MEME BANK

MeMe.Bank Whitepaper

Super DAO Decentralized Bank Global Launch

Game Changer in the Banking Industry

2024

Catalogue

Preface

Digital assets have seen explosive growth, with over 2,000 cryptocurrencies and tokens (tokens) being traded on major trading platforms. Digital asset trading has become a global 7x24-hour uninterrupted market with a market value of hundreds of millions of dollars. With the development of blockchain technology and the improvement of the token (token) economic model, in addition to the growth of the digital asset market itself, the on-chain and tokenization of traditional enterprises also provide huge potential for the trading platform market. Tokenization is a reform of the company system, an important organizational form and opportunity for various institutions in the future, and an economic model that can truly unify the company users and the distribution subject of the company's rights and interests. The application of this model has initially formed a scale. In the near future, it is highly likely that millions or even hundreds of millions of dollars of traditional assets will be transformed into digital assets. In the future, trading products and trading methods on trading platforms will become more diversified, and the overall trading scale of the trading platform market is likely to reach hundreds of times or even several times today's.

Today, there are thousands of global cryptocurrency trading platforms, with large market growth potential and rapid changes. The competitive landscape has not yet formed, and new entrants are bound to emerge as dark horses. Today's competition in the digital asset finance industry is no longer just a technical competition, but a comprehensive and multi-level market competition in terms of token economy, governance mechanisms, ecological construction, trading systems, and community services.

Based on a deep analysis and understanding of the market industry background, we have established the MeMe.Bank project. MeMe.Bank is dedicated to building a decentralized exchange platform for digital currency players, providing timely media information, market changes, community services, and other functions, aiming to solve the inconvenience and exchange trading faced by users managing multiple digital currencies.

the process is complicated, the value transfer is not smooth, the blockchain performance is insufficient, and there are insufficient application scenarios. MeMe.Bank has unique cross-chain and cross-contract technology, combined with its own high-performance public chain to provide powerful infrastructure for the digital currency field, promoting the application and development of digital currency. MeMe.Bank is both a decentralized digital asset management platform and a decentralized digital asset trading platform. We believe that in the not-too-distant future, MeMe.Bank will become a dark horse in the competition of digital asset trading platforms, leaving others far behind.

MeMe.Bank will gather a group of people who contribute their own value to achieve common goals, standing on the shoulders of predecessors to contribute to the value internet through consensus on values.

MeMe.Bank realizes the concept of value interconnection through DAO, bringing together people from different regions and industries to strive for common goals. We believe that blockchain technology will change the way humans live, and future social connectivity will evolve into value interconnection on the basis of existing information interconnection. In the trust system built by blockchain, various individuals or entities will transmit their own value through the blockchain network, forming a rich ecosystem of value interconnection networks, which will ultimately greatly improve social productivity.

Chapter 1: Exploration of the trillion-dollar blockchain market

In the 1970s, personal computers emerged, allowing people to read materials and write documents using computers. However, people still communicated through letters and visited bank branches to deposit money, remit, and borrow. In the mid-1990s, commercial Internet emerged, allowing people to buy and read books anytime, anywhere, use streaming media to listen to music without downloading, and seamlessly communicate through email, instant messaging, and real-time video. People began to use online banking for depositing money, remittances, and borrowing. Now, a major technology called "blockchain" is emerging. Twenty years later, we may describe our lives like this: digital currencies become mainstream currencies, and people can transfer assets to anyone anywhere in the world at any time, just as convenient, fast, and real-time as sending emails or playing streaming music.
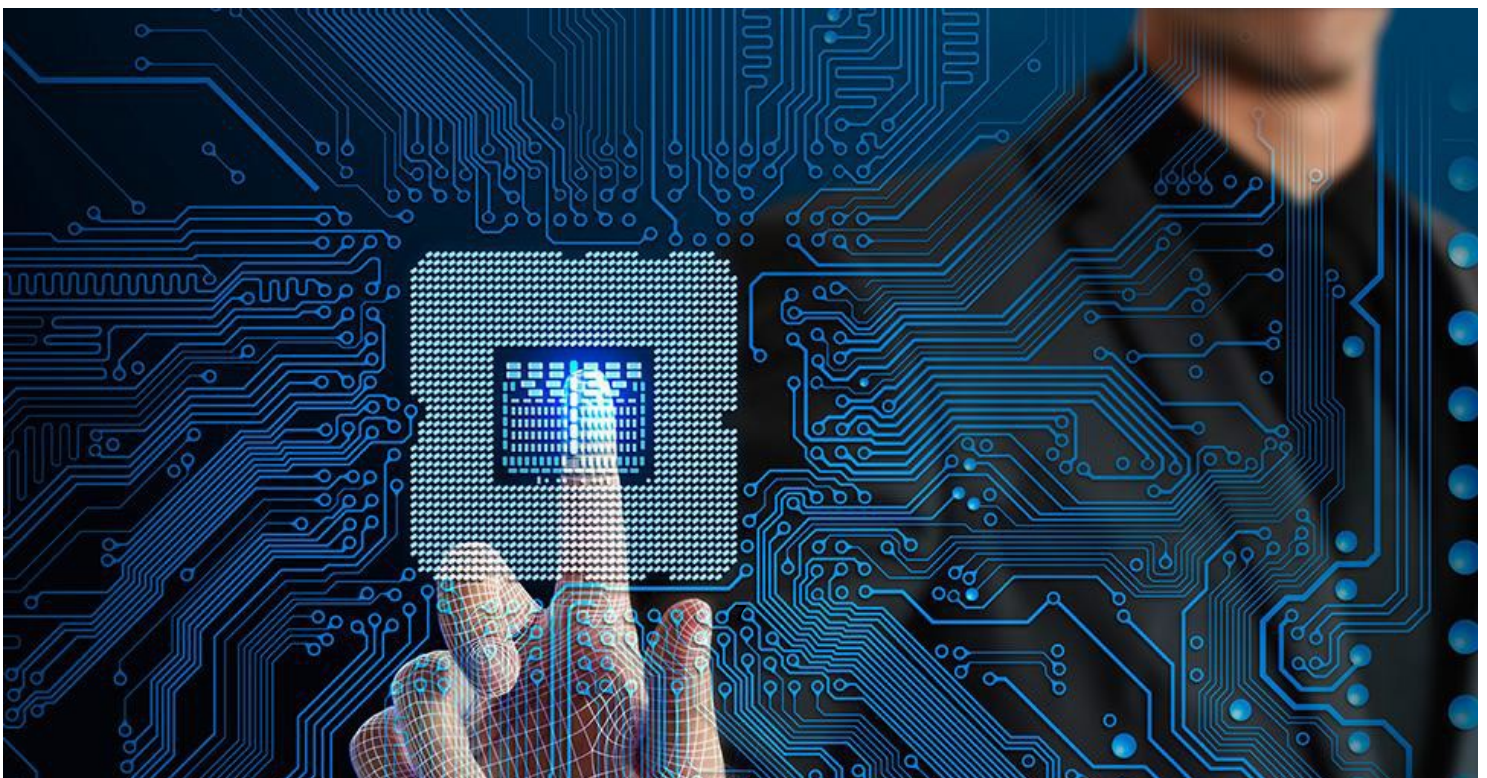
1.1 Blockchain is the most disruptive innovation technology after the internet

Blockchain, following steam engines, electricity, information, and internet technology, is currently the most potential core technology to trigger the fifth wave of disruptive revolution. Just as steam engines unleashed human productivity, electricity solved people's most basic living needs, and information technology and the internet completely changed the business models of traditional industries (such as music and publishing), blockchain technology may realize decentralized secure transfer of digital assets.

"Blockchain" sounds futuristic and technological, but essentially it is a decentralized distributed ledger. Decentralization means that all transactions occur peer-to-peer, without the need for any credit intermediaries or centralized clearing institutions; distributed ledger means that when a transaction occurs, all participants on the chain will receive information about the transaction on their own ledger, these transaction records are completely public, encrypted, and tamper-proof.

Based on the characteristics of blockchain technology, when it is applied to different scenarios, it will bring the following four main meanings to transaction participants: Eliminating the necessity of transaction intermediaries, thereby reducing transaction costs: Because peer-to-peer transactions are realized, central processing or clearing organizations become redundant; because the authenticity of transactions is verified and maintained by all participants on the blockchain, third-party credit intermediaries also lose their value of existence.

Trading settlement is almost instantaneous, thereby improving trading efficiency and greatly increasing asset utilization. The immutability of information on the blockchain and the decentralized data storage method make it the best carrier for data and information recording. Programmable blockchains enable the automation of the trading process: by embedding preset trading rules in the blockchain, transactions are automatically completed when predetermined conditions are met, thereby enhancing the degree of automation in trading.

1.2 Disruptors of the Underlying Technology

If we break down the banking business model layer by layer, different new technological developments have been continuously driving progress at various levels. Taking the information age as an example, the Internet has driven countless innovative applications at the application layer—such as P2P lending, online wealth management, and crowdfunding; cloud platforms have changed the mode of business processing and infrastructure deployment, greatly reducing the operational costs and IT investment of banks; big data analytics technology has shifted risk control from being primarily based on experience to being primarily based on machine learning and using data as the basis for decision-making, making fully automated rapid credit models possible.

Although there are waves of innovation in financial upper-layer applications and business process innovation, the fundamental requirements of credit intermediaries have not led to revolutionary improvements in the underlying logic of the banking business model and related technologies, such as the way information is exchanged between systems and the infrastructure of transaction settlement.

The emergence of blockchain technology is precisely poised to disrupt the underlying technical foundation of the banking business model. Firstly, the concept of "settlement" will no longer exist in the blockchain network, as all transactions are "settled upon occurrence," and at the moment a transaction is completed, all ledger information is synchronized and updated. Secondly, the interaction of information between systems will no longer result in high deployment costs and connectivity difficulties due to compatibility and exclusivity issues because all systems use the same technological protocols. Furthermore, transaction rules between participants are written into the blockchain according to protocol consensus and become standardized, making them tamper-proof.

1.2 The Driver of Business Institutional Innovation

The emergence of blockchain technology poses significant challenges to the institutional foundation and relationships among participants in existing business models.

The existing financial system is built upon three fundamental institutional frameworks: commercial trust relies on legal provisions; asset transfer transactions are secured by independent third parties as credit intermediaries; and transaction settlement and clearing are completed through centralized clearing institutions. However, the institutional foundations and business processes that people are accustomed to may be disrupted with the widespread application of blockchain technology. Financial intermediaries, who are like fish in water under the existing institutional framework, must adjust their roles in this paradigm shift, which will determine their future fate. Taking Visa and Nasdaq as examples, one provides payment intermediary services as a payment organization, while the other serves as a platform for securities issuance and trading. Both companies early on recognized the challenges that blockchain technology might pose to their future business value and wisely chose to embrace technological innovation, becoming early partners of Chain (a US blockchain technology startup) and laying out pilot projects for the application of blockchain technology.

From the perspective of banks, whether they become beneficiaries or disruptees in this wave of technological innovation depends entirely on how banks seize the opportunity and actively adjust their roles in the future business landscape and logic. They must no longer passively rely on their monopoly position to collect interest spreads and transaction fees as credit intermediaries but instead become pioneers in technological application, continuously enhancing high-value financial service capabilities and content, and leading and participating in the formation of new business landscapes.

Chapter 2: Introduction of MeMe.Bank

2.1 Project Overview

With the rapid development of the digital asset industry, the role of blockchain technology in the financial services sector is further expanding. The industry holds tremendous market opportunities, and there is an urgent need for products that are functionally comprehensive, business-oriented, and meet the demands of application scenarios. It is in this market context that Blockchain Bank has emerged.

MeMe.Bank is proposed by the Singapore-based Blockchain Bank Foundation, jointly initiated by prominent community leaders and team leaders such as Union, Miracle, Dog King, Flying Bull, PEPE, and MEME. MeMe.Bank has no private placement, no presale, no pre-mining, the contract is open source, and the base pool is locked. It is committed to building a benchmark ecosystem in the DAO field. With community autonomy and DAO organization as its core development positioning, it continuously empowers industries and aims to create a million-fold ecosystem centered on physical + virtual + DAO chains. Its goal is to digitize global physical industries and assist them in transforming assets and IPs into liquidity.

MeMe.Bank is a super virtual universe built on blockchain technology, focusing on NFTs, DeFi, and blockchain games, based on Web 3.0. MeMe.Bank integrates social, entertainment, financial, and even physical economic systems with gaming, emphasizing the mapping and interaction between the metaverse and the real world, providing a new window for on-chain reform in the real world.

MeMe.Bank is a new ecological platform on the parallel universe, the first decentralized comprehensive financial platform globally empowered. It aims to empower more physical enterprises and economic systems while increasing more consensus communities. It heralds a new era and solidifies new opportunities!

Blockchain Bank is an underlying blockchain system platform for meticulous blockchain distributed application development. It focuses on serving the global physical industry in the era of "new infrastructure." Positioned as an easy-to-use, high-performance blockchain platform, it is based on blockchain technology and designed with the principle of "decentralization." It constructs a new Internet technology network on distributed nodes, open to developers worldwide.

Blockchain Bank creates an architecture similar to an operating system for building applications, providing account, identity and authorization management, policy management, databases, asynchronous communication, and program scheduling on thousands of CPUs, GPUs, FPGAs, or clusters. Based on this foundation, with precise and rigorous product design, it integrates the initial features of the public chain into token applications to achieve user-friendly experience and build a complete distributed business ecosystem. Ultimately, it aims to create a "decentralized" consensus society, a full-ecosystem token network called MeMe.Bank.

In terms of operational strategy, MeMe.Bank takes the overall prosperity of the decentralized community as its guiding principle. It incentivizes community users to provide initial momentum for the project, follows decentralized principles, and minimizes the impact of the Blockchain Bank development team on the community, creating a broader space for the long-term development of Blockchain Bank.

Meanwhile, MeMe.Bank has entered the digital asset trading field aggressively, launching MeMe.Bank trading services, providing investors in the bear market with a safe and secure high-return investment avenue. Through this service, users can achieve a monthly asset profit rate of around 6% to 20%, with all currencies being equivalent digital currencies. To ensure the security of user assets, MeMe.Bank has established a 7*24 infrared security level five early warning system. MeMe.Bank is committed to building a comprehensive community platform for digital currency players, providing timely media information content, market changes, community services, and other functions. MeMe.Bank is not only a decentralized digital asset management platform but also a decentralized digital asset trading platform. Due to its technical advantages in platform development, MeMe.Bank supports fast and secure storage and transfer transactions of various tokens (BTC, ETH, USDT, etc.), and its unique MeMe.Bank trading arbitrage software can provide users with efficient and stable value-added services.

MeMe.Bank is committed to building a globally leading decentralized DAO digital asset financial ecosystem. By creating a super financial platform + decentralized exchange application, constructing a big data storage and analysis platform, and providing data services needed for backtesting and various customized reports. At the same time, MeMe.Bank will also create the most efficient, simple, and secure financial platform through a series of functions such as collective quantitative strategy customization, strategy hosting, strategy backtesting, and strategy marketplace, supporting 113 global digital cryptocurrency exchanges, covering most mainstream digital assets, supporting CTA/ALPHA strategies, and providing a user-friendly platform, allowing users interested in quantitative trading of digital cryptocurrencies to participate in digital asset investment activities more conveniently.

2.2 Project Vision

In the Web3 era, which is built upon cryptographic technology, fundamental changes are underway. Leveraging blockchain-based distributed application platforms, users will enjoy the dividends of platform ecosystem expansion through digital tokens. All data actions are processed on the blockchain, eliminating concerns about privacy and security under centralized storage methods.

DAO, short for Decentralized Autonomous Organization, is an organization that operates autonomously through a series of transparent rules, using a paradigm of democratic voting without central intervention or management.

The governance rights of DAOs are typically expressed through a set of homogeneous or heterogeneous governance tokens, which participants can acquire through purchase or contribution and become governors of the organization. Governors can use tokens as credentials to participate in the decision-making and operation of the organization, and enjoy corresponding benefits.

With the advancement of computer and blockchain technology, the future work scenario may be as follows:

Computer technology will not only replace humans but enhance our ability to be creative.

Blockchain technology can help employees collectively make decisions and manage a leaderless organization.

Blockchain technology can solve problems and improve productivity on an incredible scale.

This is the goal and vision of DAOs—Decentralized Autonomous Organizations. The core idea of DAO is collaboration and collective decision-making, where members can support each other in project management, and excellent ideas can be implemented through the collective creation of team members without relying on top-down hierarchical leadership structures.

As DAOs and blockchain technology applications mature, human creativity is facing unprecedented development and prosperity. People are using innovation and collective wisdom to solve some of the world's most difficult problems. Artificial intelligence and blockchain are not technologies that threaten the future of work; on the contrary, they may open up a decentralized and beautiful new world.

MeMe.Bank is a decentralized bank owned by a DAO organization, where everyone can participate. It's a globally unique on-chain bank that operates without any regulation, aiming to help the poor alleviate poverty and aid the wealthy in asset hedging. It aims to create a blockchain decentralized finance super-ecosystem dedicated to serving financial enthusiasts and developers. Individuals and organizations can both establish nodes on the MeMe.Bank DAO and receive incubation funds. The MeMe.Bank DAO will strive to provide high-quality financial services and technical support for the needs of Metaverse chain game projects, developers, gold-farming studios, guilds, players, and other stakeholders. Firstly, its technology must attract a group of cutting-edge code developers to innovate and optimize a new underlying architecture to adapt to the ever-changing user experience and ecosystem expansion requirements. By reducing the decision-making and working time of platform contributors, maximizing efficiency, and utilizing a token economy model, it aims to achieve value growth and benefit distribution, ensuring that every contributing user benefits from the platform's ecosystem expansion.

As we approach the new year of 2024, MeMe.Bank, with its core value of embracing change, aims to innovate and pioneer. Against the backdrop of the global Web3 wave, it strives to further advance in the field of decentralized finance, providing users with superior, safer, and longer-lasting blockchain financial derivative products, aspiring to become a benchmark in the crypto industry.

MeMe.Bank's entire industry chain ecological application layout covers DAO\gamefi, NFT, Dapp development, metaverse, public chains, multi-chain secure wallets, distributed extended storage, digital lending, and encrypted asset incubation fields, comprehensively meeting the product needs of cryptocurrency enthusiasts and developers. It aims to become the most important service provider for cryptographic systems under the trend of Web3.0. It can be foreseen that MeMe.Bank will gradually transition from being a prophet, witness, and follower in the Web3.0 world to being a driver, leader, and pioneer. MeMe.Bank is committed to building a comprehensive ecosystem community of exchanges and platform tokens. Its token, MeMe.Bank, can be directly exchanged with other mainstream currencies on the platform or used to exchange for products in the mall, pay for daily expenses, travel abroad, or purchase real estate. It manages various digital assets, supports the storage and appreciation of mainstream currencies, adheres to the core principles of blockchain, and provides users with multiple security guarantees for the storage and appreciation of digital assets. It offers multi-signature technology and two-step authorization verification for managing digital assets of different scales, allowing users to choose various verification methods such as mobile verification codes and fingerprints when conducting transfer transactions, ensuring the security of digital assets comprehensively with support for multiple languages.

MeMe.Bank will support multiple languages for mainstream digital asset markets, including English and Chinese. Meanwhile, based on the development of smart contracts, cross-chain gateways, and cross-smart contract technologies, it achieves risk-free digital asset trading services and high-frequency quantitative trading. MeMe.Bank provides users with simple, convenient, and secure trading value-added services through its unique digital asset high-frequency quantitative trading network, integrating with international exchange APIs.

Chapter 3: Blockchain Revolutionizing the Rules of the Financial Industry Game

The essence of blockchain's "decentralization" can bring about disruptive changes to some critical issues faced by today's financial exchanges. According to McKinsey analysis, the most likely areas where blockchain technology will have an impact are in the primary application scenarios of payment and transaction banks, capital markets, and investment banking.

Below, we discuss how blockchain technology will address the pain points of current business and the practical blockchain technologies that financial technology companies are implementing in five major application scenarios: digital currency, cross-border payments and settlement, bills and supply chain finance business, securities issuance and trading, and customer credit and anti-fraud.

3.1 Digital currency: Improving the Convenience of Currency Issuance and Usage

The rise of Bitcoin has overturned humanity's conception of currency. The emergence and expansion of Bitcoin and other digital currencies are changing the way humanity uses currency.

From the past when humans used physical transactions to the development of physical currency and later credit currency, all have evolved with human commercial behavior and social development. With the rise of electronic finance and e-commerce, the uniqueness of digital currency in terms of security, convenience, and low transaction costs is more suitable for network-based commercial activities, and it may potentially replace the circulation of physical currency in the future.

Digital currencies represented by Bitcoin have gained considerable market acceptance in European and American countries. They are not only used by merchants to pay for goods but have also spawned applications such as Bitcoin debit cards and ATMs. Exchanges for trading between digital currencies and fiat currencies have emerged as well. For example, Coinbase, the largest Bitcoin exchange platform in the United States, currently supports the exchange of US dollars, euros, British pounds, and Canadian dollars with Bitcoin. The large trading volume and liquidity between Bitcoin and fiat currencies are sufficient to be considered an internationally recognized currency. The rise of the Bitcoin network has drawn attention from various sectors of society to the distributed ledger blockchain technology behind it, gradually gaining applications beyond digital currencies in numerous scenarios.

The issuance of national digital currencies is becoming a trend. As early as 2015, Ecuador took the lead in launching its national digital currency. This not only reduces issuance costs and increases convenience but also allows people in remote areas without access to banking resources to obtain financial services through digital platforms. Tunisia has also issued a national digital currency based on blockchain technology, allowing citizens to buy and sell goods and pay water and electricity bills using digital currency. By combining the concept of a distributed ledger with blockchain technology, transaction records are recorded on the blockchain for easy management.

At the same time, many other countries are also exploring the feasibility of issuing digital currencies. Currently, Sweden, Australia, and Russia, among others, are discussing plans to develop digital currencies. The Bank of England is commissioning University College London to design a digital currency called RSCoin for experimentation, aiming to enhance the overall security and efficiency of the financial system through the issuance of digital currency by the central bank. Simultaneously, by extending the application of blockchain technology behind digital currencies to the entire financial industry and other sectors, efforts are made to ensure the security of funds and information and improve overall societal efficiency.

3.2 Cross-Border Payments and Settlement: Achieving Point-to-Point Transactions, Reducing Intermediary Costs

Current cross-border payment settlement processes are lengthy, costly, and involve multiple intermediaries. Having a trusted intermediary role is crucial in today's cross-border transactions. As cross-border remittances and settlements become increasingly complex, the role of third-party intermediaries relied upon by both payers and recipients becomes even more critical. Each intermediary step in a remittance not only takes time but also incurs significant transaction fees, making the cost and efficiency bottlenecks in cross-border remittances. Due to differences in clearing procedures in each country, a remittance may take 2 to 3 days to be credited, resulting in extremely low efficiency and significant funds being tied up in transit.

Blockchain technology can eliminate the role of intermediary banks, enabling fast and cost-effective cross-border payments directly between parties. Through blockchain platforms, it is possible to bypass intermediary banks, reduce intermediary fees, and enhance the security of cross-border remittances due to the secure, transparent, and low-risk nature of blockchain. This also speeds up settlement and clearing processes, significantly increasing the efficiency of fund utilization. In the future, banks may no longer need to rely on third parties for transactions between themselves, instead utilizing blockchain technology to create direct, peer-to-peer payment methods. Eliminating the intermediation of third-party financial institutions not only allows for round-the-clock payments, real-time crediting, easy withdrawals, and no hidden costs but also helps reduce the risk of cross-border e-commerce funds and meets the timely and convenient payment and settlement service needs of cross-border e-commerce.

According to McKinsey's calculations, globally, the application of blockchain technology in B2B cross-border payments and settlement services could reduce the cost of each transaction from approximately $26 to $15. About 75% of this reduction is attributed to the maintenance fees of intermediary banks' payment networks, while the remaining 25% is associated with compliance, error investigation, and foreign exchange conversion costs.

3.3 Bill and Supply Chain Finance Business: Reduce Human Intervention, Lower Costs, and Operational Risks

Bill and supply chain finance businesses involve a lot of human intervention, leading to many violations and operational risks. From 2015 to 2019, there was a credit storm in the domestic bill business. While the bill business generated a large amount of liquidity, it also gave rise to numerous irregularities and customer fraud in the related markets. Several commercial banks' bill businesses erupted in succession. Currently, about 70% of domestic bill transactions are paper-based, requiring manual intervention at every step. Due to the involvement of many intermediaries, there are control vulnerabilities, increasing the risk of irregular transactions. Supply chain finance also relies heavily on manual costs, involving a lot of review, verification of various transaction documents, and paper documents in business processing, consuming a lot of time and manpower, with opportunities for manual errors at every step.

Achieving the decentralization of bill value transmission. For a long time, there has been a third-party role in bill transactions to ensure the safe and reliable transmission of valuable documents. In paper-based bills, the trust between transaction parties is based on the authenticity of the bill; even in existing electronic bill transactions, interaction authentication is required through the central bank's ECDS system. However, with the help of blockchain technology, direct value transmission between peers can be achieved without the need for specific physical bills or central systems for control and verification; the intermediary role will be eliminated, reducing human intervention factors.

Supply chain finance can also reduce manual costs, improve security, and achieve end-to-end transparency through blockchain. In the future, supply chain finance operations will significantly reduce manual intervention and digitize current paper-based processes through blockchain. All participants (including suppliers, buyers, and banks) can use a decentralized ledger to share documents and automatically make payments when predetermined conditions are met, greatly improving efficiency and reducing errors caused by manual transactions.

According to McKinsey's calculations, the application of blockchain technology in supply chain finance worldwide can help banks and trade finance companies significantly reduce costs. Banks' operating costs can be reduced by about $13.5-15 billion per year, and risk costs can be reduced by $1.1-1.6 billion. Buyers and sellers are also expected to reduce capital costs by about $1.1-1.3 billion and operating costs by $1.6-2.1 billion per year. In addition, due to the improvement in transaction efficiency, the overall trade finance channels are smoother, which also helps increase income for both parties involved in the transaction.

Wave has reached a cooperation agreement with Barclays Bank to promote the digitalization of trade finance and supply chain business through blockchain technology. Credit letters, delivery orders, and international trade process documents will be placed on the public chain for authentication and immutable verification. Blockchain-based digital solutions can completely replace today's manual paper-based processes, achieve end-to-end transparency, improve efficiency, and reduce risks.

3.4 Securities issuance and trading aim to achieve quasi-real-time asset transfer, accelerating transaction settlement speed.

The process of securities issuance and trading is complex and inefficient. Typically, for a company to issue securities, it must first engage a brokerage firm and sign an underwriting agreement with a securities issuance intermediary. After completing the cumbersome application process, the company can then seek subscriptions from investors. Taking the trading model in the United States as an example, once securities are listed, trading becomes highly inefficient, with a three-day gap between the trading and settlement dates.

3.4 Securities issuance and trading, realize quasi-real-time asset transfer, and accelerate the speed of transaction settlement

Blockchain technology enables participants in financial transaction markets to enjoy equal access to data sources, making transaction processes more open, transparent, and efficient. Participation in securities trading through a shared network system transforms the traditional intermediary-dependent trading model into a decentralized flat network trading model. This revolutionary trading model has demonstrated three major advantages in Western financial markets: Firstly, it significantly reduces the costs of securities trading. The application of blockchain technology simplifies, streamlines, and speeds up the process of securities trading, reducing redundant IT systems and improving market efficiency. Secondly, blockchain technology can record the identity and transaction volume of traders quasi-real-time, facilitating securities issuers to understand equity structure more quickly and clearly, enhancing business decision-making efficiency. An openly transparent and traceable electronic record system also reduces the possibility of insider trading and manipulative activities, benefiting securities issuers and regulatory authorities in maintaining market integrity. Thirdly, blockchain technology shortens the interval between securities trading and settlement from 1-3 days to 10 minutes, reducing transaction risks and enhancing efficiency and controllability.

Chain and Nasdaq have launched a private equity market trading platform. Nasdaq officially announced the blockchain platform Linq, built with Chain, at the Money20/20 conference in Las Vegas – the first system platform for managing digital securities products through blockchain. For stock traders, blockchain can eliminate the need for reliance on paper-based or spreadsheet-based records, reduce human errors in trading, and enhance the transparency and traceability of the trading platform. For issuing companies, Linq provides better management of stock data, enabling Nasdaq to better serve entrepreneurs and venture capitalists in the private equity market.

Digital Asset Holdings (DAH) is about to design a clearing and settlement system for the Australian Securities Exchange. The Australian Securities Exchange announced in 2018 that it would design a new system to replace all core technology systems to improve settlement speed. Among 400 bidders, the American blockchain company DAH won the contract for this project. The technology developed by DAH aims to allow all participants to conduct real-time asset trading in the same database; it enables digital assets to be transferred between trading counterparts without the need for any central authority to record transactions, thus achieving real-time trading and reducing settlement time from the current two business days to a few minutes.

In addition to the US Nasdaq and the Australian securities market, exchanges in various countries such as the Chicago Mercantile Exchange, the Dubai Multi Commodities Centre, Germany, London, Japan, and South Korea have also begun to develop applications of blockchain technology.

3.5 Customer Credit and Anti-Fraud: Reducing Legal Compliance Costs, Preventing Financial Crimes

The costs of customer credit and legal compliance for banks continue to rise. In recent years, commercial banks in various countries have continuously invested resources to strengthen credit reviews and customer credit in order to meet increasingly stringent regulatory requirements and enhance the effectiveness of anti-fraud, anti-money laundering, and systemic risk defenses against excessive trading of complex financial derivatives. UBS has increased its expenditure by about $1 billion to meet new regulatory requirements, while the legal compliance department of HSBC has increased its staff from over 2,000 to over 7,000. To improve the security of transactions and comply with regulatory requirements, banks have invested considerable money and manpower, which has become a huge cost burden.

Customer information and transaction records recorded on the blockchain can help banks identify abnormal transactions and effectively prevent fraud. The technical characteristics of blockchain can change the existing credit system by storing data of customers with bad records in the blockchain when banks conduct "Know Your Customer" (KYC) processes. Customer information and transaction records can be updated at any time. At the same time, if the automatic encryption and association sharing of customer information and transaction records can be achieved within the framework of customer information protection regulations, banks can save a lot of repetitive work in KYC. Banks can also timely discover and eliminate fraudulent behavior by analyzing and monitoring abnormal states of customer transaction behavior within the shared distributed ledger.

Chainalysis designs anti-fraud monitoring systems for banks. Originally a startup specializing in combating money laundering and fraud using digital currencies, Chainalysis now also designs systems for monitoring and analyzing abnormal transaction behavior on the blockchain for banks. By monitoring transactions on public ledgers to identify illicit activities, it helps banks with anti-money laundering and anti-fraud efforts.

Chapter 4: Leading Global Banks' Blockchain Layout

For global financial institutions, when selecting the application scenarios of blockchain technology, they should consider the global macroeconomic background, policy orientation, major pain points, and problems facing the financial system, and seek the most breakthrough and efficient application scenarios as breakthrough points. Blockchain technology brings four major business opportunities to financial institutions!

Embracing the next wave, three major actions of financial institutions deployment

Blockchain technology is the most disruptive revolutionary technology after the Internet, which will initiate a series of new business models. The current development stage of blockchain technology is like the mid-1990s Internet technology. In a survey of global financial institution executives, about 56% believe that substantial impact of blockchain technology can be seen in the fastest 15 months and the latest 3 years. Therefore, for financial institutions, it is advisable to layout blockchain applications sooner rather than later.

1. Make blockchain strategy decisions as soon as possible

Faced with the enormous business opportunities brought by blockchain technology, financial institutions should first clarify three core strategic issues: when is the right time to enter innovative technology applications? Should they be pioneers or followers in innovative technology applications? Should they promote technology applications by establishing in-house teams (insource) or through external cooperation (outsource)?

For leading financial institutions, especially leading banks, they should consider it their duty to lead the formation of the global R3 alliance, closely communicate with regulatory authorities, and work together to create blockchain technology standards suitable for the characteristics of the global financial system and regulatory requirements. Small and medium-sized banks should actively participate in industry alliances and adopt a form of external cooperation as the main approach, developing breakthrough businesses with their own characteristics based on existing standards.
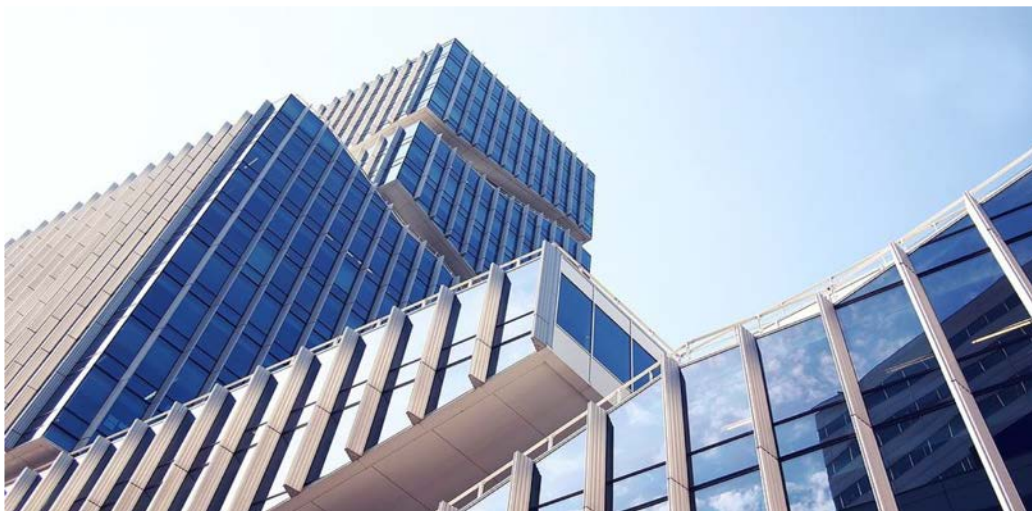
2. Rapid Advancement of Technological Applications

Select blockchain technology applications that are most suitable as entry points. Based on the disruptive characteristics of blockchain technology, it is recommended to start with business scenarios that have a large proportion of incremental changes, high business maturity, simple transaction relationships, and significant improvement effects on technological applications.

Initiate pilot implementations as soon as possible. Establish a fault-tolerant mechanism, conduct repeated testing and demonstrations in the sandbox, establish and train teams during the pilot process, and accumulate implementation experience.

Actively collaborate with institutions and teams within the ecosystem. Build a blockchain ecosystem to accelerate the pace of technological application, while inviting regulatory authorities to participate early in the construction of new models.

In terms of selecting application scenarios, large financial institutions, especially large banks with overseas branches, should consider how to cooperate with financial technology companies to jointly develop and implement blockchain technology applications, improve middle and back-office operational efficiency, increase the degree of transaction processing automation, significantly reduce costs, and increase revenue. Small and medium-sized banks should introduce mature blockchain applications, develop distinctive product and service models, and seek new business growth points.

Certainly, while emphasizing the importance of seizing opportunities and taking proactive actions, financial institutions should also fully recognize that blockchain is not a panacea for all problems. There are numerous uncertainties in the evolution and development of the technology. Firstly, from a technical perspective, before blockchain achieves widespread application and adoption, there may be limitations in terms of its feasibility, effectiveness, scalability, and compatibility, which may not meet people's expectations. The limitations of large-scale adoption still persist. Additionally, in terms of regulatory and legal risks, just as Bitcoin has been used for illicit activities such as black market transactions, drug trade, and money laundering, there may be similar risks associated with the application and development of blockchain technology. How legislative bodies and regulatory authorities will adapt existing legal frameworks to follow the development of technology remains a lengthy process. Therefore, while embracing blockchain technology, financial institutions should also take precautionary measures, enhance compliance awareness, and proceed cautiously.

Chapter 5: Project Advantages

5.1 Definition of Blockchain Digital Asset Smart Financial Management

When using traditional Internet products, we may forget our account name or user password. In such cases, we only need to apply to the operator and then send a text message with verification information to easily retrieve the lost items. To protect the security of users' assets, MeMe.Bank will provide a centralized platform for users to manage their assets themselves. Especially for private keys, once obtained by others, they control your assets. Users' digital asset storage and transaction records are on the blockchain network ledger instead of on MeMe.Bank's servers, and only those who possess the private key can control them.

5.2 Blockchain + smart contracts

Smart contracts are "programmable contracts," also known as "contract intelligence." The "intelligence" here refers to execution intelligence, meaning that when certain conditions are met, the contract is automatically executed, such as automatic transfer of securities or automatic payment. This will be an important direction for the development of blockchain technology. Since blockchain can realize peer-to-peer value transfer, programming scripts can be embedded during transmission. Through smart contracts, it can handle some unforeseen transaction patterns, ensuring the continuous effectiveness of blockchain. These programmable scripts are essentially lists of many instructions, achieving targeted and conditional value exchange, and fulfilling specific purposes for value exchange. Therefore, any value exchange activities based on blockchain can be hard-controlled through smart programming, saving costs associated with legal or contractual constraints.

MeMe.Bank smart contracts support multiple languages such as Java, C/C++, Python, etc. All smart contract source code is compiled into bytecode to run in the virtual machine. Utilizing sandbox technology, it achieves thorough isolation of transactions and restricts access to computing resources, maximizing performance and security. MeMe.Bank's smart contract virtual machine is built on the LLVM (Low Level Virtual Machine) based compiler architecture. LLVM supports JIT (Just-In-Time Compilation) technology, dynamically compiling and executing generated machine code as needed, greatly improving the execution speed of dynamic languages and maximizing hardware performance. Based on LLVM's powerful three-stage design, future MeMe.Bank smart contracts will also support more languages such as JavaScript, making it easier for developers with different technical backgrounds to develop smart contracts. Smart contracts include four parts: contract registration, triggering, execution, and deregistration.

5.3 Support for Coin-to-Coin Exchange

Coin-to-coin exchange refers to the real-time exchange of different cryptocurrencies based on their current values. Thanks to coin-to-coin exchange, users can trade digital assets or liquidate them more quickly and easily to some extent. Initially, all digital assets and smart assets on MeMe.Bank can be exchanged, as well as exchanges between MeMe.Bank and USDT. Later, the exchange between all digital assets on MeMe.Bank will be opened up.

5.4 Support for OTC Over-The-Counter Trading

The inquiry trading method (Over-The-Counter, OTC method) is also known as over-the-counter trading, which refers to trading conducted by market trading entities based on bilateral credit, through independent bilateral inquiries and bilateral clearing. Trading is not conducted on the trading platform, but transactions are reached privately at prices higher or lower than the trading platform price or with other conditions.

5.5 Spot Trading

Later, spot trading can directly realize the exchange of digital assets, which is convenient and efficient, and saves both economic and time costs. The development of digital asset management platform is based on the underlying technology of blockchain, which is decentralized, secure, and reliable. It is the world's first super blockchain digital asset intelligent management platform that integrates decentralized management platform and decentralized trading platform. Users' digital asset storage and transaction records are recorded on the blockchain network ledger, not on MeMe.Bank's server, and only those who hold the private key can control it; at the same time, it supports two-way anonymous transactions, encrypted communication, etc.

5.6 Comprehensive Security Protection

MeMe.Bank employs bank-grade SSL secure connections to ensure transaction security, with GSLB and distributed servers ensuring platform stability. The entire platform uses HTTPS, supporting Google Authenticator, mobile SMS, and other two-factor authentication methods. Digital assets are protected by a multi-signature strategy to ensure fund security. MeMe.Bank collaborates with top security teams in the industry to comprehensively guarantee the security of customer accounts and funds.

5.7 High-Performance Trading Platform

MeMe.Bank utilizes read-write separation microservices and a high-speed trading matching engine capable of handling transaction volumes of up to millions, ensuring stable and reliable operation even under massive trading concurrency, proficiently handling each customer order to guarantee no delays or stalls in order processing. The platform adopts a multi-layer, multi-cluster system architecture to provide comprehensive security protection and greater efficiency. Using a trading matching engine, it can handle up to 50,000 transactions per second, meeting the demand for rapid deposits and withdrawals: rapid deposits, small withdrawals of digital assets, and payments within 5 minutes.

Chapter 6: Technical Architecture

6.1 Multi-Signature Key Management

Multi-signature key management is a secure key management technique. When multiple stakeholders jointly manage an account, they collectively manage the keys. Each stakeholder holds a key share, and only when a certain number of key shares are collected can the key be recovered. This technology can be used to lock account keys across chains, with multiple nodes on the chained accounts jointly maintaining and managing them, ensuring the security and trustworthiness of the account and reducing the risk of key loss.

6.2 Distributed Cross-Chain Storage of Digital Assets

Security is the foundation of MeMe.Bank. As the number of digital assets stored on digital asset trading platforms increases, they easily become targets for malicious actors. Platforms need to invest a lot of manpower, material resources, and financial resources to prevent their attacks. MeMe.Bank will establish a distributed financial infrastructure that connects various blockchain networks together, helping them complete asset transfers, accounting, and storage among each other. Different digital currencies and digital assets can be transferred in and out and traded in a blockchain manner through the trading platform. Financial products and contracts based on digital currencies and digital assets can be created and executed. Moreover, related transactions can be effectively protected for privacy. Through distributed cross-chain asset storage and multi-signature key management capabilities, MeMe.Bank will break the "classical" transaction platform's fund pool model, possessing both the centralized high-speed matching capability and the open, transparent, and secure fund custody capability of distributed trading platforms.

6.3 Composite Keys

The term "public key" in the above description actually refers to a type of composite key. A composite key is a tree, with its leaves being conventional cryptographic public keys accompanied by algorithm identifiers. Nodes in the tree specify both the weight of each of their child nodes and the weighted threshold they must reach.

The validity of a set of signatures can be confirmed in the following way: by traversing the tree from bottom to top, summing the weights of all keys with valid signatures, and comparing it to the threshold. Using weights and thresholds, a variety of scenarios can be encoded, including Boolean expressions using AND and OR. Composite keys can be used in various scenarios. For example, assets can be controlled under a 2-of-2 composite key: one key belongs to a user, and the other belongs to an independent risk analysis system. When transactions appear suspicious, such as transferring too much value within a short time window, the risk analysis system will refuse to sign the transaction. Another example involves encoding cooperative structures into keys, allowing the CFO to sign a large transaction alone, while subordinates need to co-sign.

6.4 Timestamp

The transaction timestamp specifies a time window within which the occurrence of the transaction can be determined. Timestamps are represented in the form of a window because there are no exact time points in distributed systems, only a large number of asynchronous clocks. This is not only due to the laws of physics, but also because of the nature of shared transactions—especially if the signing of transactions requires multi-party authorization, the process of constructing joint transactions may take several hours or days.

It is worth noting that the purpose of the transaction timestamp is to satisfy the logic requirements of smart contract code and convey to the contract code the position of the transaction on the timeline. Although the same timestamp may also be used for other purposes, such as regulatory reporting or event ordering on user interfaces, there is no requirement to use timestamps in that way, and sometimes using locally observed timestamps, even though they may not precisely match the time observed by other participants, may be preferable.

Alternatively, if an exact point on the timeline is required and must be agreed upon by multiple participants, agreeing to use the midpoint of the time window may be a better choice. Although this will not precisely correspond to an event (such as a keystroke or verbal agreement), this approach can still be useful. Timestamp windows can be open to convey that a transaction occurred before or after a specific time, but it is not important exactly how early or late. Timestamps are checked by notary services. Because the participants of notary services themselves do not have precisely synchronized clocks, it is unpredictable whether a transaction submitted at the boundary of a given time window will be considered valid at the moment of submission. However, from the perspective of other observers, the signature of the notary is decisive.

If a transaction bears the signature of a notary, the transaction is presumed to have occurred at the given time. In order to use relatively narrow time windows when the transaction is under the complete control of a single participant, it is expected that the notary will be synchronized with the atomic clock of the United States Naval Observatory. The precise feed of this atomic clock can be obtained from GPS satellites. Note that the Java timeline used by MeMe.Bank is represented in UTC time, with leap seconds included in the last 1000 seconds of the day, so each day accurately contains 86400 seconds. Special attention needs to be paid to ensure that changes in the leap second counter in GPS are handled correctly to keep it synchronized with Java time. When setting the time window for transactions, care must be taken to handle the delay in network propagation of messages between users and notary services, as well as within the notary service itself.

6.5 Trading Engine In order to achieve top-notch information flow

processing capability, ensuring accurate information delivery and error-free processing results, the MeMe.Bank trading platform adopts the independently developed MeMe.Bank engine system. The engine system, tested to achieve a peak limit of 5 million TPS (Transactions Per Second), surpasses industry peers by 35%-40% in trading matching efficiency, providing the foundational technological support for the stable and efficient operation of the platform. Additionally, the MeMe.Bank platform will integrate and optimize the configuration of cloud computing nodes, enabling MeMe.Bank to achieve the processing speed of top international stock and futures trading platforms.

6.6 System Risk Control Techniques

Database Read/Write Separation Mechanism

In the early stages, the MeMe.Bank system's risk control was generally ensured by establishing mechanisms such as database master-slave replication, read/write separation, Sharding, etc., to synchronize transaction system databases and risk control system data and achieve read/write separation. System risk control typically only has read access to the required customer/account data and transaction data to ensure the security and reliability of account data.

Cache/In-Memory Database Mechanism

An efficient cache system is an effective measure to improve performance. Generally, this mechanism stores frequently used data in caching systems like Redis. For example, risk control rules, risk control case libraries, intermediate result sets, blacklists, whitelists, preprocessing results, transaction parameters, billing templates, clearing and settlement rules, profit-sharing rules, etc., are stored in the cache. For some high-frequency transactions, in-memory databases are used for storage based on performance considerations (usually combined with SSD hard drives).

RPC/SOA Architecture

To reduce the coupling between the trading system and the system's risk control. In the initial stage when the system services are few, direct adoption of message middleware like RabbitMQ/ActiveMQ or RPC methods is usually used to implement inter-service calls. When the number of system services increases and service governance issues arise, SOA middleware like Dubbo is adopted for system service invocation.

Complex Event Processing (CEP)

Real-time/near-real-time transaction risk control, compared to purely rule-based processing models, adopts the Complex Event Processing (CEP) mode, which offers better performance and scalability.

Database 01   04 Composite Event

Risk contr

Cache/In-Memory 02   03 RPC/SOA

Chapter 7: Team introduction

MeMe.Bank team gathers global elites

Community leader: Charles

A key figure in the founding team of MeMe.Bank, Charles was involved in the development of SHIB and graduated from the University of St. Andrews in the UK. With over 10 years of marketing experience and years of experience in internet technology companies, he has held management positions in various groups.

Community leader: Thomas

As the head of overseas projects at MeMe.Bank and a member of the PEPE team, Thomas is an early adopter in the blockchain field and an expert in blockchain technology. He has held core technical positions in several groups.

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Community leader: George

Overseas Chief Operating Officer of MeMe.Bank, involved in operations such as DOGE and PEPE, responsible for the group's business affairs and brand promotion in overseas markets. He has many years of senior brand experience.

Community leader: Malcolm

Graduated from a well-known university in the UK with a major in marketing, a promoter of DOGE, with over 8 years of marketing management experience. He has a keen judgment ability in the market and together with the team, has built MeMe.Bank's overseas market and captured a certain market share.

Chapter 8:   Development Planning

Planning for 2024

time	planning
March 2024	Project model preliminary setup, building a super financial public chain plus decentralized exchange application;
May 2024	Project White Paper 1.0 was officially released;
July 2024	MeMe.Bank1.0 internal testing;
September 2024	Adopting the unique project classification system in the industry, a comprehensive monitoring system has been established.
October 2024	Completed comprehensive risk assessment covering over a hundred projects, technical architecture testing completed, ecosystem white paper officially launched globally.
December 2024	Global recruitment of community nodes, aiming to build the world's preferred MeMe.Bank infrastructure, reaching preliminary consensus on MeMe.Bank. At the same time, open DAPP for user testing.

Plan for 2025

time	planning
March 2025	Release of Project Whitepaper 2.0, marking the beginning of the second phase of the MeMe.Bank ecosystem.
April 2025	Development of the MeMe.Bank 2.0 system.
June, 2025	Internal testing of the MeMe.Bank 2.0 system.
August, 2025	Plan to acquire or collaborate with a high-quality investment fund company for global strategic investment layout.
October, 2025	Gradual implementation of MeMe.Bank 2.0 ecosystem applications.
December, 2021	Simultaneous opening of technical interfaces, allowing other high-quality projects to apply for strategic connections via email on the official website for fan sharing.

Plan for 2026

time	planning
April 2026	MeMe.Bank blockchain ecosystem DAPP 3.0 version goes live, adding more application features.
May 2026	Project Whitepaper 3.0 officially released;
June 2026	MeMe.Bank 3.0 system open testing;
August 2026	Strengthened upgrade services to help investment partners grow better; while adhering to the investment philosophy of "unchanged".
October 2026	Complete comprehensive risk rating coverage for over a hundred projects, complete technical architecture testing, and the ecosystem whitepaper officially faces the world.
December 2026	Lay out future ecological expansion, with MeMe.Bank ecosystem managing assets reaching 100 billion.

Chapter 9: Risk Warning and Disclaimer

9.1 Risk warning

There are various risks in the development, maintenance, and operation of MeMe.Bank, many of which are beyond the control of MeMe.Bank developers. In addition to other content described in this white paper, participants should be fully aware of and agree to accept the following risks:

Market Risk

The price of MeMe.Bank is closely related to the overall situation of the digital currency market. If the overall market sentiment is low or affected by other uncontrollable factors, MeMe.Bank may remain undervalued for a long time, even if it has a good prospect.

Regulatory Risk

As blockchain development is still in its early stages, there are no regulations regarding pre-requisites, transaction requirements, information disclosure requirements, lock-up requirements, etc., related to the fundraising process globally. Additionally, the implementation of policies is currently uncertain, and these factors may have uncertain impacts on the project's development and liquidity. Blockchain technology has become a major target of regulation in major countries worldwide. If regulatory authorities intervene or exert influence, MeMe.Bank may be affected. For example, legal restrictions may limit its usage, and MeMe.Bank may face restrictions, hindrances, or even direct termination of its application and development.

Competition Risk

In the current blockchain field, there are numerous projects, leading to intense competition and significant market pressure. Whether the MeMe.Bank project can stand out among many excellent projects, gain widespread recognition, is not only related to its own team's capabilities and strategic planning but also influenced by many competitors in the market, facing the possibility of vicious competition.

Risk of Talent Loss

MeMe.Bank has attracted a vibrant and talented team, including senior practitioners and experienced technical developers in the blockchain industry. In the future development, there is a possibility of core personnel leaving or internal conflicts within the team, which could negatively impact MeMe.Bank as a whole. The rapid development of cryptography or technological advancements such as quantum computing may pose risks of decryption to the MeMe.Bank platform, potentially leading to data loss. During the project's update process, vulnerabilities may arise, which will be promptly fixed, but there is no guarantee that they won't cause any impact. Besides the risks mentioned in this white paper, there may be other unforeseen risks not mentioned by the founding team. Additionally, other risks may suddenly emerge or manifest in various combinations of the risks already mentioned. Participants are advised to fully understand the team's background, grasp the overall framework and concept of the project, and participate rationally before making any decisions.

9.2 Disclaimer

This document is intended for informational purposes only. The content of the document is provided for reference only and does not constitute any recommendation, inducement, or invitation to buy or sell stocks or securities in MeMe.Bank and its affiliated companies. This document does not constitute or imply any buying or selling activity, nor is it any form of contract or commitment.

Given unforeseeable circumstances, the objectives listed in this white paper may change. Although the team will endeavor to achieve all the objectives in this white paper, individuals and groups purchasing MeMe.Bank do so at their own risk. The content of this document may be adjusted in the new version of the white paper as the project progresses, and the team will announce updates through announcements on the website or in the new version of the white paper, etc. This document is intended for conveying information to specific parties who actively request information about the project, and does not constitute any future investment guidance or any form of contract or commitment.

Note:
a. The MeMe.Bank mentioned in this project is a virtual digital code used in transaction links, which does not represent project equity, profit rights, or control rights.
b. Due to the inherent uncertainties of digital currencies (including but not limited to: the general regulatory environment for digital currencies in various countries, industry incentive competition, and technical vulnerabilities of digital currencies), the project carries certain risks.

c. Although the team will make efforts to address issues that may arise during the project's progress, there remains uncertainty in future policies. It is essential for everyone to have a comprehensive understanding of blockchain technology and to participate rationally with full awareness of the risks. The team will endeavor to achieve the goals mentioned in the documentation, but due to the existence of force majeure, the team cannot make complete commitments.

Message:

The application of blockchain technology will open up many exciting possibilities. It can not only help improve the efficiency of financial transactions, reduce costs and risks, but also may give birth to many new business models. Although the benefits brought by blockchain technology may take several years, or even decades, to be realized on a large scale, only financial institutions that formulate strategies now and actively engage in promoting applications and investment layouts can become leaders in reshaping the industry landscape. The blockchain is about to reshape the financial ecosystem and is likely to become a "winner-takes-all" battle, so global bankers must form clear strategic views as soon as possible, recognize how blockchain technology will help or challenge banking business, actively cooperate with peers and technology companies, explore possible application scenarios, and act as soon as possible.

BTC is not the only one, not necessarily the best. Who will be the ultimate winner of this disruptive technological revolution? We wait and see!