

# ***New Opportunities for Investment Banks in the Meta- Universe: Strategy, Innovation and Earnings Growth***

**Hongyi He<sup>1,a,\*</sup>, Hongbo Kan<sup>2,b</sup>**

<sup>1</sup>*Department of actuarial Science, Xi'an Jiaotong-liverpool University, Suzhou, China*

<sup>2</sup>*Department of Civil Engineering, University of Shanghai for Science and Technology, Shanghai, China*

*a. Hongyi.HE20@student.xjtlu.edu.cn, b. 1935023013@st.usst.edu.cn*

*\*corresponding author*

**Abstract:** As a matter of fact, the concept of "Metaverse", which originated from science fiction, has become a hot topic in the current world with the advancement of technology and global attention in recent years. To be specific, the rise of the Metaverse, especially with the entry of many headline Internet companies, has brought unprecedented opportunities and challenges to investment banks. This emerging digital realm is more than just a concept of virtual space; it also represents a new interactive economic model that brings innovative possibilities to the financial services industry. With this in mind, this study explores how investment banks can innovate their business models and diversify their revenue streams through the meta-universe. According to the analysis, this study clarifies the emerging field affects the banks' business processes, risk management and client services. At the same time, the future development suggestions are proposed based on the analysis. Overall, these results shed light on guiding further exploration of investment banks development.

**Keywords:** Investing bank, Metaverse, strategy analysis, innovation and earnings growth

## **1. Introduction**

The history of investment banking in the meta-universe dates back almost a decade, when a number of leading financial institutions had begun to explore this emerging field [1-3]. However, the scale of investment at this stage was relatively small due to technological limitations and investment risks. With the rapid development of technology in recent years, especially the convergence of blockchain and artificial intelligence, investment banks' interest and investment in the meta-universe has gradually increased. Analysts at JPMorgan Chase predict that the initial total addressable market (TAM) for meta-universe in China will reach approximately \$4 trillion. Investment banks' investments in the metaverse have grown over 500% in the past two years, and since 2015, when the second generation of crypto-coin ethereum went live, Bitcoin's online trading volume has grown 33-fold, with millions of transactions per day [4]. The main focus has been on blockchain technology and decentralized finance (DeFi) applications.

JPMorgan Chase is actively exploring digital assets and the metaverse with the opening of its "Onyx Lounge" in Decentraland, an ethereum-based blockchain virtual world where users can create, buy and sell their own land and assets. The bank aims to build a robust and flexible financial ecosystem in the metaverse, leveraging its expertise in various financial services. goal is to prepare

for continuous innovation and new financial transaction methods in the decentralized web. Meanwhile, several investment banks have partnered with Decentraland to provide financial advisory services to help it manage its vast digital assets. to help it manage its vast digital assets [5-7].

Direct investment and financial services are as follows. Investment banks participate in the economic activity of the virtual world by investing in startups and established platforms in the meta-universe to gain equity returns. One can provide financial services such as financing, risk management, and financial consulting, which can help businesses and individuals in the metaverse to better manage their money, reduce risk, and promote the healthy development of the metaverse:

- Commission income: through financing advisory fees, transaction fees, etc.
- Equity returns: invest directly in meta-universe companies and platforms to gain equity returns.
- Income from virtual asset trading: Open a virtual asset trading platform to buy and sell virtual currencies and commodities to earn the difference in price.

Be advised that papers in a technically unsuitable form will be returned for retyping. After returned the manuscript must be appropriately modified.

## **2. Business Process Change and Efficiency Improvement**

### **2.1. New Approaches to Transaction Execution**

The metaverse offers new ways of executing transactions, such as virtual asset exchanges and digital wallets, which improve the efficiency and accuracy of transactions [8]. The potential of this emerging market is gradually emerging as the concept of meta-universes becomes more popular and technology continues to advance. Transactions through the metaverse already account for more than 10% of the total deal value of investment banks. A study of a report by consulting firm Technavio suggests that the meta-universe market will be on the rise over the next five years. Total market size: forecast to reach \$50.37 billion by 2026. It is projected to be 20.11% in 2023, growing at a CAGR of nearly 21% throughout the forecast period. North America (mainly Canada and the U.S.) accounted for 32%, with other major consumers including China and Germany. Major players includes meta-universe wallets such as Meta Mask, Enjin Wallet, Coinbase and others. Fashion and e-commerce are the industries to watch in the meta-universe space, with the fashion market size expected to grow to \$6.6 billion in five years, at a CAGR of 36 percent. Meanwhile, the global meta-universe market is expected to reach \$31.9 billion by 2026, growing at a CAGR of more than 66 percent, according to Bloomberg. This growth will come not only from the gaming and entertainment industry, but also from real estate, art and finance.

### **2.2. Innovations in Risk Management**

In the face of these risks and challenges, investment banks need to adopt strategies to minimize risks and improve returns. Utilizing blockchain technology for real-time monitoring and risk assessment improves risk resilience and risk management efficiency. Investment banks can utilize blockchain technology for real-time monitoring and risk assessment of virtual assets. This new risk assessment tool can greatly improve the risk resistance and risk management efficiency of investment banks. According to statistics, investment banks that adopt blockchain technology improve their effectiveness in risk control by more than 30%. Metaverse offers new ways for investment banks to serve their clients, such as virtual investment advice and virtual fairs.

## **3. Improvements in Customer Engagement and Interaction Experience**

The metaverse is a virtual world consisting of digital assets, digital identities, and interaction mechanisms. With the continuous progress of technology, metaverse is becoming an emerging field

for investment banks. Investment banks can provide more convenient and efficient services to their clients through the meta-universe, as well as risk management and investment strategy development through the meta-universe. Metaverse provides investment banking clients with a more convenient way to participate in the virtual environment where clients can trade, consult, invest and other operations, increasing participation and convenience and reducing time and transportation costs for clients. Investment banking can provide customers with a personalized interaction experience, where customers can choose different interaction methods (voice, text, images, etc.) according to their needs and preferences. Real-time monitoring and management of digital assets in the meta-universe helps banks better understand their customers' asset profiles and risk preferences and develop more precise risk management strategies.

#### **4. Market Research and Innovative Applications in Investment Banking**

Investment banks, as specialized institutions in the financial field, have always been committed to providing a full range of financial services to their clients. With the rise of the meta-universe, investment banks have begun to explore how to utilize this emerging technology to enhance customer service. Utilizes meta-universe technology to conduct market research and provide data support for investment decisions. Digital asset trading platforms in the meta-universe offer new business opportunities for investment banks. According to statistics, the number of client transactions using digital asset trading platforms has increased by 50%. Case study: JPMorgan Chase's virtual business office and digital asset trading platform.

Utilizing the metaverse for brand promotion, such as virtual spokespersons and virtual events, in early September 2021, the Industrial and Commercial Bank of China (ICBC) showed the bank's virtual digital person to the public at the Trade in Services Conference. by the end of 2021, the Baxin Bank launched its first virtual digital employee, "AIYA Aiya," and acted as "AI Virtual Brand Officer". In the Yuan Universe business hall constructed by Bank of China, users do not need to choose to use the virtual character doppelganger instead of acting on their own, and the bank can directly put the user's real image into the virtual space of the Yuan Universe and realize a certain degree of interaction with the staff of the bank's Yuan Universe business hall. The brand awareness of brand promotion using the meta-universe increased by 25%.

#### **5. Future Prospects and Challenges**

The Investment Bank will focus on the maturation and improvement of the economic system of the Metaverse, and the Investment Bank will provide more financing services to Metaverse enterprises to help them realize rapid development. The traditional financial industry will gradually integrate with the meta-universe, and investment banks will utilize the advantages of traditional finance to provide more comprehensive and professional services for meta-universe enterprises. With reference to the real world banks, the corresponding virtual banks are established in the meta-universe, with two-way interaction and resource mapping between the virtual banks and the real banks to better serve the users' c-suites. Technology is the cornerstone to support the meta-universe system, in the face of technological development and market changes, the process of digital transformation of banks, for the meta-universe of related technologies, similar to artificial intelligence, blockchain, the Internet of Things, and other corresponding technologies need to be fully constructed in order to form a digital technology pedestal, the investment bank needs to continue to innovate and adapt [7, 8].

Virtual real estate investment: virtual real estate in the meta-universe is a new type of investment product, investment banks provide investors with a new investment channel by offering virtual real estate transaction services. According to statistics, the size of the virtual real estate market has reached billions of U.S. dollars. Meta-universe enterprise IPO: Investment banks help enterprises to obtain

financial support by providing meta-universe enterprise IPO services, and at the same time, they also provide investors with new investment opportunities. At present, there are already a number of meta-universe enterprises in the capital market. Cryptocurrency exchanges: the combination of investment banks and the metaverse is first reflected in the rise of cryptocurrency exchanges. With the popularization of the concept of meta-universe, more and more investors begin to pay attention to virtual currencies, therefore, cryptocurrency exchanges become a typical case of the combination of investment banks and meta-universe. According to statistics, the global cryptocurrency trading volume has surpassed the traditional financial market, becoming one of the largest financial markets in the world.

## 6. Technological Innovation and Investment Strategies

The technological innovation and investment strategies of investment banks in the field of meta-universe mark a new stage of development in the financial services industry. Meta-universe, as a collection of various cutting-edge technologies such as Augmented Reality (AR), Virtual Reality (VR), Blockchain, Artificial Intelligence (AI) and so on, provides unprecedented opportunities and challenges for investment banks.

Blockchain technology, since the creation of Bitcoin, has rapidly evolved into a revolutionary digital technology. It was originally designed as the underlying technology for Bitcoin, but its potential extends far beyond the cryptocurrency space. Blockchain is a distributed ledger technology whose core features are decentralization, immutability, transparency and security. Decentralization is a key feature of blockchain. In traditional database systems, data is stored on a central server, which is vulnerable to a single point of failure or centralized control [9]. Blockchain, on the other hand, maintains a public ledger through multiple nodes on a network, each of which keeps a copy of the ledger. This structure allows blockchain to operate effectively without a centralized governing body, enhancing the system's resistance to attack and fault tolerance. Non-tamperability is another distinguishing feature of blockchain. Once data is recorded on the blockchain, it cannot be easily altered or deleted. Each block contains a series of transaction records and is linked to the previous block by a cryptographic algorithm to form a growing chain. This structure ensures that once data has been added to the blockchain, in order to change it all subsequent blocks in the chain must be changed, which is virtually impossible in practice. Transparency is another important characteristic of blockchain. While transactions on a blockchain can remain anonymous, the transaction record itself is public. This means that anyone can view the history of all transactions on the blockchain, and this transparency provides traceability to transactions and helps to increase trust and transparency. Security is at the heart of blockchain technology. By using complex encryption algorithms, blockchain ensures the security and integrity of data. Each block contains an encrypted hash that contains not only the transaction data within the block, but also the hash of the previous block. This linking makes any attempt to alter blockchain data quickly detectable by other nodes in the network. In addition to cryptocurrencies, blockchain technology has shown great potential for application in many other areas. For example, in supply chain management, blockchain can be used to track the origin and distribution process of products, improving the transparency and efficiency of the supply chain. In the field of financial services, blockchain can simplify the transaction process, reduce costs, and improve the efficiency and security of the system. In addition, blockchain is used in a variety of fields such as smart contracts, copyright protection, identity verification and voting systems. The decentralization, transparency and security features of blockchain technology allow investment banks to conduct more secure and efficient transactions in the meta-universe. For example, the use of blockchain technology for cross-border payments, asset transactions and other operations can greatly improve efficiency and reduce costs [10, 11]. For example, JPMorgan Chase Bank applied blockchain technology in the meta-universe to create a digital currency called JPM Coin, which is used for instant

payments and asset transfers, significantly improving transaction efficiency and security. Goldman Sachs Group uses artificial intelligence and big data analytics to delve deeper into the meta-universe market and provide its clients with customized investment advice that effectively predicts market trends.

In terms of investment strategies, investment banks are gradually recognizing the huge potential of the metaverse and are beginning to make strategic investments in this area. This includes investing directly in metaverse-related startups and technology platforms or supporting metaverse projects by setting up specialized funds. In addition, investment banks are exploring how to utilize the metaverse for asset management and wealth management, as well as how to combine traditional financial products and services with the metaverse to create new business models and revenue streams. Credit Suisse Group has added virtual assets and digital currencies to its portfolio to accommodate the emerging demand in the metaverse market.

## 7. Compliance and Security Considerations

While investment banks' exploration of the meta-universe space is full of potential and opportunities, it also faces a series of compliance and security challenges. As an emerging and highly digitized space, the meta-universe is fundamentally different from traditional banking in terms of its operational mechanisms and user interactions, which brings new compliance tests for investment banks. Compliance has always been a core concern for HSBC as it actively enters the meta-universe space. The bank understands the legal and regulatory framework of the meta-universe, as a new and fast-growing field, is still evolving. Different countries and regional governments are still in the process of catching up on legislative discussions. In the event of legal gaps or legislative delays, businesses and users need rigorous protocols to manage data transmission, information security and compliance responsibilities. HSBC pays particular attention to data protection, user privacy when conducting meta-universe business, intellectual property, and transaction security legal risks. Actively engaging with global regulators, with a particular focus on close communication and cooperation with global regulators. ensuring that its business model complies with emerging regulatory requirements [12].

In terms of security, the virtual and anonymous nature of the metaverse may exacerbate security risks. In such a digital environment, cybersecurity issues are particularly acute, including risks such as data breaches, fraud, and hacking. Investment banks need to ensure that their business operations in the meta-universe are resilient to these security threats while protecting their clients' assets and information. As consumers spend more and more time in the metaverse, their patterns and habits are being watched, and the collection and analysis of this data is helping to provide a better and deeper understanding of consumer behavior. For the meta-universe to function properly, interoperability and data transferability (portability) are important, but vulnerabilities increase when data is allowed to move in and out of the meta-universe. Therefore, cybersecurity will be even more important in the metaverse. Citibank has strengthened its cybersecurity measures with advanced encryption technology to protect customer data from data breaches and cyberattacks. Korean banks such as Kookmin have opened branches in meta-universe environments that allow customers to move around in virtual financial towns. These towns offer virtual branches and financial playgrounds for customers and "telecommuting" centers for employees. Customers can walk into a virtual branch and talk to real-life customer service via video calls, constantly updating their risk management strategies to address emerging technology risks in the metaverse.



## 8. Customer Relationship and Service Innovation

The activities of investment banks in the meta-universe, especially in terms of enhancing client relationships and service innovation, are starting a revolution in the financial services industry. The meta-universe, a new realm that incorporates a variety of cutting-edge technologies such as virtual reality, augmented reality, blockchain and more, provides investment banks with a unique platform not only to attract a new generation of clients, but also to engage with their existing clients in a whole new way. The activities of investment banks in the meta-universe, especially in terms of enhancing client relationships and service innovation, are starting a revolution in the financial services industry. The metaverse, a new realm that incorporates a variety of cutting-edge technologies such as virtual reality, augmented reality, and blockchain, provides investment banks with a unique platform to not only attract a new generation of clients, but also to engage with existing clients in new ways. Bank of America provides an immersive customer service experience by creating virtual branches in the meta-universe, Bank of America (Bank of America) announced that it will carry out VR training to its employees in the group's 4,300 financial service centers, and employees in the financial centers will learn to use the VR headset to perform professional skills, including deepening communication with customers, negotiating with customers to solve problems, answering questions and solving puzzles, etc., effectively enhancing customer service [12]. These include deepening communication with customers, negotiating with customers to solve problems, answering questions for customers, and so on, effectively improving customer satisfaction.

In terms of service innovation, Metaverse provides a platform for investment banks to experiment and innovate new products. For example, using blockchain technology, banks can issue and trade digital assets, such as NFTs (non-homogenized tokens), in the metaverse, which not only provides new investment opportunities for their clients, but also creates new sources of revenue for the banks themselves. JPMorgan has opened a virtual space called "Onyx Lounge" on Decentraland, a meta-universe platform, which provides information on a variety of financial services and helps customers understand complex financial products in a more intuitive way. UBS uses big data and AI technology to provide highly personalized investment advice to clients in the metaverse. In 2021, companies associated with the metaverse successfully secured over \$1 billion in funding, doubling the amount raised in 2020. As of 2022, investments in the metaverse have surged, exceeding \$12 billion. According to recent studies by McKinsey, the metaverse could create a value of up to \$5 trillion by the year 2030. According to recent studies by McKinsey, the metaverse could create a value of up to \$5 trillion by the year 2030.

## 9. Conclusion

To sum up, as technology continues to advance, the meta-universe will present more opportunities for investment banks. Banks will need to continue to innovate to adapt to this changing market. Investment banks will be transformed from traditional providers of financial services to drivers of technological innovation and market development. The metaverse will become an important part of investment banking and banks will play an increasingly important role in this emerging field. Through the integration and innovation of the meta-universe, investment banks are not only bringing new revenue streams and business models to themselves, but also providing more efficient and personalized services to their clients. With the development of technology and changes in the market, investment banks will continue to explore and grow in this new field full of potential.

## Author Contribution

All the authors contributed equally and their names were listed in alphabetical order.

## References

- [1] Wang, C., Kai, L., and Liu, D. (2023). *Study on the Construction of Accounting Degree case Base at Home and Abroad in the Metauniverse era*. In *Proceedings of the 2023 8th International Conference on Information and Education Innovations* (pp. 32-40).
- [2] Yayman, D. (2023). *Taxation in Virtual Worlds: Analysis Under United States of America and Turkish Tax Regulations*. *Sosyoekonomi*, 31(55), 211-231.
- [3] Масян, А. (2022). *Information Society and Global Modern Problems*. *Філософські та методологічні проблеми права*, 44-49.
- [4] Taskinsoy, J. (2021). *Bitcoinmania: A Ticking Time Bomb Waiting to Explode*. Available at SSRN 3861836.
- [5] Turi, A.N. (Ed.). (2023). *Financial Technologies and DeFi: A Revisit to the Digital Finance Revolution*. Springer Nature.
- [6] Goanta, C. (2020). *Selling LAND in Decentraland: The regime of non-fungible tokens on the Ethereum blockchain under the digital content directive*. *Disruptive technology, legal innovation, and the future of real estate*, 139-154.
- [7] Ante, L. (2022). *Non-fungible token (NFT) markets on the Ethereum blockchain: Temporal development, cointegration and interrelations*. *Economics of Innovation and New Technology*, 1-19.
- [8] Truong, V.T., Le, L.B., and Niyato, D. (2023). *Blockchain meets metaverse and digital asset management: A comprehensive survey*. *IEEE Access*.
- [9] Mooij, A. (2023). *Regulating the Technology (Placement)*. In *Regulating the Metaverse Economy: How to Prevent Money Laundering and the Financing of Terrorism* (pp. 35-67). Cham: Springer Nature Switzerland.
- [10] Kim, G., and Ryou, J. (2023). *Digital Authentication System in Avatar Using DID and SBT*. *Mathematics*, 11(20), 4387.
- [11] Tan, T.M., and Saraniemi, S. (2023). *Trust in blockchain-enabled exchanges: Future directions in blockchain marketing*. *Journal of the Academy of marketing Science*, 51(4), 914-939.
- [12] Periyasami, S., and Periyasamy, A. P. (2022). *Metaverse as future promising platform business model: Case study on fashion value chain*. *Businesses*, 2(4), 527-545.