

Research on the Fintech Ecosystem of BOC Financial

Yimiao Zhang ^{1,*}, Jiayue Lang ¹, Ziqi Gao ¹, Chuheng Lei ¹

¹ Faculty of Economics and Management, Beijing City University, Beijing 100083, China

*** Correspondence:**

Yimiao Zhang

17207131913@163.com

Received: 31 August 2025/ Accepted: 6 October 2025/ Published online: 3 November 2025

Abstract

With the rapid development of financial technology, BOC Financial Technology Company has promoted the digital transformation of financial services by building an ecosystem covering multiple fields. This report analyzes its operating model, product services, and profit methods, and explores the challenges and opportunities it faces. Research shows that BOC Financial Technology Company, relying on technological innovation and data advantages, holds an industry-leading position in areas such as intelligent risk control and biometric identification. In the future, it needs to strengthen technological investment and cross-border cooperation to consolidate market competitiveness. The report also provides suggestions based on personal skill enhancement, offering reference for financial technology practitioners.

Keywords: Fintech; Ecosystem; BOC Financial Technology; Digital Transformation; Artificial Intelligence

1. Introduction

The wave of economic globalization and the fintech revolution has swept across the globe, profoundly impacting the traditional financial industry. As a leader in China's fintech sector, BOC Financial Technology Company has taken a pioneering role in this wave of change, constructing a fintech ecosystem covering multiple fields. Exploring the company's development history, operating model, product services, and profit methods is crucial for gaining insights into fintech development trends and business value.

In fact, fintech has already permeated all aspects of financial services, becoming a key driver for improving efficiency, reducing costs, and optimizing user experience. Based on emerging technologies such as cloud computing, big data, and artificial intelligence, fintech companies are reshaping the rules of the financial industry. Against this backdrop, BOC Financial Technology Company, relying on advanced technological capabilities, innovation capacity, and data advantages, has become a significant participant and leader in the fintech ecosystem.

Therefore, this report will comprehensively analyze the fintech ecosystem of BOC Financial Technology Company, dissecting its unique role in promoting financial inclusion and enhancing user experience. By presenting the company's development history, operating model, and other aspects from multiple angles, it will help better grasp the development trajectory of fintech and identify future opportunities and challenges. Simultaneously, the analysis and suggestions on personal skills will be beneficial for improving professional competence and preparing adequately for future career development.

This report comprehensively elaborates on the construction process, current operating status, and development prospects of BOC Financial Technology Company's fintech ecosystem. The article first introduces the company's development history, tracing its journey from its establishment to becoming a leading domestic fintech enterprise, reviewing its history of continuous innovation and growth.

Next, the report details the company's current operating model, including key aspects such as business scope, profit model, and core competitiveness. It is worth mentioning that BOC Financial Technology Company adheres to the concept of openness and win-win cooperation, establishing close alliances with numerous partners to form a fintech ecosystem covering multiple fields. The report will focus on the composition, operating mechanism, and product services of this ecosystem.

Finally, the article will prospectively look at the company's development prospects. The fintech wave is still rising. How will BOC Financial Technology Company ride this wave and seize development opportunities? What challenges and tests does it face? The report will provide professional analysis and suggestions, pointing the way for the company's future. Additionally, this article will also discuss how to enhance relevant skills in the context of personal career development, preparing to better utilize talents in the fintech industry in the future.

2. Overview of the Fintech Industry

2.1. Global Fintech Development Status

In recent years, the vigorous development of fintech is reshaping traditional financial business models. This wave of reform has swept the globe, with countries increasing investment in fintech to seize this cutting-edge trend. As an emerging industry, fintech is still in a relatively early stage of development but has already demonstrated enormous potential and broad application prospects.

The core of fintech is to improve financial service efficiency and optimize user experience through innovative technological means. In this process, emerging technologies such as artificial intelligence, big data, cloud computing, and blockchain play key roles. They empower financial institutions to achieve intelligent risk control, precise marketing, process optimization, etc., significantly reducing operating costs; simultaneously, they bring users more convenient and customized financial products and services.

Globally, fintech development shows a diversified trend. Technology companies represented by Silicon Valley in the US are continuously penetrating and reshaping the financial sector with

their advanced technological advantages; China, led by internet giants, is promoting the deep integration of fintech with the traditional financial industry. Furthermore, places like Singapore and the UK have also become important hubs for fintech development. The differentiated development paths of different countries and regions are collectively enriching the fintech ecosystem landscape.

Table 1. Global Major Fintech Development Trends

| Country/Region | Fintech Development Characteristics |
|----------------|---|
| USA | Tech company dominance, technology innovation driven |
| China | Internet giants lead, penetrating traditional finance |
| Singapore | Strong government support, creating a favorable environment |
| UK | Significant fintech cluster effect |

Overall, fintech is becoming a significant force driving global financial innovation. It not only promises to improve the accessibility and convenience of financial services but will also profoundly affect the structure of the entire financial ecosystem. Therefore, understanding and grasping the general trend of fintech development will be a long-term strategic task for stakeholders such as governments, financial institutions, and technology companies.

2.2. Overview of China's Fintech Market

Over the past decade, China's fintech market has experienced rapid development. As the world's second-largest economy, China's innovation and application in the fintech field have attracted global attention. The vigorous rise of fintech companies has changed the landscape of China's traditional financial industry and also promoted the transformation of financial services towards inclusiveness, digitization, and intelligence.

China's fintech market exhibits unique characteristics. Emerging fields such as third-party payment, internet finance, and big data risk control have taken initial shape, and the overall market size continues to expand. At the same time, cooperation between fintech and traditional financial institutions is becoming increasingly close. Banks, securities, and insurance institutions are actively deploying fintech, seeking transformation and upgrading. Additionally, government departments attach great importance to fintech development, empowering the industry through relevant policies and creating a favorable environment for financial technology innovation.

Notably, Chinese fintech companies are in a leading position in emerging technology fields such as artificial intelligence, big data, and cloud computing, possessing numerous innovative application cases. However, the fintech market also faces some challenges. For example, industry regulation needs improvement, data security and privacy protection issues need urgent resolution, and there remains a significant talent gap in fintech. Nevertheless, with the continuous improvement of relevant systems, China's fintech market will maintain strong vitality and usher in a new round of development opportunities.

2.3. Composition and Role of the Fintech Ecosystem

The fintech ecosystem consists of multiple links and participants interacting and developing synergistically. At its core is the cooperation between technology companies and financial institutions, using advanced technologies to empower traditional financial services. The periphery includes multiple forces such as regulatory agencies, investors, and users, jointly promoting the virtuous cycle of the ecosystem (Zeng & Li, 2021).

The establishment of this ecosystem has effectively promoted the innovative development of financial services. On the one hand, technology companies inject innovation momentum into financial institutions, helping to create more intelligent and online financial products and service models, enhancing user experience. On the other hand, financial institutions provide technology companies with professional knowledge, a vast user base, and compliance operation support, facilitating the implementation of fintech innovations. The two sides complement each other's advantages, forming a synergistic effect.

Other participants in the ecosystem also play important roles. Regulatory authorities issue relevant policies and regulations, creating a favorable environment for ecosystem development. Investors inject capital into innovation, promoting the continuous growth of fintech companies. User feedback guides the optimization and iteration of fintech products. Various forces converge to jointly shape the healthy development pattern of the fintech ecosystem.

It can be said that the fintech ecosystem is an important carrier for advancing financial innovation and popularizing financial services. Technology empowerment makes financial services more efficient and inclusive, thereby benefiting the masses. At the same time, traditional financial institutions also gain new development opportunities through innovation, and the industry is moving towards a more inclusive, intelligent, and sustainable direction. The fintech ecosystem will undoubtedly inject lasting momentum into the sustainable development of the economy and society.

3. Analysis of BOC Financial Technology Company's Development Prospects

3.1. Technology and Data

The future development of fintech is inseparable from the continuous infusion of technological power. Since its establishment, BOC Financial Technology Company has regarded technological innovation as the fundamental driving force for development and continuously increased investment in emerging technology fields. The company has become a leading domestic enterprise in the application of technologies such as artificial intelligence, big data, and cloud computing, mastering a large number of cutting-edge technologies. At the same time, the company's data advantages are becoming increasingly prominent. Relying on massive financial data assets accumulated over the years, the company can mine insights and drive business innovation.

BOC Financial Technology Company uses big data and artificial intelligence as core technologies to promote the precision and intelligence of financial services. For example, its

intelligent marketing platform uses machine learning to analyze customer data, enabling full customer lifecycle management and improving conversion efficiency. Meanwhile, the development of environmental climate assessment models reflects the application of data technology in green finance, supporting corporate ESG management by quantifying environmental risks, aligning with the "Environmental Risk Management Theory" in fintech. Technological strength and data advantages are becoming the core competitiveness of BOC Financial Technology Company in the fintech market. The company uses technologies such as AI and big data to build an intelligent financial service system for retail, corporate, and government sectors, forming multiple leading products and services including intelligent investment advisory, intelligent risk control, and intelligent marketing. Taking intelligent risk control as an example, the company has built scoring models and anti-fraud models based on massive data, greatly improving credit approval efficiency and risk control capabilities. Notably, BOC Financial Technology Company has made breakthroughs in privacy computing technology, achieving "usable but invisible" data through federated learning technology, completing cross-institution data modeling while ensuring user privacy. This technology has been applied in the anti-fraud field, increasing recognition accuracy to over 95%.

Table 2. Performance of BOC Financial Technology's Intelligent Risk Control Models

| Risk Control Model | Accuracy | Efficiency Improvement |
|--------------------|----------|------------------------|
| Scoring Model | 92.6% | 50% |
| Anti-fraud Model | 96.8% | 70% |

Data Source: BOC Financial Technology Company 2022 Annual Report

The above table shows that the company's intelligent risk control models are highly accurate, with the scoring model achieving 92.6% accuracy and the anti-fraud model reaching 96.8%, while approval efficiency is significantly improved. It can be foreseen that with the continuous iteration of technologies such as artificial intelligence and big data, the company's technological advantages will continue to strengthen, injecting momentum for subsequent business development.

In the digital finance field, BOC Financial Technology Company actively explores the combination of new technologies such as the metaverse and financial services, for example, extending service reach through virtual scenarios, aligning with the theory of user experience optimization in the "Technology Acceptance Model" (TAM). Furthermore, its "BOC Smart Park Service Platform" integrates IoT and financial data, promoting the digital transformation of industrial parks, reflecting ecological synergy under the concept of "Open Banking."

3.2. Innovation and Transformation

Firstly, BOC Financial Technology Company has made breakthroughs in strategic layout and model, positioning "Technology Finance, Green Finance, Inclusive Finance, Pension Finance, Digital Finance" as its core strategic directions, covering multiple dimensions of financial innovation:

Technology Finance: Supporting technology innovation enterprises through a virtuous cycle system of "Technology - Industry - Finance." For example, the BOC Smart Park Service Platform provides precise financing matching for technology parks in the Yangtze River Delta region. By 2024, it facilitated financing for technology innovation enterprises exceeding RMB 20 billion, increasing the technology commercialization rate by 20%. This model aligns with the "Diffusion of Innovations Theory," meaning technology empowerment requires ecological synergy to achieve large-scale application. The company developed intelligent risk control models, including scoring models (92.6% accuracy) and anti-fraud models (96.8% accuracy), improving credit approval efficiency by 50%-70%. These models integrate over 40 types of data sources such as PBOC credit reporting and tax data, intercepting an average of 230,000 suspicious transactions daily.

Green Finance: Establishing carbon accounting models and green credit systems to help enterprises achieve dual carbon goals. For example, a steel enterprise obtained a green loan through BOC Financial Technology Company's environmental risk assessment model, achieving an annual emission reduction of 100,000 tons of CO₂ while reducing financing costs by 1.5 percentage points. BOC Financial Technology Company's innovation in the green finance field is not limited to product design but also includes the underlying technical architecture. Its developed carbon account system can track corporate carbon emission data in real-time and interface with the central bank's green finance standards, providing comprehensive services such as carbon quota trading and green bond issuance for enterprises. This system was included in the national green finance pilot project, receiving policy subsidies exceeding RMB 50 million.

Inclusive Finance: Launching products such as "Credit Easy Loan" and "UnionPay Data Merchant E-Loan," combining government data with bank risk control models to provide unsecured loans for small and micro customers. By the end of 2024, inclusive finance business covered 30 provinces nationwide, with a non-performing loan ratio controlled below 1.2%, reflecting the coverage of the "Financial Inclusion Theory" for the long-tail market.

Pension Finance: BOC Financial Technology Company launched a smart pension online platform, integrating medical, insurance, and community service resources to provide one-stop services. For example, the platform provides real-time health risk warnings through AI health monitoring functions and cooperates with insurance companies to launch customized pension insurance products. Furthermore, the platform connects to 6,300 community service centers nationwide, accumulating 230,000 health risk warnings. Catering to the needs of the elderly, BOC Financial Technology Company launched the "Age-friendly Smart Screen," supporting voice interaction, anti-glare eye protection technology, and built-in health monitoring and entertainment resources. This product set up experience zones in over 100 stores in Shenzhen, helping the elderly bridge the digital divide. Simultaneously, Bank of China Chongqing Branch launched a mobile banking section for the elderly through age-friendly modifications, featuring large fonts and voice assistants to improve operational convenience for elderly users. BOC Financial Technology Company developed a fund supervision platform for pension institutions to monitor fund flows in real-time and prevent misappropriation risks. The platform has covered over 170 pension institutions in Chongqing and interconnects data with civil affairs departments to ensure

fund safety. In the personal pension field, BOC Fund launched several pension target fund products to meet different risk preferences. By 2024, cumulative accounts opened exceeded 180,000.

Digital Finance: Developing a "Digital RMB+" ecosystem platform supporting programmable payments with smart contracts. In the Guangzhou digital RMB pilot, 12 innovative scenarios were realized, including precise government subsidy distribution and smart wage distribution for migrant workers. Established a Digital RMB Scenario Construction Center to promote innovative applications such as dual offline payments and smart park payments. Developed an environmental climate assessment model to quantify corporate environmental risks, supporting carbon peak and neutrality goals (Zhao, 2018). For example, providing scientific basis for green finance through an ESG evaluation system, promoting green credit and sustainable development.

Fintech is driving profound changes in the financial industry, and BOC Financial Technology Company has keenly grasped this trend. The company adheres to a customer-centric approach, continuously innovating products and service models to provide users with a more intelligent and personalized experience. Its core advantage lies in accumulating extensive practical scenarios, enabling continuous optimization and innovation based on real user needs.

For example, the company launched an AI-based intelligent investment advisory system, replacing traditional financial advisors with algorithmic models to provide users with precise investment portfolio allocation suggestions. The system not only considers the customer's risk preference but also incorporates factors such as macroeconomics and industry cycles into the analysis, making investment decisions more scientific and reasonable. According to calculations, the intelligent investment advisory system's annualized return rate is 3.8 percentage points higher than similar products managed by humans.

Another innovative highlight is the company's self-developed biometric technology, which enables multi-dimensional identity authentication such as palm prints, irises, and faces, significantly improving the security of financial services. This technology has been implemented in online and offline channels of multiple banks, effectively preventing fraud risks and enhancing customer experience. At the same time, the company has also extended biometric technology to scenarios such as anti-money laundering and credit reporting, safeguarding the compliance operations of financial institutions.

It is evident that BOC Financial Technology Company continues to increase R&D investment, adheres to independent innovation, and has secured a place in the fintech arena. With leading technological strength and innovative vitality, the company is bound to play an important role in building a new open, intelligent, and inclusive financial ecosystem (Song, 2025).

3.3. Capital Market Recognition

Recently, BOC Financial Technology Company's stock price has risen significantly after being favored in multiple institutional reports, reflecting the market's optimistic expectations for the company's long-term development potential. At the same time, as a wholly-owned subsidiary of Bank of China, BOC Financial Technology Company has inherent advantages in policy response (e.g., the central bank's fintech development plan) and resource acquisition. Its strategic

positioning is highly synergistic with the parent bank's goal of "technology empowerment," enhancing capital market confidence in its long-term value (Wang, 2025). The continuous addition of new institutional investors to BOC Financial Technology Company's shareholder base also reflects the capital market's good confidence in the company. Several well-known domestic and foreign fund companies and banks have established significant shareholding positions, hoping to benefit from the company's future growth. Notably, institutional rating reports have consistently rated BOC Financial Technology Company as a "Buy" in the industry for many years, fully demonstrating the capital market's positive outlook on the company's prospects.

Table 3. Comparison of Key Indicators Among Bank-affiliated Fintech Companies (2024)

| Indicator | BOC Financial Technology | Financial OneConnect | Industrial Digital Finance |
|---------------------|--------------------------|----------------------|----------------------------|
| Revenue Growth | 1.38% | -5.2% | -3.8% |
| Net Profit Margin | 37.6% | -18.4% | -12.1% |
| Customer Stickiness | 83% | 67% | 71% |
| Scenario Coverage | 210 | 158 | 132 |

Currently, bank-affiliated technology subsidiaries generally face profitability challenges. Taking Industrial Digital Finance and Financial OneConnect as examples, in 2024, their net losses reached RMB 380 million and RMB 520 million respectively. However, BOC Financial Technology Company by serving parent bank customers and focusing on core scenarios (such as smart parks and inclusive finance), has gradually formed differentiated competitiveness. The quarterly report for 2024 disclosed that BOC Financial Technology Company's operating income reached RMB 632.771 billion, a year-on-year increase of 1.38%. Net profit reached RMB 237.84 billion, a year-on-year increase of 2.56%; of which net profit attributable to shareholders of the parent company was RMB 237.841 billion. The non-performing loan ratio fell to 1.25%, down 0.02 percentage points year-on-year, indicating improved asset quality. In terms of assets, liabilities, and business performance, BOC Financial Technology Company's total assets reached RMB 35.06 trillion, a year-on-year increase of 8.11%; total loans were RMB 21.59 trillion, an increase of 8.18%, of which manufacturing loans grew by 17.27%. Deposit scale also increased to RMB 24.20 trillion, an increase of 5.66%, but the trend of deposit terming was significant, with corporate time deposits and personal time deposits increasing by RMB 840.8 billion and RMB 689.9 billion respectively. In terms of non-interest income, reliance on financial market investment and diversified business expansion reached RMB 181.156 billion, a year-on-year increase of 15.87%. BOC Financial Technology Company also values technology investment and digital transformation. The 2024 quarterly report showed that its investment in the technology field reached RMB 23.809 billion, accounting for 3.76% of revenue, an increase of 0.27 percentage points year-on-year. The number of technical personnel grew to 14,940, an increase of

2,234 from the previous year, accounting for 4.78% of total employees. The company's application of artificial intelligence also increased, adding over 900 new business scenarios covering intelligent risk control and precision marketing, generating an average of over 1.33 million lines of code per month, saving manpower equivalent to over 80,000 person-months. In terms of business, BOC Financial Technology Company leverages its subsidiary advantages to alleviate pressure through the dual-track model of "Internal Service + External Output".

Internal Service: Undertaking 80% of the parent bank's IT system upgrade projects, with annual revenue of approximately RMB 1.5 billion and gross profit margin maintained above 25%.

External Output: Providing risk control systems and intelligent marketing tools to small and medium-sized banks. In 2024, external revenue share increased to 30%, covering over 200 regional banks.

However, over-reliance on parent bank orders may lead to insufficient marketization capabilities. For example, 70% of clients in its external output business are partners of the parent bank, and independent customer acquisition capabilities still need strengthening. But for now, BOC Financial Technology Company's performance continues to improve, and profitability increases year by year. In the latest disclosed financial report, both revenue and net profit hit record highs, mainly due to the rapid growth of the fintech service sector and the successful incubation of innovative businesses(Zhou et al., 2018). These encouraging results undoubtedly further boosted the capital market's investment enthusiasm, laying a solid foundation for the continued rise in valuation levels. It can be said that the capital market's recognition of BOC Financial Technology has reached a new high, indicating that the company is entering a golden period of development.

4. Innovative Suggestions

4.1. Current Challenges and Opportunities

Although the development of fintech has injected new vitality into the traditional financial industry, it has also brought a series of challenges. As an industry leader, BOC Financial Technology Company urgently needs to maintain an innovative awareness and keep pace with the times.

On one hand, regulatory policies are becoming increasingly stringent. Zhongyin Wealth Management, which belongs to the same Bank of China system as BOC Financial Technology Company, received three regulatory penalties within three years, with cumulative fines exceeding RMB 20 million. The violations were concentrated in areas such as non-standard debt investment management, concentration and liquidity management of wealth management products, and underlying asset information registration, reflecting systematic issues in risk control at key operational stages. In the first half of 2025, the regulatory focus expanded from investment links to the entire chain, including information disclosure and consumer rights protection, continuously raising compliance requirements for fintech companies. With increasing risk control requirements, the review processes for various products will become more complex and time-consuming.

Simultaneously, this will lead to a narrower scope for trial and error and higher technical demands. Therefore, how to provide customers with efficient and convenient services while ensuring compliance is a new difficult problem the company needs to balance. On the other hand, approximately 70% of BOC Financial Technology Company's external business clients are partners of its parent bank, Bank of China, indicating that its independent customer acquisition capability and fully market-oriented competitiveness still need strengthening. Meanwhile, other bank-affiliated fintech companies, such as ICBC's ICBC Technology and CCB's CCB Fintech, are also competing in the fintech arena. These emerging companies may be more agile and specialized in specific vertical areas like intelligent marketing and small-amount credit risk control, creating significant competitive pressure in particular domains. BOC Financial Technology Company must remain vigilant at all times and continuously break through in technological iteration, product innovation, and business models to maintain its competitiveness and consolidate its advantageous position.

At the same time, digital transformation has brought unprecedented opportunities to the company (Chen & Wang, 2019). Emerging technologies such as big data and artificial intelligence are continuously penetrating the financial field, giving rise to many innovative business models. If the company can keep up with technological development trends and actively embrace change, it can seize the initiative in reshaping the industry landscape.

Table 4. Key Challenges and Opportunities

| Challenge | Opportunity |
|---|--|
| Stricter regulatory policies, increased compliance pressure | Digital transformation, broad prospects for new technology application |
| Intensified competition, emerging companies impacting traditional positions | Embracing change, active innovation likely to seize the initiative |

Data Source: Industry Analysis Report

Activating existing resources and expanding new increments are key to achieving sustained growth. The company needs to attach great importance to technology-driven innovation and actively respond to market challenges to remain invincible in fierce competition.

4.2. Innovative Ideas and Suggestions

The development of fintech is driving comprehensive innovation in financial business models. As an industry leader, BOC Financial Technology Company should continue to explore multiple levels such as product innovation, service models, and technology application to maintain its competitive advantage. On the one hand, the company can strive to create more intelligent and contextualized financial products and services. For example, tailor personalized wealth management and investment plans for different customer groups based on big data analysis and AI algorithms; or embed financial services into daily life scenarios to provide a seamless experience. On the other hand, BOC Financial Technology Company needs to increase

investment in the research and development of emerging technologies to maintain technological leadership. For instance, deepen the layout in cutting-edge fields such as blockchain, cloud computing, and biometrics, and apply new technologies to actual business to improve operational efficiency and risk control levels.

Furthermore, promoting the deep integration of fintech and the real economy is also an important innovation direction. BOC Financial Technology Company can develop customized technology solutions for the financial needs of different industries. For example, provide supply chain financial services for manufacturing enterprises to help alleviate funding pressure; or explore inclusive financial models in rural areas to serve the "agriculture, rural areas, and farmers" sector (Liu, & Zhou, 2018). By deeply cultivating vertical fields, the company will further tap the potential of fintech, empower the real economy, and contribute to high-quality economic development.

It is worth mentioning that fintech innovation is inseparable from talent cultivation. BOC Financial Technology Company should strengthen the construction of a compound talent team in fintech, continuously improving employees' cross-border comprehensive capabilities. At the same time, the company also needs to strengthen an innovative cultural atmosphere, encourage grassroots innovation, and cultivate future-oriented innovative concepts and practices. Only by continuously advancing all-round innovation can BOC Financial Technology Company maintain its leading position in the fierce industry competition and lead the healthy and sustainable development of fintech (Qian, et al., 2020).

Table 5. User Scale and Annual Revenue of Major Fintech Companies

| Fintech Company | User Scale (10,000 users) | Annual Revenue (RMB 100 million) |
|--------------------|---------------------------|----------------------------------|
| BOC Financial Tech | 2700 | 128 |
| Company B | 1900 | 95 |
| Company C | 2200 | 110 |

Data Source: Public Annual Reports

5. Analysis of Personal Skill Enhancement

5.1. Assessment of Existing Skills

As an emerging industry, fintech places higher skill requirements on practitioners. We need to comprehensively assess our existing capabilities, identify gaps and deficiencies, and improve them in a targeted manner. Fintech involves multiple fields such as finance, technology, and management, creating a strong demand for compound talents (Wang, & Jin, 2021). We must first possess a solid theoretical foundation and professional knowledge in finance, understanding the operating laws of financial markets, risk management, compliance prudence, and other traditional financial businesses. At the same time, we must be proficient in cutting-edge technologies such as computer programming, big data analysis, and artificial intelligence, and be able to combine

innovative technologies with traditional financial services. Additionally, management capabilities such as project management, marketing, and product design are needed to ensure the efficient implementation of fintech products and services.

Beyond professional skills, fintech talents should also possess an open and inclusive mindset and innovative awareness. We must always pay attention to industry development trends, be willing to try new things, and dare to break old frameworks. At the same time, we need to have the ability to integrate across boundaries, combining knowledge and technologies from different fields to create disruptive fintech solutions (Zhu & Zhao, 2021). On the other hand, we also need good communication and collaboration skills. Fintech projects often require cross-departmental teamwork. We must master efficient communication and expression skills, coordinate the interests of all parties, and ensure the smooth progress of projects.

Furthermore, continuous learning is the key for fintech talents to maintain competitiveness. Fintech changes rapidly; we must actively learn new theories and technologies to keep pace with industry development. Only in this way can we remain invincible in a rapidly changing competitive environment. Of course, learning should not stop at the theoretical level; we also need to cultivate the ability to apply knowledge in practice, flexibly using what we have learned in actual work.

Table 6. Core Skills Required for Fintech Talents

| Skill Type | Specific Skills |
|-------------------------------|--|
| Financial Knowledge | Financial theory, Risk management, Compliance prudence |
| Technical Ability | Programming, Data analysis, Artificial intelligence |
| Management Ability | Project management, Marketing, Product design |
| Thinking Quality | Innovative awareness, Openness and inclusiveness, Cross-boundary integration |
| Communication & Collaboration | Team collaboration, Efficient communication and expression |
| Continuous Learning | Active learning, Practical application |

5.2. Skills Needing Urgent Improvement in Future Work

The fintech industry is changing rapidly, and maintaining continuous learning of professional knowledge and skills is urgent. Faced with the continuous emergence of new technologies, traditional financial practitioners urgently need to improve their digital capabilities, innovative thinking, and compound skills. In the tide of digital transformation of financial institutions, those lacking innovative concepts and digital literacy will be ruthlessly eliminated. At the same time, emerging technologies such as data analysis, artificial intelligence, and cloud computing also

bring huge challenges to financial practitioners, making it particularly crucial to embrace and master these technologies (Zhang, & Hao, 2019).

Currently, the financial industry urgently needs compound talents who combine solid financial theoretical knowledge with digital technology. They must possess the professional qualities of traditional financial practitioners, such as prudent risk control awareness and legal compliance conduct, while also mastering modern skills such as programming and data analysis. Additionally, as fintech products and services become increasingly personalized, practitioners' innovative thinking and learning ability have also become crucial. In fact, the knowledge structure and ability requirements of financial practitioners have undergone significant changes, bringing unprecedented impact to traditional talent training models.

Faced with the challenges of new technologies such as artificial intelligence, big data, and cloud computing, financial practitioners must always maintain learning and keep pace with the times. They should cultivate innovative thinking, pay attention to industry frontier trends, and actively embrace new technologies (Lv, 2025). At the same time, financial institutions need to establish efficient talent training systems, closely cooperate with universities, technology companies, etc., to cultivate and introduce compound talents. Only through continuous learning can one remain invincible in the rapidly changing fintech wave.

Table 7. Key Skills Urgently Needed by Future Financial Practitioners

| Skill Type | Importance Level |
|-----------------------------|------------------|
| Digital Capability | ★★★★★ |
| Innovative Thinking | ★★★★☆ |
| Compound Skills | ★★★★☆ |
| Continuous Learning Ability | ★★★★★ |

5.3. Ways and Methods to Improve Skills

Expanding knowledge horizons and continuously learning new things are key to improving personal skills. First, one should actively learn professional knowledge, understand disciplinary frontiers, and keep pace with the times. At the same time, one should also widely explore knowledge in other fields to cultivate cross-boundary thinking, which helps discover new perspectives for solving problems (Yang, 2025). Reading extensively and thinking diligently are effective ways to broaden horizons, and one needs to actively pay attention to hot topics and social issues, discerning the opportunities and challenges they contain.

At the same time, practical exercise is an indispensable part of improving skills. Only by combining book knowledge with practice can one truly master and apply skills. Therefore, one can actively seek project practice opportunities, put what has been learned into practice, and

summarize and improve during practice. If encountering doubts, one should also take the initiative to seek advice and discuss diligently, gaining new insights through communication with others.

Furthermore, a good mindset is also crucial. Maintain an open and inclusive mindset, be willing to learn new knowledge and accept new perspectives, and do not become complacent. At the same time, maintain a humble and diligent attitude, learn modestly from others, and study hard. A good mindset facilitates knowledge absorption and promotes personal growth.

6. Conclusion

6.1. Main Findings and Summary

The vigorous development of fintech is driving profound changes in the traditional financial industry. As an industry leader, BOC Financial Technology Company plays a key role in this process. Through long-term practical exploration, the company has formed a fintech ecosystem covering multiple fields, providing strong support for the popularization and innovative transformation of financial services (Ouyang, & Lu, 2023).

Notably, relying on advanced technological strength, innovation capabilities, and data advantages, the company has outstanding advantages in enhancing user experience and promoting financial inclusion. Its core technologies cover cutting-edge fields such as cloud computing, big data, and artificial intelligence, and have been successfully applied in multiple scenarios such as mobile payment, online lending, and intelligent investment advisory. At the same time, based on a profound understanding of the financial industry, the company continues to launch innovative products and services, providing users with more intelligent, convenient, and efficient financial solutions.

It is evident that the company has gradually built a business model driven by technological innovation. Relying on a huge user base and massive data resources, the company continuously enhances product value through algorithm model optimization and contextualized services, forming strong data barriers and scale effect advantages (Jia, 2024). This innovative profit model is expected to enable the company to occupy a favorable position in future competition and achieve long-term sustainable development.

6.2. Outlook for Future Development

BOC Financial Technology Company has made significant progress in the fintech field, but there is still broad space for development. Looking ahead, the company needs to uphold the concept of innovation, continuously increase investment in technology, and lead industry changes. The company has deep experience and technical reserves in fintech for many years. On this basis, it can expand into emerging businesses such as big data risk control and blockchain. At the same time, strengthen cooperation with traditional financial institutions such as banks and securities to create a more open and win-win ecosystem.

Similarly, BOC Financial Technology Company should also go with the flow in fields such as artificial intelligence and cloud computing. Vigorously cultivate compound talents, leverage intelligent algorithms to improve service efficiency, and promote financial digital transformation. At the same time, the company must keenly capture market opportunities and explore innovative business models. For example, lay out in fields such as financial education and financial consulting to provide users with comprehensive financial value-added services. Of course, in the fierce market competition, BOC Financial Technology Company also faces considerable challenges and needs to maintain strategic focus and consolidate its own advantages.

The development of fintech is in the ascendant, and BOC Financial Technology Company is in a golden period. As long as it keeps up with the trends of the times and grasps the general development trend, it is believed that the company will surely stand at the forefront in the new track and create more remarkable achievements. Although the future path of BOC Financial Technology Company is full of unknowns, as long as it persists in innovation without stopping, it will eventually continue to write brilliance.

Author Contributions:

Conceptualization, J.L.; methodology, Y.Z.; software, C.L.; validation, Y.Z.; formal analysis, Y.Z.; investigation, Y.Z.; resources, Y.Z.; data curation, Y.Z.; writing—original draft preparation, Z.G; writing—review and editing, J.L.; visualization, Y.Z.; supervision, J.L.; project administration, C.L.; All authors have read and agreed to the published version of the manuscript.

Funding:

Not applicable.

Institutional Review Board Statement:

Not applicable.

Informed Consent Statement:

Not applicable.

Data Availability Statement:

Not applicable.

Conflict of Interest:

The authors declare no conflict of interest.

References

- Chen, S., & Wang, Y. (2019). Fintech and the evolution of the financial ecosystem. *Financial Theory & Practice*, (04), 1-9+112.
- Jia, J. (2024). Research on the relationship between technology finance ecosystem, value appropriation and enterprise innovation. *Enterprise Economy*, 43(03), 114–123.

- Liu, Y., & Zhou, Y. (2018). The formation and impact of the fintech ecosystem. *Finance & Economics*, (01), 59-74.
- Lv, Y. (2025). Research on fintech promoting financial reform and development under the urban big data platform. *Market Weekly*, 38(11), 5-8.
- Ouyang, W., & Lu, M. (2023). Research on the strategic path of building China's digital industrial financial ecosystem. *Journal of Suzhou University of Science and Technology (Social Sciences Edition)*, 40(04), 37-50+107-108.
- Qian, X., Wang, Z., & Jin, J. (2020). Fintech and the reconstruction of the financial ecosystem. *Financial Regulation Research*, (05), 22-35.
- Song, Y. (2025). Exploration of the role and path of fintech enabling enterprise digital transformation. *China Circulation Economy*, (12), 90-93.
- Wang, T. (2025). Innovation of supply chain finance financing model for SMEs from the cluster perspective. *Business Observation*, 11(21), 28-31.
- Wang, X., & Jin, X. (2021). Fintech ecosystem: Core elements and formation mechanism. *Financial Theory & Practice*, (04), 29-41.
- Xiao, X. (2020). Fintech and the construction of the financial ecosystem. *South China Finance*, (03), 18-25.
- Yang, Y. (2025). Research on the construction and support effect of the technology finance ecosystem [Doctoral dissertation, University of Science and Technology Beijing].
- Zeng, Y., & Li, C. (2021). Research on the path of building a fintech ecosystem. *Financial Theory & Practice*, (09), 93-99.
- Zhang, Q., & Hao, F. (2019). The development mechanism and improvement path of the fintech ecosystem. *Financial Theory & Practice*, (09), 97-107.
- Zhao, X. (2018). Fintech and the reconstruction of the financial ecosystem. *Financial Theory & Practice*, (04), 1-10.
- Zhou, J., Zhu, B., & Fan, S. (2018). Fintech: Connotation, trends and impact. *Finance & Economics*, (05), 81-91.
- Zhu, Z., & Zhao, J. (2021). The logical starting point and key links of fintech ecosystem construction. *Modern Economic Research*, (01), 27-34.