent and more open. It is not only a change in technology, but also a change in thought -- altruistic thought. The era of digital economy will be more beautiful, not because the relationship between people and machines has changed, but because the thoughts of people have changed and the relationship between people has changed. In the era of digital economy, you have me, I have you, the idea of digital economy makes all people connected together, mutual achievement, mutual strength, in the past is 20% of the people benefit, in the future is 80% of the people benefit.

In the era of digital economy, blockchain and cryptocurrency will play an even more important role!

It can reduce the risk of capital trust

Blockchain technology is open source and transparent. Participants of the system can know the operation rules of the system, verify the authenticity and integrity of the ledger content and the history of the ledger construction, and ensure that the transaction history is reliable and not tampered with, which is equivalent to improving the accountability of the system and reducing the trust risk of the system. For example, blockchain can avoid the current frequent thunder, the occurrence of runaway events.

It can effectively prevent failures and attacks

The traditional financial model is centered on financial institutions such as exchanges or banks. Once the center fails or is attacked, the overall network may be paralyzed and trading will be suspended. Blockchain is underpinned by a number of distributed nodes and computer servers on a peer-to-peer network, where a failure in any part does not affect the overall operation, and each node keeps a copy of the blockchain data. Therefore, the blockchain has built-in business continuity, high reliability and fault tolerance.

It can improve the efficiency of fund payment, transaction and settlement

On the blockchain, the process of transaction confirmation is the process of clearing, settlement and audit. The blockchain uses distributed accounting, and all transactions are displayed in real time on a platform similar to a globally shared spreadsheet, and are cleared in real time, greatly improving efficiency. Blockchain, on the other hand, can increase the efficiency to the minute level, which can reduce the settlement risk by 99%, thus effectively reducing the cost of capital and systemic risk.

It can improve the level of automation

Since any file or cryptocurrency asset can be represented in the form of a code or ledger, smart contracts and automated transactions can be implemented on the blockchain by setting up the data processing program on the blockchain. For example, a smart contract can write a set of financial contract terms into the agreement, guaranteeing the automatic execution of the contract and payment for default.

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1.2 Market pain point analysis

At present, in the entire crypto space, exchanges assume the most critical role of circulation, trading and value exchange. Therefore, in the whole digital currency market ecology, as one of the most important circulation links, the digital currency circulation platform has an irreplaceable important position, and its most important role is to export the value of the project's cryptocurrency to all investors, and closely connect each other. When more and more people invest in the wave of blockchain and digital assets, they are looking forward to getting the harvest and value they want, whether in development or assets.

As an important application scenario in the early stage of blockchain development, digital currency circulation, storage and exchange platform undertakes important tasks such as market expansion, capital drainage, token circulation and trading, and is also an important traffic entrance in the early stage of blockchain. Although the market space in the field of digital currency trading is huge, the challenges to be faced are also very severe due to the limitations of technology, mode and user habits. It is manifested in the following aspects:

Security Challenges

The importance of security is self-evident. At present, the mainstream digital asset trading platforms are mostly centralized trading, which is highly vulnerable to external hacker attacks. Once a breach occurs, it will cause huge losses for thousands of investors. At the same time, the reputation of trading platforms will also be dealt a major blow, and some platforms will be forced to close down directly because of this. On the one hand, exchanges are frequently hacked, and on the other hand, the blockchain trading market is extremely hot. After years of research on blockchain, we have found that in addition to exchange networks being attacked, the imperfection of blockchain technology itself can also cause network transactions to block. In addition, due to the geographical, legal currency, language, investment environment and other reasons, unknown exchanges have localized business, mutual separation, insufficient members, lack of liquidity of digital assets, incomplete currencies available to users in various regions, and large price gap, making it difficult to realize the globalization of digital asset circulation, which restricts the natural attributes and advantages of the global free flow of digital assets.

The lack of market depth

The market depth of trading platform has a great impact on user experience and investment cost. It costs a lot of time for users to complete an ordinary transaction on a platform with insufficient trading volume, and may even cause certain economic losses compared with a platform with greater liquidity. Due to the lack of trading depth, users will choose to give up trading on the platform with insufficient trading volume, and then create a vicious circle, aggravate the problem of insufficient trading depth, and greatly affect the development of trading platform. The unfair benefit distribution mechanism also exists. Some large-scale exchanges rely on a number of good currency drainage to bring popularity in the early stage of development, and will also attract the support of some seed users. However, with the gradual growth of the platform, the role of relevant groups such as currencies, users, liquidity and providers, which had made great contributions to the platform at the beginning, has been weakening, and users have not shared the benefits brought by the growth of the platform. This is quite different from the concept of blockchain decentralization and win-win cooperation.

Ecological independence and information island

Complete ecological independence among independent exchanges creates silos of value and information. As a result, there are:

• High cost: the transfer fee of bitcoin and Ethereum main network is rising day by day, reaching a high of 50 US dollars per transaction;

• Slow speed: the speed of bitcoin/Ethereum transfer has long reached the bottleneck, the peak of the Bitcoin main network once stranded 200,000 unconfirmed transactions, resulting in many futures traders can not cover the margin when the market breaks out and out of position.

• Poor performance of smart contracts: Limitations of the blockchain framework (scalability, ease of use, consensus energy issues) resulting in an extremely redundant computing architecture.

• There is a system loss equalization problem: So far, the trading model has explored a variety of ways to solve the system loss, whether it is the apportionment fund model, the system loss equalization model, or a combination of the two models, can not solve the system loss problem, affecting the user trading experience, but also affecting the effect of hedging transactions.

The lack of stability and protection mechanism

Due to the influx of investors, the average daily trading volume continues to rise, and the underlying architecture of the existing trading platform and the insufficient expansion of server performance make it difficult to provide investors with stable and smooth trading experience. Slow transfer, system failures, trading cards and so on often occur.

Judging from the current development situation, the trading platform will hardly set up any protection mechanism for ordinary users or the user protection mechanism is in vain, and users can only bear the loss by themselves; The lack of user protection mechanism is a defect of each trading platform at present, and the establishment of a targeted user protection mechanism is an indispensable part of the development planning of trading platforms.

In general, under the superposition of multiple factors, the digital currency trading market needs to upgrade and change all aspects of the exchange platform in order to further develop, and the maturity of Web3 has brought new support to the development of the market.

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1.3 Web3 era: The key to reshaping the Internet ecology

Web3 (also known as Web 3.0) is a concept about the development of the World Wide Web, primarily related to blockchain-based decentralization, cryptocurrencies, and non-homogeneous tokens. Simply put, Web3 is a variety of applications that utilize blockchain to decentralize the Internet, allowing users rather than developers to manage the protocol. More than just an upgrade of technology, Web3 is a reimagining of the digital world, bringing the Internet of Value into a new era that is more open, decentralized and user-led. In this new era, Web3.0 is coming into our lives, bringing us new experiences and possibilities.

The advent of the Web3 era represents a new stage of the Internet, whose core is the concept of decentralization and trustless based on blockchain technology, breaking through the traditional way of information transmission and exchange,

so as to achieve a safer and more efficient information exchange mechanism. This stage represents an evolutionary network era of decentralized management and ownership.

A growing number of examples show that Web3 brings new solutions to existing legacy problems, and most of the world's traffic hubs are filled with enthusiasm for new technologies and a strong desire to improve the legacy of modern technologies. Now there are many successful cases of cutting-edge technology application scenarios from our real world needs, how to explore the application of the most advanced technology based on the most practical real world problems is the core of the key issue. The data also confirms that the coming of Web3 era is the general trend to some extent.

At present, the number of blockchain startups has reached hundreds of thousands, involving a wide range of business fields covering all aspects of production and life. For example, the application and development of digital collections has opened up a market space with great potential for the development of the industry, and invigorating rich and high-quality traditional resources through the integration of virtual and real will be one of the mainstream directions. In addition to the collection value, this industry is looking for more efficient production and operation methods to enhance the ability to transform economic value, and has become one of the new paths for the current industry to constantly explore innovation and development. These are the pain points and difficult problems faced by the current society, and also the opportunities for the innovation and development of Web3. Therefore. The rise of Web3 is not only the innovation of technology, but also the presentation of deep thinking and innovative solutions to practical problems. This has not only aroused the attention of the scientific and technological circles, but also aroused the wide attention of all sectors of society.

With its unique advantages, Web3 is changing the face of the Internet ecology. Let's further explore the impact and potential of Web 3 in many aspects.

• **Open：** Web3 applications are built from open-source software that is accessible to anyone or any developer community. Using open code, it means that these blockchain projects can be inserted into each other like Lego blocks.

• **Trust-free：** Google's motto is "Do no evil". We have to believe that the algorithm is working for us, not against us, but it's hard to believe when you have different search results with your friends. While Web3 is transparent and is supported by verifiable code. In Web3, the code is the law, hence the phrase "distrust, only verification".

• **Free permission:** Simply put, a license-free system is a system without a gatekeeper. The system works best when anyone can participate in the game and the rules of the game give it more freedom.

The foundation of the Web3 technology includes the following aspects:

• **Blockchain :** Distributed ledger technology provides a guarantee for the transparency and immutability of data.

• **Smart contract :** Self-execution contract, automatically complete transactions through pre-set rules, to remove third-party intermediary needs.

• **Decentralized Application (DApps):** Unlike traditional applications, DApps runs on a blockchain network, and users have full control over their data and assets

.• **Digital identity :** Web3 allows users to manage their data and assets through their digital identity, reducing their reliance on centralized authentication.

In addition, the value characteristics of Web3: openness, privacy and co-construction of the world, also value the construction of the Internet, creating a theoretical foundation and practical feasibility. At the same time, Web3 is reshaping the value of the Internet ecology, mainly reflected in data ownership, information security, business model innovation and other aspects.

With the continuous advancement of the digital process, people's awareness of data ownership is becoming more and more intense. The decentralized features of Web3 enable users to truly own their own data ownership and control, thus protecting user privacy and data security. Compared with the traditional centralized model, the information security of Web3 is more reliable, and the user's data is no longer controlled by a single organization, reducing the risk of data leakage. In addition, Web3's business model innovation has also brought great changes to the Internet ecology. The characteristics of decentralization have allowed new business models to emerge, such as decentralized Finance (DeFi), GameFi, NFT digital collections, etc. These new business models have injected new vitality into the Internet ecology. Global capital also competed to enter this new technology industry and soon gave birth to the head of the giants. More participants came to the wave of Web3 field, began to accelerate the innovation and expansion of the layout, explore their own unique development path and innovation road, in order to open up a broader blue ocean market.

With the continuous progress of technology and the continuous expansion of application scenarios, Web3 will play a more important role in the future Internet

ecology. As the demand for sustainable and long-term solutions rises, Web3 will further support social and economic services in a way that breaks through conventional technologies and protocols, expand access to wider areas of society, expand the advantages of the digital economy by combining more social features and characteristics, and reinforce trends more closely related to digital transformation, etc. It will play a more important role in the Internet ecosystem and become one of the core pillars and main drivers of the future digital economy.

Web3 is reshaping the entire Internet industry in many ways, bringing more fair, open, innovative and valuable experiences to players and developers. As the technology continues to evolve and mature, there is reason to believe that Web3 will be an important development direction for the market in the future, leading the crypto industry into a whole new era.

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1.4 Web3 promotes the transformation of digital currency exchanges

Digital currency exchanges are online platforms that provide digital asset buying and selling services, allowing users to trade, exchange and invest in cryptocurrencies. They are an important hub for the circulation of digital assets, providing users with convenient trading channels and rich trading tools, such as trading charts, market depth, etc. With the rise of cryptocurrencies such as Bitcoin and Ethereum, digital currency trading platforms have grown rapidly over the past decade, becoming an important bridge between traditional finance and the emerging digital economy.

The Web3 era is a new era characterized by decentralization, digitalization and intelligence, and blockchain technology is one of its core driving forces. In this era, people begin to attach importance to the security and privacy of personal data, and the trust in decentralized finance is increasing, and the digital currency trading platform, as the key infrastructure for the circulation of digital assets, will play a crucial role in this era.

There are two main categories of digital currency trading platforms:

• **Centralized Exchanges (CEX) :** Such platforms are controlled by a centralized operator, and users store assets in the platform's wallet and trade through the platform. While centralized exchanges offer a high level of liquidity and convenience, they also face issues such as hacking, regulatory risks and more.

• **Decentralized Exchange (DEX) :** Unlike CEX, decentralized exchanges do not rely on a centralized intermediary and users can trade directly on-chain via smart contracts. DEX has significant advantages in improving security and transparency, but it leaves much to be desired in terms of liquidity and user experience.

The Web3 era has arrived, and decentralization, transparency and openness have become the new theme. The diversified trading ecosystem based on Web3 has also emerged, which will redefine digital currency trading. Overall, Web3 will promote the development of the digital currency trading market from the following two aspects:

The impact of Web3 on trading platforms

The decentralized concept of Web3 has had a profound impact on the development of digital currency trading platforms. Traditional centralized exchanges are facing more and more challenges, and users are beginning to seek decentralized solutions that are more secure, transparent and efficient. Decentralized exchanges (DEX) have sprung up against this backdrop, reducing their reliance on centralized institutions through smart contracts and on-chain transactions.

Web3 also introduces a wider range of features to the trading platform, such as cross-chain interoperability, digital identity management and distributed Autonomous organization (DAO) governance, among others. These innovations not only enable users to manage their assets more flexibly, but also enhance the transparency and impartiality of the platform.

New business models brought about by Web3

Web3 technology also brings new business models to digital currency trading platforms. For example, platforms can attract users to participate in governance and decision-making by issuing flat Taiwan dollars. In addition, some decentralized platforms reward users for providing liquidity through "liquidity mining" and "pledge" mechanisms, thereby improving trading depth and platform stickiness. Another notable Web3 innovation is DAO governance. The DAO is a blockchain-based decentralized organizational structure where users of the platform can participate in the decision-making and governance of the platform by holding tokens. This model not only increases user engagement, but also offers a more democratizing choice in the direction of the platform.

The combination of Web3 and a digital currency trading platform signals a new round of change in the fintech sector. Web3 technology empowers users with more autonomy and security through decentralization, smart contracts and blockchain technology, while the digital currency trading platform provides more efficient financial services to users around the world through innovative business models and technical means.

In the future, as the technology matures and the regulatory framework improves, Web3 and digital currency trading platforms will play an increasingly important role in the global financial system. Both individual users and institutional investors are expected to benefit from this transformation and experience more secure, transparent and efficient financial services.

With this background in mind, BitSasci CRYPTO GROUP LIMITED has created BitSasci Exchange with the goal of building a mature digital currency trading platform fully suited for the Web3 era.

Chapter 2: An Overview of the BitSasci Exchange

2.1 Introduction of BitSasci Exchange

BitSasci Exchange is the world's leading Web3 based digital currency trading platform created by BitSasci CRYPTO GROUP LIMITED in conjunction with the world's top capital, technical team and community, committed to the Web3 era, To build a safe, stable, fair, transparent and extensive trading space for global users, and continue to expand DeFi, GameFi and other diversified ecosystems on the basis of market conditions, perpetual contracts, currency trading, balance financing, pledge lending and other basic businesses to meet the diversified trading needs of global users. At the same time, it is committed to providing users with one-stop digital asset trading and financial service experience. The platform takes community co-construction and revenue sharing as its operating philosophy, and provides users with rich and practical investment tools, so that users can easily obtain more investment income in the cryptocurrency market.

BitSasci Exchange development team members are from the international top scientific research institutions and blockchain technology development team. While focusing on improving the user experience, we continue to upgrade platform technology and improve the ecosystem. Relying on the value, we accumulate Web3 ecological resources and energy and export this energy to the entire industry with scientific and efficient management and operation methods. Finally, through the empowered

application, the whole ecology is fed back, and the development trend of circular empowerment and continuous growth is finally formed.

At present, BitSasci has set up independent trading business and operation centers in Thailand, Dubai, Hong Kong, Taiwan, Japan, Singapore, Canada, the United States, South Korea and other countries and regions. In terms of language adaptation, the platform adopts multi-language versions, currently supports Chinese, English, Japanese, Korean, Arabic, Brazilian Portuguese and other languages, and will continue to expand more service languages in the future. At the same time, the platform is in a leading position in the world in terms of technology platform, product feeder, security risk control system, operation and customer service system.

Industry innovation leader

Access to face recognition verification capabilities in 2020, making transactions more secure; Open the authentication advertiser mode, so that transactions are more secure. At the same time, it will introduce innovative functions such as one-click coin buying to make transactions more convenient.

Anti-fraud and positive wind practitioners

Safety education reached 3.6 million people; In 2022, it will launch medium-high risk coin withdrawal interception, and realize the ability to intercept and block pig killing pan fraud in advance in the same year.

7*24 hours guard

The industry's first 7x24 customer service support, professional service; Back-end risk control 7x24 manual inspection, rapid response; Serving tens of millions of users in more than 170 countries.

Top security risk control capabilities

Refined risk control intelligence work, focusing on pre-warning prevention and control; Continuously iterating risk control strategies and covering all business scenarios with strategy factors; OTC purchase time limit withdrawal limit, covering all users of the site, withdrawal limit time is greater than T+1, to ensure the safety of platform funds.

In order to have the ability of sustainable development, BitSasci is building a top international community, attracting international high-quality blockchain public chain, international financial institutions, international digital asset regulators, international outstanding scientific and technological personnel, international entity industries on the chain demand side to join the community, in order to promote the Web3 community and the globalization of trading products. The BitSasci team has not only strong technical capabilities, but also excellent scientific research capabilities, and has achieved outstanding research results in many fields such as distributed ledger and cryptography.

Chapter 2: An Overview of the BitSasci Exchange

2.2 BitSasci CRYPTO GROUP LIMITED

BitSasci CRYPTO GROUP LIMITED is a company focused on the field of blockchain technology and Web3 applications. It is committed to promoting the innovation of blockchain technology and Web3 financial applications, providing efficient, secure and reliable blockchain and crypto financial solutions to the market. By integrating blockchain technology and Web3, it helps the crypto financial market achieve business optimization in data security, transparency and smart contracts. At present, the business system involved in BitSasci CRYPTO GROUP LIMITED includes:

Distributed finance

BitSasci CRYPTO GROUP LIMITED is one of the first companies to study the application of blockchain technology in the financial field, and is far ahead in the field of distributed finance. It is committed to let the general public have the opportunity to enjoy the financial value contained in their financial assets, and financial business users also have the opportunity to enjoy services at a lower cost. The operation efficiency of the entire financial system has been greatly improved, while the cost has been greatly reduced.

Cross-border payments

BitSasci CRYPTO GROUP LIMITED has been continuously investing, supporting and incubating related projects in the field of cross-border payments. In cooperation with IDG Capital, Qryto has successfully implemented a number of payment-related projects. BitSasci CRYPTO GROUP LIMITED continues to promote the borderless circulation of value, and is committed to making cross-border payments more efficient, convenient and secure.

Digital transactions

Participating in or independently developing digital currency business systems have served more than 10 million users in more than 150 countries around the world. Relying on relevant digital currency exchanges, it provides digital currency storage and trading for users around the world. The digital currency storage and exchange of its related projects can realize the unified management of multiple blockchain assets, one-stop management, decentralized services, multiple security guarantees, and multi-language support functions. At present, the company has a close cooperative relationship with Bithumb, BitMEX, OKEX, DigiFinex and others.

Digital asset technology applications

BitSasci CRYPTO GROUP LIMITED is committed to promoting the creation of the third blockchain ecosystem besides Bitcoin and Ethereum, and expanding the application boundary and technical boundary of blockchain technology, so that ordinary Internet users can feel the value of blockchain technology. Successively invested in and participated in projects including: Qtum, Cosmos, Coindesk, Cryptovest, etc.

At present, BitSasci CRYPTO GROUP LIMITED has obtained several compliance licenses:

BitSasci CRYPTO GROUP LIMITED embodies the powerful power of cutting-edge technology. By deeply integrating cutting-edge technologies such as blockchain, Web3 and artificial intelligence, BitSasci Crypto Group Limited is committed to comprehensively innovating the application and tools of Web3 ecology, and injecting new impetus into the development and innovation of the future crypto financial field. To become an excellent technology leader leading the Web3 era and leading a new chapter in the future crypto world.

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2.3 Top team co-construction

BitSasci Exchange has set up a cross-field core technical team, most of whose members are from top international blockchain projects and well-known Internet companies. It has brought together the industry's best technical experts in various fields such as blockchain, digital currency, trading, payment, wealth management, DeFi, GameFi, Web development and high-frequency algorithmic trading.

Hayly Benso

Harvard University, PhD, once in the service of the world's top technology companies, led the team hatch many billions project, won the honorary title of the world's most outstanding leader, in 2014 into the block chain, the digital field outstanding achievements, have the top block chain circles and resource system, very good at currency trading, contract trading, arbitrage financing, etc.

Adrian doctor

C language experts, blockchain technology experts, long-term research on the application of blockchain technology in the financial field. He has participated in the cross-platform transplantation of mining algorithm and the development and management of mining machine software. He has rich experience in virtual digital currency wallet and virtual digital exchange technology architecture.

Stanford

Senior programmer, PhD in computer science, California Institute of Technology, senior expert in blockchain technology application, DeFi application expert. He has rich experience in big data parallel computing and distributed algorithm optimization, and has in-depth research in blockchain, cryptography, and data mining.

Algernon

He used to be a famous blockchain software development engineer, responsible for cross-platform transplantation of mining algorithm and virtual currency such as Bitcoin and ETH, and mining machine software development on management. Algernon I have accumulated rich industrial experience in the technical architecture of virtual digital currency wallet and virtual digital exchange.

Bradley

The research focuses on big data parallel computing and distributed algorithm optimization, and it has rich research experience in blockchain, cryptography, and data mining. Bradley It will provide deep algorithm support for the project in the core mathematical model of blockchain, the core algorithm of artificial intelligence, and the parallel computing level of big data.

Justin

Graduated from Harvard University, he specializes in intelligent voice technology, social networking and traceability technology, Python, application development. In the field of intelligent interaction, he has more than 100 professional works, more than 80 core patents, and he is also the author of a number of international standards. Provide overall consulting services for the project, and provide strategic support to help the project achieve the application landing.

Chapter 2: An Overview of the BitSasci Exchange

2.4 Global Capital Support

BitSasci Exchange has received funding from Andreessen Horowitz, TechConnect Partners, Blockchain Capital, Digital Assets Capital, Innovation Ventures, among others, backed by top global capitals.

Andreessen Horowitz

It is one of the largest venture capital firms in the world, not only doing blockchain and digital asset investments, but also in other areas, such as the Internet, software, biotechnology, etc. In total, it has invested in 14 blockchain companies, earning about $55 million in profits. Major investments include: Coinbase, MakerDAO, Difinity and others.

Blockchain Capital

This is a SAN Francisco-based blockchain investment fund, founded in 2014, its investment focus includes exchanges, cryptography companies, and premium tokens, and it has made a lot of returns over the years. Major investments include: Circle, Coinbase, Blockstream, Kraken, Ripple, and others.

Innovation Ventures

This is a venture capital firm focusing on blockchain projects, which is committed to finding those blockchain projects with unique innovative value in different fields. The investment philosophy is to focus on the mining of potential value, and has invested in and supported a number of innovative blockchain projects. This investment in BitSasci Exchange is mainly to reach an agreement on the future exploration of Web3 financial field and digital identity verification system, and achieve innovation and win-win through capital and resource support.

TechConnect Partners

Techconnect Partners is a leading technology innovation investment and advisory firm focused on providing financial support and professional advice for cutting-edge technology projects, having successfully invested in and supported several leading blockchain projects. This investment in BitSasci Exchange will provide a full range of technical consulting and marketing support for the project, aiming to help the platform to rapidly expand internationally.

Digital Assets Capital

It is an investment institution focused on the digital asset sector, dedicated to finding digital asset projects with innovation and potential, with extensive investment experience in the blockchain sector and keen insight into technological innovation and market demand. This time, we deeply recognize the prospect of BitSasci Exchange's exploration in the field of digital asset finance, so we invest in and promote BitSasci Exchange to jointly explore digital financial innovation opportunities.

Chapter 3: BitSasci Exchange business module

As the world's leading Web3 digital currency exchange, BitSasci Exchange's business modules cover: real-time quotes, perpetual contracts, currency trading, financial management, lending and Web3 investments such as DeFi, GameFi and AI fields.

Chapter 3: BitSasci Exchange business module

3.1 Real-time market information

BitSasci Exchange provides real-time market information and blockchain data information for digital currencies to users around the world. It not only provides real-time virtual currency price data, but also covers market depth, trading volume, historical price and other data analysis. Users can obtain real-time price, market value, trading volume and other data of thousands of cryptocurrencies around the world through the platform, helping users to keep abreast of market dynamics.
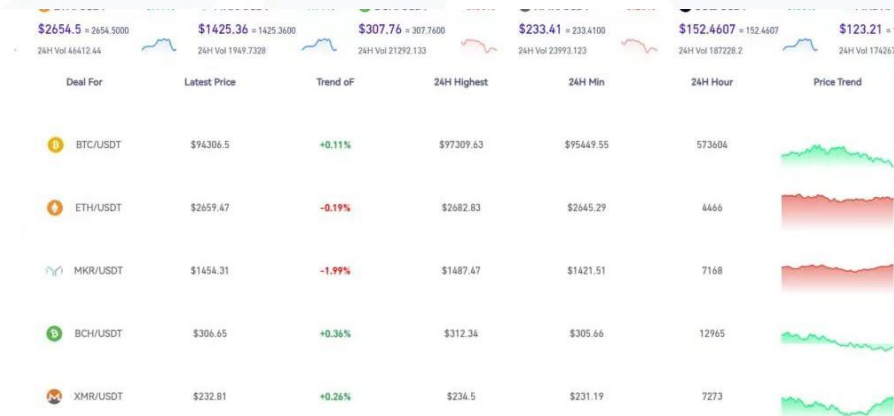
- **Real-time price inquiry** : BitSasci provides real-time price inquiry of various virtual currencies around the world, so that users can get the latest market information in the first time.

- **Market in-depth analysis** : BitSasci through the real-time statistics of market transaction depth, buy order and sell order, users can better analyze market liquidity and make more accurate trading judgments.

- **rich currency support** : BitSasci supports a variety of mainstream virtual coins and their trading pairs, covering the needs of most users.

- **user community interaction** : BitSasci has user discussion forums, information push, investment advice and other services, users can exchange experience and share market information with other investors.

Chapter 3: BitSasci Exchange business module

3.2 Perpetual Contract

The BitSasci exchange supports USDT margin perpetual contracts in a long mode, where users can capture gains on the rise/fall of the digital asset price by judging the rise and fall and choosing to buy long or sell short contracts. Perpetual contracts do not have a delivery date and users can hold them forever.
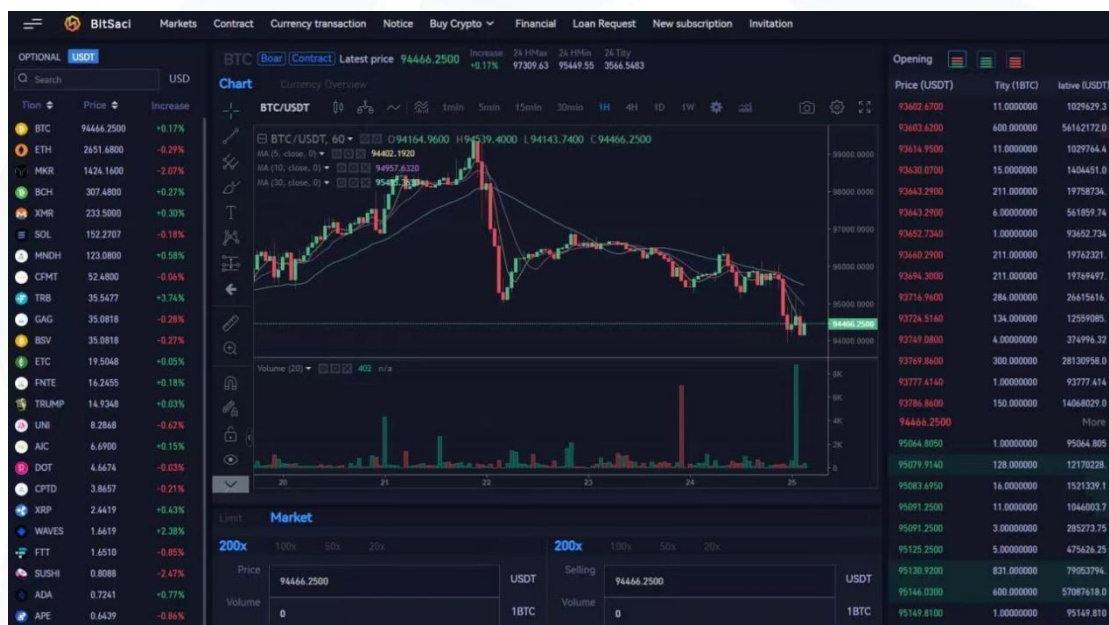
6. Calculation of trading interests and profit and loss of contracts:

• Account interest: The USDT-based Perpetual Account interest represents the total interest in the USDT-based perpetual account in that currency. The account equity of each contract is calculated independently of each other and is calculated as follows: Total equity of USDT perpetual Account = account balance + unrealized profit or loss.

• Account balance: Account balance refers to the amount of currency held by the user in the USDT perpetual contract account.

• Unrealized profit or loss: Unrealized profit or loss is the profit or loss of the user's current position in the USDT-based perpetual contract of that variety, and the unrealized profit or loss

changes with the latest transaction price change.

Long position unrealized profit and loss = (1/ average open position price - 1/ latest traded price) * Number of long position contracts * contract face value * latest traded price

Short unrealized profit/loss = (1/ last traded price - 1/ last traded price) * Number of short contracts * face value * Last traded price

In the future, BitSasci Exchange will continue to deepen the field of contracts, and expand the multi-currency contract trading services including second contracts, delivery contracts, etc.
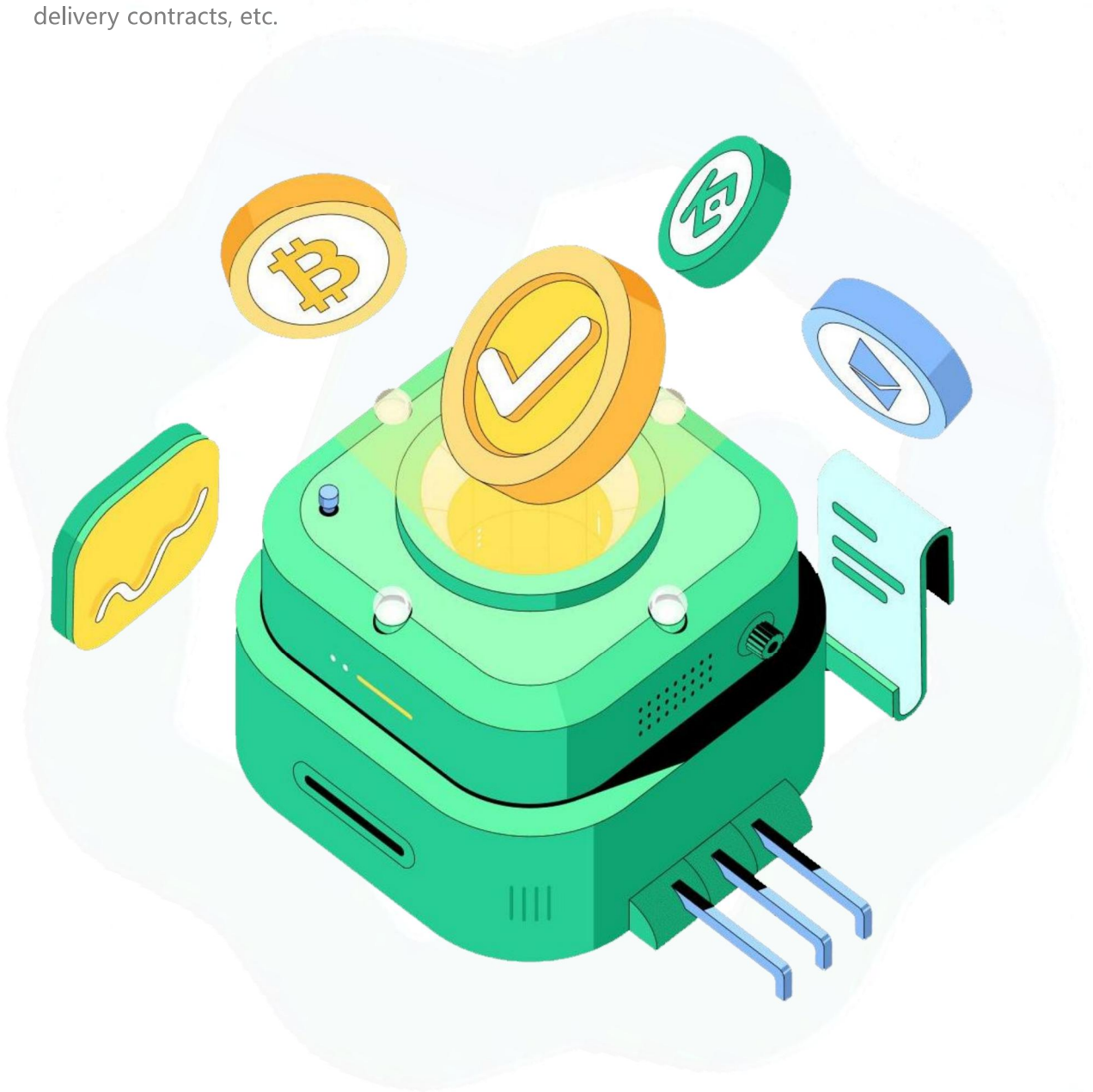
Chapter 3: BitSasci Exchange business module

3.3 BitSasci Exchange

BitSasci Exchange leads the innovative mode of bitcoin trading, provides several mainstream virtual digital currency trading, and is committed to providing a safe, fair, open and efficient blockchain digital asset trading platform for digital currency enthusiasts.
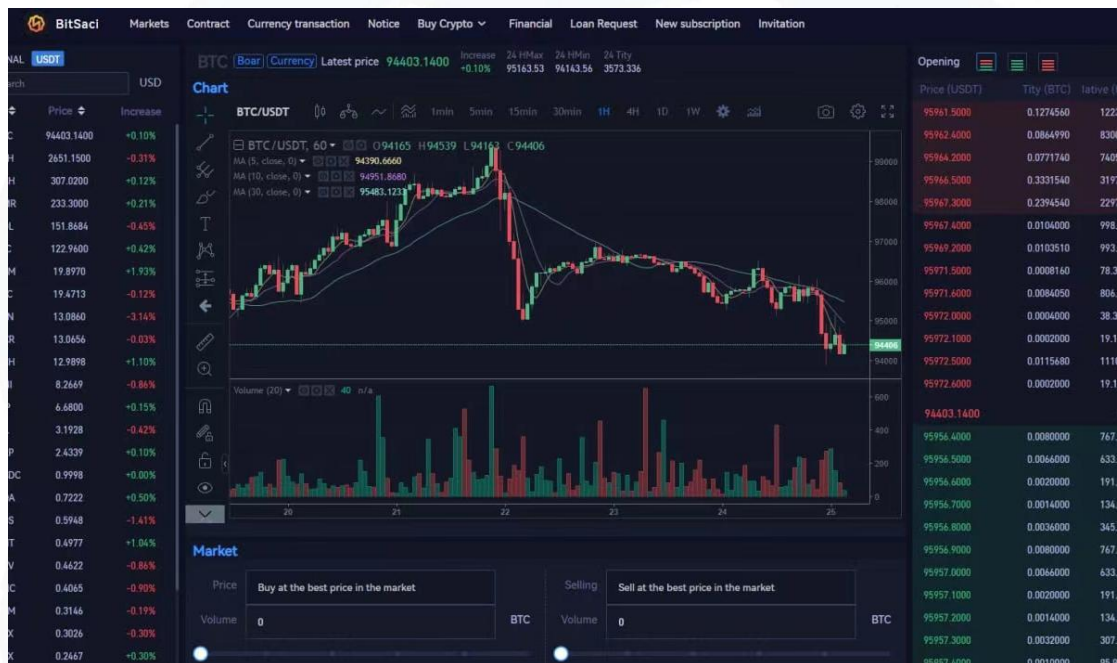
• **Leading liquidity services:** provide 300+ mainstream currency pairs, liquidity of hot currency pairs, top trading depth, continuous K-chart.

• **Professional solutions:** Provide mainstream currency trading liquidity, Taiwan dollar liquidity solutions.

• **Low trading cost:** competitive tiered trading rates, the larger the transaction volume, the lower the commission.

• **Diversified functions:** including custom parameters, financial level monitoring, professional risk control management, complete reports and other functions.

BitSasci Exchange connects to the whole network through the API interface, providing investors with sufficient digital asset trading. The trading area is divided into three sections: mainstream currency area, potential currency area and New currency area, supporting all mainstream currency transactions in the market. The transaction price can adopt market price trading and limit price trading, and users can trade according to their own needs. At the same time, in order to prevent users from placing orders incorrectly, which may cause abnormal market price fluctuations and personal capital losses, BitSasci Exchange will provide real-time reminder services. Support USDT, BTC, ETH and other mainstream currency trading market, for example, when the user holds USDT, you can use USDT to buy any currency that supports USDT trading pairs, and so on.

Example of the BitSasci Exchange Coin trading process:

Step 1	Step 2	Step Two
Open BitSasci exchange website (https://www.BitSasci group.co), enter the dollar currency trading.	Select the trading area (for example, the BTC trading area is the trading of other currencies against BTC) and select the currency pair you want to trade.	Choose to buy or sell the corresponding currency, the order type can choose limit order, advanced limit order, etc.

Take the limit order as an example, enter the price and quantity of the coins you want to buy and click Buy to buy the corresponding virtual coins. The handling fee in the coin transaction is what currency is purchased and the amount of what currency is charged as the handling fee.

BitSasci Exchange has supported coin trading, LTC/BTC, ETH/BTC, BCH/BTC, ETC/BTC, BTC/USDT, LTC/USDT, ETH/USDT, BCH/USDT, ETC/USDT, BTC/BTC, ETH/ETH, etc. In the future, more trading pairs of coins will be expanded.

OTC trade advertising area

OTC over-the-counter trading refers to not through the trading platform to buy, OTC trading is a form of advertising, two-way trading, free trading, safe and reliable.

In order to meet the needs of global users in different trading forms, BitSasci Exchange has established a set of offline digital currency purchase system independent of the exchange. Everyone can publish purchase/sale advertisements in the OTC trading advertising area of BitSasci Exchange, and purchase/sale users can buy/sell through offline means. After the transfer is completed, the platform will confirm whether it is completed. After clicking the confirmation, the platform will transfer the seller's digital currency to the buyer. BitSasci Exchange OTC trading advertising area can establish a reputation system for each user.

C2C trading area

C2C trading is also a kind of over-the-counter trading, is a kind of paving the way for the existence of currency transactions, basically can be said to be a channel to provide recharge, there is a way for merchants to settle in, and there are some ways to recommend matching. The platform does not touch funds in it, and it is an upgraded version of over-the-counter trading. The C2C trading area of the BitSasci exchange is a place where information is released for buyers and sellers of digital currencies, and the trading parties publish trading advertisements for buying and selling on the platform according to demand. Similar to the "e-commerce" model, after the buyer "snaps" a certain amount of digital currency, the BitSasci exchange locks up the seller's digital currency. According to the agreed payment method, the buyer pays the seller in US dollars or other sovereign currencies and confirms the completion of the payment. After the seller receives the payment, confirming that the transaction was successful, the BitSasci exchange automatically releases the locked digital currency to the buyer.

For newbies, the first step to start trading in digital assets is to buy a digital asset. At present, the operation of buying and selling digital assets on some digital asset trading platforms in the market is too complicated. In order to make it more convenient for novice users to buy and sell digital assets, BitSasci Exchange can realize one-click coin buying, so that more people can easily participate in the crypto industry.

In the future, BitSasci Exchange will continue to open up the legal legal currency channels of various countries, and well-known banks will provide legal currency recharge and withdrawal and settlement services, and will soon launch legal currency trading pairs. The legal currency channel and legal currency trading pair will bring a large number of incremental users to the exchange. BitSasci Exchange will rely on the resources of traditional finance and the advantages of large institutions, have a more sensitive sense of legality and regulatory compliance, and have stronger support in financial licenses and traditional banking channels.

Chapter 3: BitSasci Exchange business module

3.4 Balance Financing

BitSasci Exchange fully applies the technical thinking of blockchain, regards blockchain technology as a tool to break through the shackles and solve the single problem of financial services, so that every subject in the Internet ecological group can enjoy the progress brought by science and technology, and every subject can invest in digital currency quickly and conveniently on BitSasci exchange. Efficiently and confidently complete each digital currency transaction, but also enjoy the global digital currency financial services provided by BitSasci exchange, all the user's information transmission, asset trading and income distribution activities, will be protected by the technology based on the blockchain cannot be tampered with.

The deposit income is one of the core products of BitSasci Exchange's financial management, and it is also the manifestation of the income trading service.

BitSasci Exchange Wealth Management will help connect users who have spare digital assets and need to borrow coins. It has the features of deposit-on-demand withdrawal, hourly interest rate and support for interest rate customization. After the user transfers the digital asset to BitSasci exchange, the system will judge whether the loan is successful at each hour according to the lending rate set by the user. After the loan is successful, the interest of the hour can be obtained. Otherwise, the interest cannot be

obtained, and the matching result needs to wait for the next hour.

As a digital currency derivative financial product for investors, BitSasci Exchange Financial offers two types of financial management, current and fixed. Demand banking can be subscribed or redeemed at any time, while fixed-term banking needs to be subscribed and redeemed based on rules. The term/current income of BitSasci Exchange Banking is capital protected banking, 100% of which guarantees the safety of the principal. It also has unique advantages such as flash access, stable capital protection and low investment threshold.

BitSasci Exchange Financial management not only provides the service of withdrawing lightning into the account, but also greatly improves its clearing and settlement ability by adopting distributed architecture and other technologies, providing users with ultra-low investment threshold, so that small and medium-sized retail investors holding small amounts of digital assets can also participate in investment and obtain considerable returns.

In the case of ensuring the absolute safety of investors' principal, BitSasci Exchange Financial Management adopts a settlement model based on "day" to give investors more sense of security, which fills the gap of T+0 products in the digital currency financial service industry. When investors need to use the financial assets of BitSasci exchange, T+0 product features realize that the assets within the BitSasci exchange agreement can be redeemed at any time, real-time account, the whole process is simple and efficient.

BitSasci exchange financial products will create sustainable value for users who hold currencies. Users who participate in financial management can lend cryptocurrency assets, and redeem the principal according to their actual situation, so as to gain interest. Digital currency assets can also be increased without cryptocurrency trading. BitSasci exchange hopes to provide diversified options for diversified users under the premise of ensuring the safety of digital currencies. Aggressive users can trust their digital assets and earn short-term profits. Holding users can entrust digital currency assets to the platform and continuously increase their assets without trading.

In the future, according to the real-time market demand, BitSasci Exchange will be open to support more cryptocurrency currencies and launch diversified digital currency financial investment products. In addition to supporting more digital currency assets online, BitSasci Exchange will also provide products with different lock-in periods and higher asset returns in the future, providing cryptocurrency investors with reasonable digital currency financial investment returns.

Chapter 3: BitSasci Exchange business module

3.5 Loan Service

In the demand market, the positioning of BitSasci users has changed, that is, they are both depositors and lenders, and the platform will provide mortgage loans for lenders through the funds of depositors/lenders. The depositor earns interest on the ongoing loan. Because the loan is secured, the savers' money is maximized.

Loan Agreement

The network framework of the BitSasci lending protocol is based on EVM smart contracts, from deposit users to deposit cryptocurrency to loan users to lend cryptocurrency; From the time the loan user repays the debt or is forced to liquidate the debt to the time the deposit user receives interest. This is all based on smart contract

automation, which we call the blockchain service architecture. In the BitSasci lending protocol, the smart contract will fulfill its mission -- to always keep both lenders and borrowers under fair rules, and add new content to the smart contract through community proposals.

2) Loan interest rate

The logic of the BitSasci lending agreement is based on a pool of liquid funds (liquidity pool). Deposit users (depositors) will provide ample liquidity to the BitSasci lending pool, equivalent to customers who make deposits for banks, loan users (lenders) will need to use excess mainstream currencies (such as ETH) as collateral to obtain on-chain loans, while the BitSasci lending agreement acts as a matchmaking system and will not retain any assets of the user.

• When funds become available: Lower loan interest rates to encourage users to borrow. If no user makes a loan request within 24 hours, the remaining funds in the liquidity pool will be sent by smart contract to the Polygon liquidity pool for maximum profit.

• When funds run low: raise lending rates to discourage lending, subsidize interest rates to encourage users to deposit.

3) Profit distribution

When the loan user repays the debt, he needs to pay the loan principal X(1+ loan interest rate) to the BitSasci loan agreement, a part of the profits generated here will go to the Treasury as an ecological incentive, most of the profits will be issued to the deposit user as interest, and the income generated depends on the amount of cryptocurrency deposited by the deposit user.

The interest received by the deposit user is not issued in real time, but in the form of fixed income to the deposit user, the deposit user can choose the type of cryptocurrency deposited, profit rate or deposit cycle and other factors to determine the interest income, these interest will be in the premise of capital protection financing, to provide the user with compound interest income.

4) Forced liquidation

In order to better protect deposit users' funds, the BitSasci lending agreement will have to use forced liquidation, but these rules are not fixed, they are subject to change in the community's proposal:

• Loan user fails to complete repayment within the specified time: If the loan user fails to

complete repayment within the specified time, the BitSasci Loan Agreement will liquidate the loan user's collateral at the optimal price to repay the debt. The excess portion of the debt will generate additional revenue for the deposit user.

• The loan user's collateral price plummets below the loan amount: If the loan user's collateral price plummets below the loan amount, the BitSasci Loan Agreement will liquidate the loan user's collateral in time to repay the debt, and the resulting loss will be reimbursed by the BitSasci Treasury to the deposit user.

5) Redeem the deposit

The deposit user can initiate the redemption unconditionally. Once the deposit user redeems the funds, it means that the user no longer enjoys any benefits. After redemption, the user can continue to earn profits by redepositing assets. The BitSasci lending agreement does not record the user's historical deposit record, but only distributes profits according to the real-time deposit number and community relations.

BitSasci is currently actively optimized and will soon realize further improvement of its lending function. In the future, BitSasci will provide three aspects of lending services: first, mortgage & loan, such as borrowers mortgage BTC and other digital assets as collateral, choose the loan term and interest rate; The second is lending & financial management, the lender will USDT into BitSasci, choose the corresponding lending conditions such as loan term and interest rate; The third is matching & completion, the platform will match the borrower's demand with the lender's conditions, and the borrower can get funds immediately.

Chapter 4 Web3 and Multi-ecology / functional layout

4.1 Web3 Investment

With the rapid development of Web3 technology and its wide application in various industries, BitSasci recognizes the strategic importance of expanding its business in the Web3 space. In order to better meet the market demand and grasp the development trend of the industry, BitSasci decided to use BitSasci Labs to actively invest and incubate innovative projects in the field of Web3, build a cryptocurrency industry ecology, help high-quality projects grow, and promote the healthy development of the industry.

Web3 contains endless possibilities and is rapidly promoting the innovation of global information technology, finance, social networking, gaming and other fields. BitSasci hopes to share the benefits of Web3 with users, businesses and developers around the world to open up a wider digital world.

Focus on the trend of The Times, insight into the industry pulse

Web3 is a new generation of decentralized, secure and interactive Internet technology. With its wide application in finance, social networking, gaming and other fields, Web3 has become a key force to promote innovation and upgrading of the blockchain industry. BitSasci Labs closely follows the latest developments of Web3 to bring more quality investment opportunities and services to the community.

Build an ecological alliance for mutual benefit

BitSasci Labs will build an open and inclusive platform for ecological cooperation, inviting outstanding enterprises and institutions in various fields to participate and build a prosperous ecosystem with Web3 as the core. BitSasci firmly believes that through the integration of resources and complementary advantages, it will help promote the development of the entire industry.

All-round support to help the project growth

BitSasci will provide comprehensive services for the supported projects, including financial support, technical consultation, marketing and industry resources, in order to help the growth of the projects. At the same time, BitSasci will strengthen the incubation of original and innovative projects to promote the development of the industry.

Advocate transparency and safeguard fairness

BitSasci Labs is committed to promoting the principles of fairness, equity and transparency in the Web3 space, with a view to building a sustainable industry environment and providing better investment opportunities for the community.

This is a new journey, and BitSasci will bring more high-quality investment opportunities and services to the majority of users. At present, BitSasci has entered into a strategic partnership with ConsenSys Ventures to jointly invest in and support outstanding projects in the Web3 space, and explore innovative projects in the Web3 space to provide more potential assets for investment, and bring more high growth potential investment opportunities for investors. At the same time, BitSasci pays close attention to the latest development trends and regulatory policies in the Web3 field, and provides investors with comprehensive risk control recommendations.

Chapter 4 Web3 and Multi-ecology / functional layout

4.2 DeFi domain layout

BitSasci has entered into an in-depth strategic cooperation agreement with Pantera BlockchainFund to jointly develop outstanding investment projects in the field of decentralized finance DeF. The two parties will make full use of their rich experience and excellent strength in the field of digital assets and fintech to deeply explore the investment value and frontier trends of the DeFi market for the majority of users, and present more high-quality investment opportunities.

As a leading innovation in the field of fintech, DeFi aims to provide more efficient, secure and transparent financial services to users around the world by building a decentralized financial ecosystem.

Core features of the DeFi field include:

• **Disruptive financial services innovation :** With the help of blockchain technology and smart contracts, DeFi greatly improves the efficiency of financial services, reduces operating costs, expands coverage and reshaped financial experience.

• **Strong value creation ability:** DeFi project continuously creates rich profits for the majority of users and investors by virtue of diversified methods such as pledge, loan and prediction machine.

• **Diversified investment approach:** DeFi enriches investment categories, such as lending agreements, decentralized exchanges (DEX) and stablecoin projects, to meet the unique needs of all types of investors.

With the rapid development of blockchain technology and the cryptocurrency market, the DeFi sector is showing great growth potential and broad market opportunities. Under the cooperation framework with Pantera Blockchain Fund, BitSasci will make every effort to explore high-quality DeFi investment projects and provide users with more diversified high-quality assets and trading options. At the same time, BitSasci will pay close attention to the latest development trends and regulatory policies in the DeFi field, and provide investors with comprehensive risk control recommendations.

Chapter 4 Web3 and Multi-ecology / functional layout

4.3 GameFi domain layout

BitSasci Platform has entered into an investment cooperation agreement with AccalPartners to jointly invest in quality projects in the GameFi field. The cooperation will focus on research in this field and jointly explore investment prospects in the Gamefi field.

GameFi is an innovative platform that disrupts the traditional gaming industry and aims to bring unprecedented experiences and value to gamers and investors by closely integrating gaming with cryptocurrencies.

GameFi Features include:

• **A whole new game experience**: It brings more fun and value to players by combining games and cryptocurrencies.

• **Strong value delivery**: By combining the virtual currency with cryptocurrency, it brings more revenue for players and investors.

• **Diversified investment opportunities**: GameFi Provide investors with diversified investment opportunities, including investing in game projects and cryptocurrencies.

The GameF space is dynamic and has strong growth potential. As the gaming and cryptocurrency industry continues to evolve, the GameF space will show good growth momentum. BitSasci hopes to better explore and invest in opportunities in the space for users, as well as provide more quality assets and trading options. In the future, BitSasci will continue its efforts to continuously improve the quality and efficiency of BitSasci's services to bring more value and benefits to investors.

BitSasci

Chapter 4 Web3 and Multi-ecology / functional layout

4.4 AI field layout

With the rapid development of AI technology and its wide application in various industries, BitSasci believes that it is of great significance to expand its business in AI field. In order to better meet the market demand and grasp the development trend of the industry, BitSasci decided to use BitSasci Labs to actively invest and incubate innovative projects in the field of AI, build the ecosystem of the cryptocurrency industry, help high-quality projects grow, and promote the innovation and development of the industry.

BitSasci Labs will adopt the following strategies when laying out the AI field:

• **Select quality AI projects:** BitSasci will conduct in-depth investigation and rigorous evaluation of projects in the field of AI, and select potential and innovative projects for investment and incubation.

• **Provide all-round support:** Provide a series of support services such as financial support, technical guidance, marketing and industry resources for the selected projects to help the rapid growth of high-quality projects.

• **Establish an ecological alliance:** Build an ecological cooperation platform, invite outstanding enterprises and institutions from all walks of life to participate, and form a cooperative ecology conducive to the development of the industry.

At present, BitSasci has reached an in-depth strategic cooperation agreement with Pantera Capitel to jointly explore quality investment projects in the field of artificial intelligence (AI). It will make full use of the rich experience and excellent strength of the two parties in the field of digital assets and financial technology to deeply explore the investment value and frontier trends of the AI market for the majority of users, and present more investment opportunities.

As a leading innovation in the field of science and technology, AI aims to provide more efficient, accurate and convenient services to users around the world by building an intelligent technology ecosystem.

BitSasci

Core features of the AI field include:

- **Intelligent decision support :** Through complex algorithms and big data analysis, AI technology can carry out deep learning and pattern recognition, provide scientific and accurate decision support for decision-makers, and help improve decision-making quality and efficiency.

- **Adaptive and learning ability :** AI systems have strong self-learning and adaptive capabilities, and can learn from historical data and constantly optimize their own performance to adapt to changing environments and needs.

- **Innovation and development-driven:** The AI field continues to promote the innovation and development of science and technology. Through continuous research and improvement of A | algorithms, models and technologies, more powerful and intelligent systems can be implemented.

With the rapid development of science and technology and digital economy, the field of AI is showing great growth potential and broad market opportunities. BitSasci will make every effort to explore high-quality AI investment projects and provide users with more diversified high-quality assets and trading options. At the same time, BitSasci will pay close attention to the latest development trends and regulatory policies in the field of AI, and provide investors with comprehensive risk control recommendations.

Taking the AI field as an opportunity, BitSasci is continuously expanding its business territory and bringing more high-quality investment opportunities and services to the majority of users.

Chapter 4 Web3 and Multi-ecology / functional layout

4.5 BitSasci Wallet

In response to users' demand for secure storage and management of digital assets, BitSasci Exchange launched the BitSasci Wallet product.

As the most basic part of the entire BitSasci ecosystem, BitSasci wallet supports the storage and management of a variety of digital assets, including mainstream digital assets such as BTC, ETH, LTC, and will also support the storage and management of some mainstream stablecoins.

• **Decentralized wallet: It** ensures data security by storing private keys locally and contains several layers of pictograph.

• **Hot Wallet and Cold wallet:** Log in to the hot wallet and store it in the cold wallet for physical isolation and dual protection.

• **Node stability and reliability:** Support for free switching and automatic reconnection between nodes.

BitSasci Wallet uses advanced security technology and multiple authentication mechanisms to guarantee the security and privacy of users' digital assets. At the same time, BitSasci will also provide users with some practical functions, such as asset statistics, transaction records query, etc., so that users can more easily understand their digital assets.

• **Easy to use:** Support for creating/importing one-click wallets, HD wallets, importing ledger wallets via Bluetooth and creating multiple wallet accounts.

• **Multi-signature feature:** Multiple accounts manage a set of assets with a variety of use cases and new signature pipelines.

• **Easy switching and management:** It can also be provided in the form of mobile applications and browser extensions, fully supporting iOS and Android systems to meet the needs of users in different use cases.

• Available SDKS and testnets: provide services for developers to help scale the ecosystem by working together.

In the future, BitSasci will continue to improve and optimize the features and services of the BitSasci wallet.

Chapter 5: BitSasci Technical system

5.1 Technical Structure

BitSasci's underlying system is a high-speed, secure and scalable blockchain infrastructure, consisting of two layers of super nodes and storage connection nodes. It also processes millions of transactions per second through IPFS technology, and provides unlimited storage capacity for DApps through a secure decentralized cloud database.

The BitSasci architecture system consists of the following parts, which are:

• Isomorphic multi-chain chain system, providing high TPS access capabilities, cross-chain transaction capabilities, etc.;

• P2P network system BitSasci P2P, providing network layer addressing capabilities;

• multi-database cluster system, providing unlimited expansion of secure encrypted data storage capabilities;

• BitSasci system's underlying structure support system, including a block storage system and a distributed file system;

• Attribute based encryption authentication access system composed of multi-node consensus, database access control gateway;

• a data integrity verification organization composed of multiple authenticator nodes;

• An adaptive probe system that provides memory data storage, performance monitoring, security monitoring, and Metrics data upload capabilities.

The core of BitSasci system is the link library separation mechanism and function sub-chain design. Decentralized applications can store data in on-chain and database systems respectively according to different trust and public verification levels of data.

BitSasci system provides different types and levels of data collaborative management. Moreover, the multi-database cluster system is a Permissionless environment. BitSasci system also completes access control mechanism based on multi-authority attribute based encryption, as well as complete proof of possession of stored data.

The main reason for the design of link database separation is to consider the future upgrade and update of the system, because the update of the blockchain system will lead to the fork of the system, which will cause irreversible impact on the entire economic system, so we put the main data processing capacity on the database system, and the access control system of the database system through the function of the sub-chain to complete. Functional sub-chain design one is for the future expansion, more is to complete the two core functions of the decentralized storage system: privacy protection and data holding proof. We use an efficient multi-authority attribute-based encryption scheme to achieve the cloud storage data access control function and encryption function.

Accounts

BitSasci uses the concept of state to store a series of accounts, each with its own identity and unique data. In some cases, the accepting account has a code that needs to be executed, and the transaction triggers the execution of that code, then the internal memory of the account may change, and additional information may even be created to be sent to other accounts, resulting in a new transaction.

Merkle tree

Bitcoin does this through something called a Merkle tree, and IPFS also stores data through a directed acyclic graph data structure of the Merkle tree. The Merkle tree is simply that when the file is large, the IPFS system will split the file when the user uploads the file to the IPFS node, and then each file will use a hash value as its file name. And then these files are saved by a number, in terms of the total, for example, this number is like there are many leaves, and then the branch with two leaves is actually a hash of the two leaves, so from the leaf to the branch, and then from the branch to the root. And in this way, you can make sure that when the data on a particular leaf changes, the hash value of the root changes as well. This method is actually the same as the data storage method of Bitcoin. Its purpose is to allow the entire network to verify the integrity of a piece of data as quickly as possible. Because we don't need to compare the whole file, we just need to see if the root value is still the same. If yes, the different nodes can prove that the data has not been tampered with.

The Merkle Patricia tree/trie, conceived by Alan Reiner and implemented in the Ripple

protocol, is the main data structure of the BitSasci system and is used to store all account states, as well as transaction and receipt data in each block. The Merkle Patricia tree/trie is a combined abbreviation of the Merkel tree and the Patricia tree, and the structure created by combining the two trees has the following properties:

• A hash value that maps uniquely to the root for each unique key-value pair; In Merkle Patricia tree/trie, it is not possible to fool members with only one key-value pair (unless the attacker has ~2A128 computing power);

• The time complexity of adding, deleting or changing a key-value pair is logarithmic.

Merkle Patricia tree/trie provides BitSasci with an efficient, easily updated fingerprint that represents the entire state tree.

RLP encoding

RLP is intended to be a highly simplified serialization format whose sole purpose is to store nested arrays of bytes. Unlike existing solutions such as protobuf BSON, RLP does not define any specified data type - such as Boolean, 20floa, double, or integer. It simply stores the structure as a nested array and leaves it up to the protocol to determine what the array means. RLP also does not explicitly support map sets, semi-official recommendations are to adopt [[kl, vl], [k2, v2],...] Is a nested array of [kl,k2...] Sort by the standard string.

A scheme that has the same functionality as RLP is protobuf or BSON, which are the algorithms that are used all the time. However, we prefer to use RLP because:

• It is easy to implement;

• Byte consistency is absolutely guaranteed.

Node architecture

BitSasci system itself is an isomorphic multi-chain design, including verification node (super node) and storage node (voting node). Super node is the "block producer", referring to those nodes that collect, package and verify transaction information to the block. It is the basis of stable operation of BitSasci system network, which is based on POS consensus mechanism. The working principle of POS is as follows: similar to property stored in a bank, this model will allocate interest to the user according to the amount and time you hold digital currency.

In simple terms, it is a system that pays interest to users according to the amount and time of currency held by users. Under the proof of equity POS mode, there is a noun called coin age, and each coin generates 1 coin age every day. For example, users hold 100 coins for a total of 30 days, then the coin age is 3000. If the user finds a POS block, the coin age will be emptied to 0. For every 365 coin age emptied, the user will receive 0.05 coin interest from the block (assuming that the interest can be understood as 5% per annum), then in this case, the interest = 3000 * 5% / 365 = 0.41 coins, which is the interest on the coins. In addition, POS-based pledge lending will also have an efficient, safe and stable system performance.
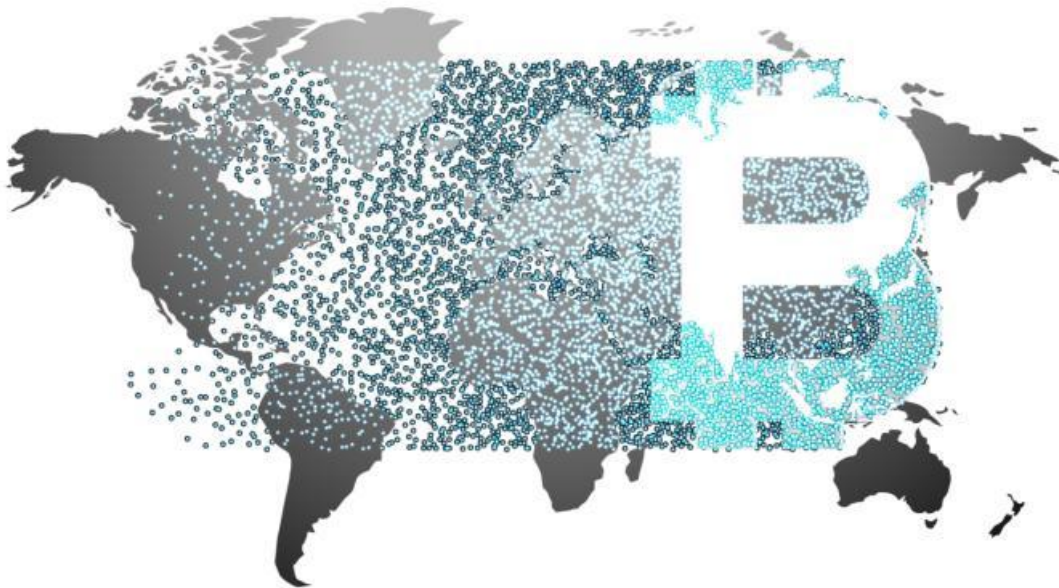
Chapter 5: BitSasci Technical system

5.2 Database Design

BitSasci system adopts IPFS distributed storage for database design.

IPFS (Inter-Planetary File System) is a globally oriented, peer-to-peer distributed version file system that aims to complement (or even replace) the Hypertext Transfer Protocol (HTTP) that currently rules the Internet, connecting all computing devices with the same file system. The idea is to replace domain-based addresses with content-based addresses, where users are looking for content stored somewhere rather than at an address, without verifying the identity of the sender, but only the hash of the content, by making web pages faster, more secure, more robust, and more durable.

At present, the traditional HTTP has the problem of hyper-centralization, there are too many insecure factors in security, from the recent network security accidents can be seen the disadvantages of centralized network storage, IPFS fundamentally changed the way to find, using HTTP to find the location, and using IPFS we find the content.

IPFS is the general purpose of the infrastructure, there is no storage restrictions. Large files are split into smaller chunks that can be downloaded from multiple servers at the same time. The IPFS network is a fluid, fine-grained, distributed network that can be well adapted to the requirements of a content delivery network (CDN). This design makes it possible to share all kinds of data, including images, video streams, distributed databases, entire operating systems, module chains, backup of 8-inch floppy disks, and most importantly, static websites.

IPFS files can also be abstracted into special IPFS directories, labeled with a readable file name (transparently mapped to an IPFS hash), and accessed with a directory index like HTTP. The process of creating a website on IPFS is the same as in the past, and the instructions for adding a website to an IPFS node require only one command: ipfs add -r yoursitedirectory. The connections between web pages no longer need to be maintained; IPFS's own lookups take care of them. IPFS does not require every node to store everything, and owners of nodes are free to choose what data they want to maintain. It's like a bookmark, which backs up its own site and voluntarily serves content of interest to others, except that the bookmark doesn't eventually become invalid, as it used to. Copying, storing, and supporting websites between IPFS nodes is easy, using only a single command and a hash of the website.

Chapter 5: BitSasci Technical system

5.3 C2C support

The original traditional centralized transaction method relies on the platform to make credit endorsement to ensure the authenticity and reliability of the transaction, but it also exposes the risk of personal privacy and asset theft. Individuals cannot grasp their own information, but in the blockchain network, personal transaction information is stored on all nodes in a decentralized manner, and anyone can openly review it, forming a multi-centralized data storage model. Skip the centralized platform to directly carry out transactions between individuals and individuals, the transaction efficiency is higher. In the blockchain system, each node is characterized by a high degree of autonomy. Any node may become the center of the stage, but does not have the mandatory central control function. Among nodes, a non-linear causal relationship will be formed through the network to achieve a decentralized, open, flat and equal system. Compared with centralized transactions, many obstacles need to be overcome due to the need to comply with the relevant regulations of the management authority to supervise customer funds. Users who trade in this way must comply with the rules of the centralized trading service providers and pay the corresponding fees.

In the future, BitSasci will solve this problem through DEX (Decentralized Exchange) decentralized trading rules to achieve both convenient and secure transactions. There are two ways to implement DEX decentralized trading: Bitcoin Cross-chain Support (BTC Relay) and Hash Locking.

Chapter 5: BitSasci Technical system

5.4 Privacy protection mechanism

The immutable and distributed characteristics of blockchain technology can indeed avoid the problem of users' privacy being mastered by centralized institutions, which leads to being sold and hacked, etc., but the open and transparent ledger allows massive user data to be exposed on the chain, and the privacy problem is still like an attic in the air, which has not been fundamentally solved. For example, the original shopping on Taobao, now decentralized, not through Taobao transactions, both parties directly mail. Although no Taobao has the data of these two transactions, their transaction data is recorded on the blockchain network, and anyone can view it.

Based on the hybrid model of account and UTXO, BitSasci implements the blockchain privacy transaction system, which retains the account system while using the UTXO system, adding ring signatures and one-time addresses, allowing the account to flow freely between privacy and public, while having untraceable and unconnected.

In addition, BitSasci uses ring signature technology to achieve privacy protection. Ring signature refers to the technology of hiding the private key from n public keys, which is specifically used to hide the transaction sender (address/public key) on the blockchain.

$$d \in \mathbb{F}^m \xrightarrow{\ S^{-1}\ } x \in \mathbb{F}^m \xrightarrow{\ F^{-1}\ } y \in \mathbb{F}^n \xrightarrow{\ T^{-1}\ } z \in \mathbb{F}^n$$

$$P$$
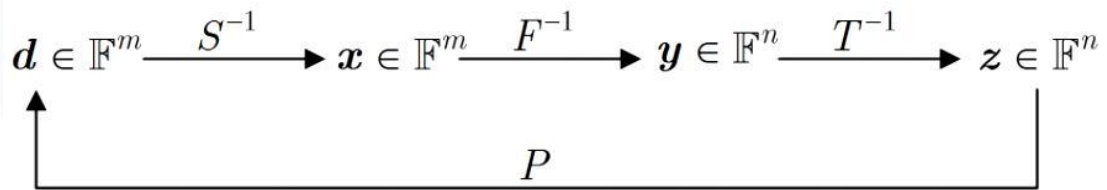
A ring signature is a type of digital signature that can be performed by any member of a group of users who each has the key. Thus, a message signed using a ring signature is signed by someone in a particular group of people, but there is no way to deduce exactly which member completed the signature: A security property of ring signatures is that it is impossible to compute which group member's key was used for the signature.

Chapter 5: BitSasci Technical system

5.5 BitSasci P2P

The network of the BitSasci blockchain is a distributed network of full nodes, where each node on the network is in equal and peer power; The nodes can also independently complete block data and transaction verification while connecting to each other point-to-point.

This Peer-to-Peer Network layer is the most important foundation on the blockchain data layer; It realizes the underlying mechanism of nodes communicating with each other in the network, connecting with each other, and confirming the correct validity of data, which supports the efficient and stable work of BitSasci blockchain system.

Chapter 5: BitSasci Technical system

5.6 Function matching network

Asset registration system:

Asset registration is one of the basic functions of BitSasci. The asset registration process is usually completed by the gateway or the gateway agent. All assets registered by the gateway or assets registered by the agent need to gain the trust of the asset owner, and only the trusted parties can trade the same asset. Registered assets are mainly divided into:

• **Currency-type assets：** Currency type assets are mainly used for gateway docking with other digital currency and digital asset platforms. For example, the gateway can register the asset code of BTC, and any account with BTC can trust the gateway and recharge the BTC assets to the gateway account. There is no limit to assets of currency types, and the gateway can register as many assets as actual currency assets.

• **Physical type assets：** It mainly refers to the digitalization of assets, which are generally registered by enterprises or institutions and sold on a commission basis. This kind of asset generally has a certain amount, after the registration, will be through the restriction of the asset registration party no longer additional issuance.

Asset query system support:

BitSasci Provide a complete asset query system for ordinary users to check the number of assets displayed by any BitSasci-based application. The asset query system supports links to different blockchain nodes to query the account situation, and can observe the generation of each block and each transaction in real time. When entering the corresponding account, it can query the balance of various assets and the records of all transactions in the account.

Matrix Trading engine:

In order to realize the top information flow processing capacity and ensure accurate information arrival and error-free processing results, the BitSasci trading platform adopts the self-developed Matrix engine system, which achieves the maximum trading processing speed of 5 million TPS and the trading matching efficiency is 35% -40% higher than the industry, providing the basic technical support for the stable and efficient operation of the platform. Meanwhile, the BitSasci platform will integrate and optimize the configuration of cloud computing for each node, so that the BitSasci can achieve the processing speed of the international top stock futures trading platform.

Operations Management System Module:

Adopt the development language:. net core Commercial and golang Laeditions

• Network isolation through VPC, VPN access mechanism to improve security;

• Use the https protocol, cooperate with high defense and WAF to improve the attack prevention capability;

• At the business level, the financial-level risk control mechanism is introduced to comprehensively improve user security.

Chapter 6: Cooperation and Development

6.1 Diversified Cooperation

ConsenSys Ventures:

BitSasci Has entered a strategic partnership with ConsenSvs ventures, a US-based blockchain and crypto asset investment firm, the venture capital arm of Consensys. ConsenSys Is one of the largest software companies in the Ethereum ecosystem, focusing on developing and supporting Ethereum blockchain technology. In the future, the two sides will jointly invest in and incubate high-quality cryptocurrency projects, help innovative project developers grow rapidly, and jointly build a prosperous cryptocurrency ecosystem.

Pantera Capital Its Pantera Blockchain Fund:

To further strengthen the ecological layout and technological advantages of BitSasci Exchange, BitSasci has reached a strategic partnership with Pantera Capital and Pantera Blockchain Fund.

Founded in 2013, Pantera Captal is an investment company focusing on blockchain and digital assets. They manage multiple funds, invest in cryptocurrencies, blockchain projects, and related businesses. Pantera Blockchain fund Is PanteraCapital's main fund, focusing on investing in start-ups and projects related to blockchain and digital assets.

BitSasci It will integrate multiple advantages, integrate the blockchain industry resources, provide better technical support for the entire blockchain ecology, and provide users with more efficient, more convenient, more secure and more transparent blockchain financial services.

Accel Partners：

In order to better serve the international market, BitSasci has reached an important strategic cooperation with Accel Partners, and the two sides will jointly layout in the global digital asset field.

Accel Partners Is a global venture capital company based in California, founded in 1983. They focus on early stage and growth stage tech startups and invest globally.

In the future, BitSasci will carry out all-round cooperation with AccelParners, combine the advantages of both sides, integrate traditional financial experience and digital asset characteristics, provide more friendly, more secure and more professional digital currency transaction services for global users, and achieve a win-win future with the majority of users.

Chapter 6: Cooperation and Development

6.2 Support for globalization development

BitSasci's global development is supported by the following resources:

Technology Team

With very mature and strong technical support, BitSasci has accumulated rich industry and technical experience in many fields such as blockchain, finance, trading, investment, Web3 protocol and community autonomy, and has made industry-leading breakthroughs in the development and application of the underlying technology of blockchain. The BitSasci team perfectly brings together senior people from multiple industries, many years of practical operation experience, and profound insights into the development of the industry.

Industry resources

BitSasci signed strategic cooperation agreements with top projects in target industries to provide strong support for BitSasci to cut into target scenarios, so as to really promote the actual landing of BitSasci application. Capital Partners include: Goldman Sachs, IDG Capital, Accel Partners, Fidelity Investment Group, IBM and others.

Liquidity Support

BitSasci has rich resources and numerous partners in the industry, and has reached cooperation with a number of international mines, active communities, investment funds, and professional investment institutions to provide sufficient liquidity for the platform. BitSasci has a professional quantitative team to connect with the market depth of the world's leading exchanges, provide total fragmented liquidity solutions, support high-frequency quantitative trading, adapt to rapid programmatic trading API interface set, and introduce market maker system.

Powerful trading tools

With the maturity of the market, the complexity of trading demand has become larger, the previous simple trading function has been difficult to meet the appetite of professional investors, BitSasci with senior experience in securities investment, combined with artificial intelligence deep learning technology, for professional investors to provide a richer suite of trading tools, including automatic investment tools, quantitative trading tools, strategies, etc. At the same time, it also allows ordinary investors to easily access professional tools, reduce the threshold of professional investment, and make trading more popular.

Business governance

Unlike ordinary projects, BitSasci has a clear and defined strategic plan for its target sectors and continues to enable free, equitable and high-value ecological prosperity in the form of autonomous communities. BitSasci is more focused and professional on using the distributed decentralization, immutable and cryptographic security of blockchain technology and the characteristics of peer-to-peer value transmission, to penetrate the target industry and quickly gain market share.

Room for growth

BitSasci's target industry is the trillion-level digital currency trading and Web3 investment market. By drawing up a sound governance structure, the development team will effectively manage matters such as general procedures, code management, financial management, compensation management and privileged operating scope to ensure sustainable development.

Money Management

BitSasci's fund management is guided by the Investor Protection Fund, strictly adhering to the principles of fairness, impartiality and openness, and with the development of BitSasci as its primary purpose. The Investor Protection Fund is dedicated to keeping and ensuring the safety and sustainability of the funds. The use of all BitSasci funds will be disclosed to all investors on a regular basis to ensure that the use of funds is public.

With the support of core competitiveness, BitSasci's commercialization logic is clear, each technical link and organization has a strong target and logic gene, and on this basis, many modularization and transformation of technical solutions or mechanisms are proposed.

Chapter 6: Cooperation and Development

6.3 Investor Protection

In order to ensure the safety of every transaction conducted by users on the BitSasci platform and ensure that assets are completely worry-free, BitSasci continuously improves and improves the security protection system. We have introduced the Merkle Security Tree technology and established a transaction security reserve plan worth up to $800 million!

BitSasci always regards the safety and reliability of trading assets as our most important responsibility. Therefore, BitSasci applies the most advanced Merkle Security Tree technology to comprehensively ensure the security of all transactions, providing a strong security guarantee for every transaction. This leading technology ensures that every transaction conducted by users in BitSasci is automatically protected, which protects the transaction security and privacy of users to the greatest extent.

In addition, in order to further enhance the security of transactions, BitSasci has set up a special transaction security reserve of up to $800 million. This reserve demonstrates BitSasci's strong commitment to user security. Even in the event of an unexpected risk event, BitSasci is able to respond efficiently and in a timely manner to ensure that your assets are fully protected.

BitSasci always regards the security of users' assets and transactions as its top priority, and BitSasci will constantly strive to improve its security protection capabilities and wholeheartedly protect users' interests.

Chapter 6: Cooperation and Development

6.4 Compliance construction

BitSasci has more than 40 security staff, including veterans who assess peripheral risks and PHDS in cryptography who work on crypto attack analysis. BitSasci also has nearly a hundred compliance officers who comb through money laundering by checking transactions. In addition, BitSasci also cooperates extensively with law enforcement. It follows strict identity verification procedures to comply with regulations such as KYC(Know your Customer) and AML(Anti-money laundering), and tracks and monitors crypto assets sent to and from its website.

BitSasci has set up a project review committee made up of renowned institutions and professionals. Under the committee, there are multiple functional departments to review the listing procedures, codes, white papers, legal compliance, finance and other aspects of the projects applying for listing. At the same time, BitSasci introduces authoritative third-party rating agencies to independently review listing projects. BitSasci introduces internationally renowned third-party authorities to participate in the review of all aspects of the project listing transaction to ensure that the review results are true, objective, reasonable and credible. In this way, the security of users' investment and income can be guaranteed.

In the future, BitSasci will provide a more fair, transparent, compliant, and fully circulating value discovery platform for global high-quality blockchain digital assets, provide a safe, stable, caring and trustworthy trading environment for global digital asset enthusiasts, and build a world-class blockchain digital asset integration ecosystem without borders and racial barriers. At the same time, BitSasci will continue to explore Web3, build a new generation of digital asset trading business map, and create a truly distributed "Web3 service ecosystem", so that blockchain technology and Web3 applications can be popularized in a wider range, so that more people can share the wealth feast brought by Web3.

Chapter 7 Disclaimer

BitSasci complies with any regulatory regulations and industry self-regulation statements that are conducive to the healthy development of the industry. Participant participation means that the representative will fully accept and comply with such inspection. At the same time, all information disclosed by Participant to complete such inspection must be complete and accurate. The digital assets involved in the project are encrypted digital codes used on the Platform and do not represent equity, debt, income rights or control rights of the Platform project. At the same time, the Platform hereby expressly does not recognize and refuses to assume the following responsibilities:

• No person shall violate the anti-money laundering, anti-terrorist financing or other regulatory requirements of any country in the exchange of assets;

• No person shall violate any representation, warranty, obligation, undertaking or other requirement set out in this White paper when purchasing digital currency and the resulting inability to use or withdraw digital currency;

• the delay or postponement of the BitSasci upgrade and the resulting inability to meet the previously disclosed schedule;

• Errors, flaws, defects, or other issues with BitSasci's source code;

• Failure, crash, paralysis, rollback, or hard fork of BitSasci;

• Failure to disclose timely and complete information about the development of BitSasci;

• any participant divulges, loses or destroys the wallet private key;

• Breach, violation, infringement, crash, paralysis, service termination or suspension, fraud, misoperation, misconduct, error, negligence, bankruptcy, liquidation, dissolution or shutdown of a third-party distribution platform;

• any agreement between the third party distribution platform and the content of this white paper is different, conflicted or contradictory;

• speculation by any person on digital currencies, the listing, suspension or delisting of digital currencies on any trading platform;

• the digital currency is classified or treated as a currency, security, commercial paper, negotiable instrument, investment or other thing by any government, quasi-governmental body, competent authority or public body to the extent that it is prohibited, regulated or restricted by law;

• any risk factors disclosed in this White Paper and damages, losses, claims, liabilities, penalties, costs or other negative effects associated with, resulting from or associated with such risk factors.

BitSasci expressly communicates the possible risks to the Participant, and by participating in the Platform Product, the participant confirms that he understands and accepts the terms and conditions stated in the Terms and Conditions, and accepts the potential risks of the Platform.