

# The Current Situation, Problems and Countermeasures of Financial Technology Application in Commercial Banks

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*Abstract:* In recent years, with the rapid development of technologies such as big data, cloud computing, block-chain, and artificial intelligence, financial technology has penetrated into various sub sectors of the financial industry. The popularization advantage brought by financial technology is conducive to reducing the capital investment in bank operations, effectively alleviating the problems of information asymmetry faced by bank operations for a long time, thereby improving the ability and level of serving the real economy, and improving the quality and efficiency of financial services. As the most crucial link in the financial industry, commercial banks are also accelerating their digital transformation with the development of financial technology, shaping new advantages in the development of financial technology. *Keywords:* Financial Technology; Commercial Bank; Digital Transformation

# Introduction

With the continuous development of financial technology, commercial banks in China are facing severe management challenges and fierce competition. The four pillars of traditional banking industry (partners, product portfolios, professional risk management and physical networks) are quietly being subverted by financial technology. Therefore, commercial banks must be aware of the changing competitive situation, pay high attention to and respond to the challenges brought by the development of fin-tech, actively comply with the development strategy of fin-tech, seize opportunities, innovate the financial service models and channels of commercial banks, in order to achieve the goal of transformation and high-quality development.

# 1. The Current Situation and Problems of Developing Financial Technology in Commercial Banks

# 1.1 Current Situation of Financial Technology Development in Commercial Banks

#### 1.1.1 Clear Guidance for Digital Transformation

In recent years, with the country's emphasis on digital transformation in various industries, the transformation of traditional financial industries through financial technology has also become increasingly profound. To this end, the central bank successively issued the "Financial Technology Development Plan (2019-2021)" in 2019, and on this basis, a new "Financial Technology Development Plan (2022-2025)" was introduced, specifically proposing eight key tasks. Each commercial bank has followed clear guidelines and made top-level designs for their digital transformation strategies.

#### 1.1.2 The Cooperation between Commercial Banks, Insurance and Venture Capital Institutions is Constantly Increasing

Under the implementation of the Guiding Opinions on Supporting Banking and Financial Institutions to Increase Innovation and Carry out Pilot Projects for Investment and Loan Linkage of Science and Technology Innovation Enterprises, the collaboration between venture capital and commercial banks is becoming increasingly close, and the cooperation between venture capital is also becoming closer. In the absence of direct participation in capital markets such as stocks and bonds, venture capital companies have provided a new business model for science and technology innovation enterprises by leveraging their professional risk assessment capabilities, such as conducting financing and other businesses. Some banks have established multi-level risk sharing and compensation systems, providing financial services for science and technology innovation enterprises through financial institutions, and reducing risks through institutional compensation in case of problems. In addition, some commercial banks have also established professional technology finance business branches, such as Qingdao Bank, which has established a technology branch to conduct in-depth research in the field of technology finance and a specialized technology finance business platform. With this as the center, they closely cooperate with government, science and technology bureaus, insurance institutions, guarantee institutions, investment institutions, equity exchanges and other institutions, providing a comprehensive service channel for technology companies, which has effectively promoted the development and growth of local technology innovation companies.

#### 1.2 Problems in the Development of Financial Technology in Commercial Banks

#### 1.2.1 Insufficient Support from the Capital Market

Currently, a multi-level financial system has been preliminarily established, but the direct financing ability of science and technology innovation enterprises in the capital market is still weak. The development speed of science and technology innovation companies is relatively slow, and the current capital market system can no longer adapt to the new round of development needs. Overall, the service capacity of China's capital market is relatively weak. For example, the current stock approval mechanism is prone to overlook the technique research and development of science and technology innovation enterprises, while there is a significant gap in registration between the Growth Enterprise Board and the Small and Medium Enterprise Board. In the integrated financing of science and technology innovation enterprises, the assistance provided by non bank financial institutions is limited, making it difficult for the two to collaborate efficiently. Therefore, in terms of technology finance, it is necessary to further expand and improve the cooperation relationship between the two.

# 1.2.2 Insufficient Level of Customer Exploration and Customized Services

Although in the process of branch transformation, most commercial banks still focus on network services and device self-service, there is still great room for improvement in exploring customers' data. Intelligent risk control and intelligent marketing have not yet fully developed, making it difficult to provide accurate services to customers. General commercial banks classify customers into five types, namely low-end customers, ordinary customers, VIP customers, SVIP customers and top customers. The reasons for choosing banks among the five are not entirely the same, and their actual needs also vary. Low-end customers and ordinary customers pay more attention to factors such as distance, banking services, fees charged, and bank interest. Although commercial banks have installed intelligent equipment, ordinary customers can still enjoy the bank's ordinary services when handling business, their sense of gain from the bank is not strong, which leads to most customers being unwilling to enter the commercial bank's branches. Therefore, commercial banks need to be able to provide them with comprehensive, professional, and customized services, including precise services such as wealth advisory and risk assessment.

# 2. Countermeasures for Commercial Banks to Develop Financial Technology

#### 2.1 Strengthening Cooperation with Third-party Institutions

China's economic development is facing some difficulties, such as shortage of funds and difficulty in financing. Commercial banks can cooperate with the state and fully leverage local government support for the development of technology finance for commercial banks through government incentive policies such as interest discounts, interest margin subsidies, and risk compensation provided by the state, thereby accelerating their layout. In addition, commercial banks can jointly establish credit risk reserves for science and technology innovation enterprises with relevant government departments, and provide unsecured credit loans to science and technology innovation enterprises with a certain reputation through "government guidance, market-oriented operation, and professional services". At the same time, the commercial banks can utilize risk reserves to reduce the mismatch between loan terms and repayment times that may arise during the financing process of sci-tech innovation companies. In addition, commercial banks can also collaborate with listed companies to establish investment loan funds for science and technology innovation enterprises. By operating funds in a unified manner, they can not only provide financial support for science and technology innovation enterprises, but also use capital flow to promote their overall development. Moreover, commercial banks can cooperate with third-party equity investment institutions or form investment and loan alliances through acquisition and control, establishing specialized equity investment platforms. When facing technology innovation companies with good development prospects, commercial banks can establish interest distribution plans with third-party equity investment institutions, which can carry out mergers and acqui-

sitions, or directly invest through investment platforms under commercial banks. Through the "debt to equity swap" approach, the integration of "investment loan" has been achieved, which can effectively alleviate the contradiction between "banks and non banks" and provide better financial support for science and technology innovation enterprises.

## 2.2 Improving the Infrastructure of Commercial Banks

In the development process of commercial bank infrastructure, in order to achieve the characteristics of professionalism, immediacy, and inclusivity, the improvement of infrastructure is the most basic requirement. It requires providing mature supporting facilities to meet the development needs of financial technology. Therefore, it is necessary to work together in software and hardware. In terms of software, technologies such as data mining and computing, distributed storage, batch processing, and artificial intelligence will play an important role. In terms of hardware, network infrastructure, high-end computers, cloud services, and massive memory are also indispensable factors.

#### 2.3 Promoting New Corporate Culture

In most commercial banks, only technical personnel can truly understand the meaning of "fin-tech", while other employees are not familiar with it. Lacking of understanding of "fin-tech" may affect their communication with customers and their support for fin-tech products. To address this issue, commercial banks can enhance their understanding of financial technology at a deeper level and strengthen their emphasis on its importance. Through these efforts, it is possible to accelerate the establishment of a good corporate culture, thus enabling employees to better participate in innovation activities.

# 3. Conclusion

With the progress of financial technology, China's financial industry is undergoing a new stage of development, and commercial banks are also undergoing profound changes. In order to break through the limitations of existing development, it is excepted to actively utilize technology to establish a healthier new financial ecosystem. Therefore, commercial banks should optimize their financial system to a certain extent, fully integrate various resources, and comply with the development trend of financial technology innovation to comprehensively improve their digital, intelligent and information level. In today's rapidly developing information technology, we are facing new opportunities and challenges. Therefore, we should actively assume this responsibility as a strategic task and provide high-quality services to the real economy.

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