

Research on the Transformation of Traditional Commercial Banks Based on the Perspective of Financial Technology

Ke Yang, Jiale Tao

School of Accountancy, Anhui University of Finance & Economics, Bengbu Anhui 233030, China.

Abstract

With the rapid development of technology and the acceleration of the process of informationization, the financial industry has paid increasing attention to financial technology. The rise of financial technology can help improve the operational efficiency of the financial system, promote the structural change of the financial supply side, promote the development of "double cycle", and promote the high-quality development of China's economy. Fintech has had a profound impact on the business model of the traditional banking industry, transforming it from intermediary to platform. Emerging technologies such as artificial intelligence, big data analysis, blockchain and cloud computing have brought more efficient, convenient and personalized financial services to the banking industry. In the face of changing market demand and fierce competition, traditional banks have begun to transform with the help of technology. However, there are still certain challenges in the process of financial technology change. To achieve the transformation, traditional banks must develop a clear digitalization strategy and invest more in technology strength and architecture. Traditional banking firms should establish partnerships with fintech firms, innovative companies, and others to develop innovations and share resources. In addition, they should pay attention to customer experience and provide personalized, convenient, and high-quality financial services to customers. This project will contribute to an in-depth understanding of how fintechs change traditional business models and facilitate the transformation of commercial banks in the fintech environment.

Keywords

Traditional Banks, Fintech, Innovation.

1. Introduction

With the rapid development of information technology and networks, fintech is becoming increasingly popular due to its innovative technological approach and convenient service experience. Fintech is gradually changing the way traditional banking industry operates. Fintech companies, emerging digital payment platforms, and blockchain technology bring great challenges to the traditional banking industry. Therefore, traditional banks must reflect on their business model, actively change and innovate, and gradually transform into a platform-based development adapted to the fintech era. Therefore, the purpose of this paper is to explore the impact of financial technology on the traditional banking industry from the perspective of financial technology, and to explore ways to cope with the changes in the new situation.

2. The traditional profit model of Chinese commercial banks and its problems

2.1. Traditional profit model

By analyzing the value generated by each production factor, the profitability of a commercial bank can be measured as the proportion of value created by operating activities in operating income. Currently, the profitability model of Chinese commercial banks can be categorized into two types: the traditional profitability model, which is based on the deposit and loan spreads; and the non-traditional profitability model, which is dominated by a method that is not based on the spreads. Compared with most Western countries, Chinese commercial banks have long been subject to macro-control, and deposit and loan spreads have been higher. Although this loose policy environment has, to a certain extent, contributed to the rapid development of Chinese commercial banks in recent years, on the other hand, it has also led to the fact that Chinese commercial banks mainly rely on the traditional profitability of deposit and loan spreads, while the contribution of non-carry businesses (such as intermediary business and investment business) is relatively small, and the source of income is relatively single.

2.2. Problems

Over the past few years, the profit model of Chinese commercial banks has been "spread-oriented", focusing too much on interest income and neglecting the development of intermediary business, making it difficult to find new and stable sources of income. This model has led to a steady decline in the profits of the banking industry, which in turn affects the profitability of the entire banking industry. In addition, commercial banks adopting this model usually rely on the expansion of asset size to secure profitability, but the return on capital is low. Among Chinese domestic commercial banks, the development of non-interest business has not received sufficient attention. Large banks focus more on non-interest business, while smaller banks tend to neglect this area. In addition, Chinese financial consumers' weak ability to pay and their low acceptance of innovative products have made it so that the revenues generated by innovation usually do not cover the high R&D costs, inhibiting the willingness to innovate. Finally, since the business model of commercial banks is quite different from that of foreign banks and the business is relatively single, this limits the optimization of the transformation of the profit model of Chinese commercial banks.

3. The impact of financial technology on the traditional banking industry and promote its innovation

3.1. The impact on the traditional business model

3.1.1. Payment business

The continuous development of financial technology provides a new impetus for the innovation of payment methods. In the traditional banking system, credit cards, debit cards and checks are the main payment modes, but with the advancement of modern technology, emerging payment modes such as mobile payments, e-wallets and virtual payments continue to emerge. ^[1]These innovative modes have made payments more convenient, secure and real-time. Users are no longer restricted to traditional banking and can make payments on their cell phones or other terminals. Meanwhile, the speed and cost of cross-border payments are gradually optimized.

3.1.2. Lending Business

The impact of fintech on credit business is multifaceted. On the one hand, fintech has facilitated the rise of online lending platforms, an emerging platform that provides more convenient lending channels for individuals and small and micro enterprises. With the help of technical means such as big data and artificial intelligence, credit assessment and risk management for

banks have improved the accuracy and efficiency of credit placement. In addition, new technologies such as blockchain-based smart contracts have been applied to the banking industry, which has had a great impact on the traditional banking industry.

3.1.3. Asset Management

There are two important perspectives in terms of the impact of fintech on commercial banks' asset management. First, personalized and intelligent management of assets has been achieved through technologies such as smart investment and machine learning. Customers can access personalized investment solutions and keep abreast of asset status through these platforms. Second, blockchain technology improves the security and transparency of assets and reduces transaction costs and risks.

3.1.4. Financial Technology

Through the application of digital, automated and intelligent technologies, the traditional banking industry has made significant progress in enhancing customer experience and service quality. While traditional banks mainly rely on physical branches to carry out their business, FinTech has introduced new service channels, such as online banking, mobile banking and smart customer service, enabling customers to conduct transactions and make inquiries anytime, anywhere. In addition, fintech has also promoted the development of personal finance business, which can provide personalized financial products and consulting services for different types of customers.

3.2. Changes and innovations to the traditional banking model

3.2.1. Enhance user experience with digital technology

With the continuous application of digital technology, traditional banks can provide customers with more convenient, fast and personalized services through online banking and mobile banking. Users can conduct transactions, check their accounts and view relevant information wherever and whenever they want, without having to travel to a physical branch or go through complicated processes. These digital technologies have enhanced user experience and satisfaction while attracting more young people.

3.2.2. Advancing innovation in products and services

Financial technology has played a driving role in the innovation of traditional bank products and services. With the rapid development of Internet technology, traditional banks have launched new financial products and services such as intelligent investment advisors and virtual payments. These initiatives have not only enriched the product mix, but also enhanced the competitiveness of banks in the market competition.

3.2.3. Improving risk management and anti-fraud capabilities

Fintech, using big data analysis, artificial intelligence and other means, has significantly improved the risk management and prevention capabilities of enterprises. Traditional banks analyze on the basis of massive data to discover anomalies and potential risk signals, thus improving the precision and efficiency of risk management. At the same time, financial technology provides new ways for banks to prevent all kinds of fraudulent activities, enabling them to detect and deal with all kinds of fraud in a timely manner and safeguard customer funds.

3.2.4. Promoting cooperation and establishing an ecosystem

Fintech promotes cooperation between traditional banks and technology enterprises and start-ups, and facilitates the construction of an ecosystem. Traditional banks, in cooperation with fintech enterprises, can utilize the technological advantages of technology enterprises to accelerate the promotion of products and services. At the same time, traditional banks also realize resource sharing and innovation through cooperation with other related enterprises in the process of building the fintech innovation ecosphere. [2]

3.2.5. Increase market competition and reduce market barriers

In recent years, with the rapid development of fintech, China's banking industry has been increasing its share within the field of information technology. With their flexible innovation ability, low cost and other characteristics, financial technology enterprises have formed a prominent position in the market with their unique competitive advantages. In the face of fierce market competition, traditional commercial banks must strengthen their technological innovation and services in order to gain a greater advantage in the competition.

3.3. The empowerment of financial technology in the transformation of traditional commercial banks

3.3.1. Can break through the financial services time and geographical restrictions

Traditional commercial banks to carry out various businesses rely on the physical network, the service object is mainly limited to the local people concerned. ^{[3][5]}A small number of service recipients involved in cross-regional business has a high standard of access, while labor costs and business risks have increased accordingly. In addition, the financial services of traditional commercial banks are constrained by business hours, resulting in the public not being able to access the financial services they need at any time. ^[3]In the context of financial technology, commercial banks can realize more diversified services and products across regions with the help of Internet technology, provide professional services for the general public through online channels, and meet the needs of different user groups.

3.3.2. Enhance the ability of traditional commercial banks to attract new customers

The integration of finance and information technology promotes the overall improvement of commercial banks' production capacity and information collection ability. The application of artificial intelligence and cloud computing technology can process, organize and analyze the data, so as to better improve the customer labeling system, and make the customer portrait more comprehensive and dynamic. ^[3]Banks are able to better observe and analyze customers' real financial needs and conditions in this way, thus more fully tapping potential high-quality customers.

3.3.3. It can reduce the operating costs of traditional commercial banks

With regard to the reduction of operating costs, there are three main aspects: first, the reduction of transaction costs. For example, the establishment of infrastructure closely related to the Internet requires a large investment, but once it is put into use, the marginal cost to the customer will gradually decrease and may even reach zero. This change breaks the "law of two or eight" for "long-tail customer" services and makes it feasible to provide more services. At the same time, it provides more sufficient possibilities for the cost-benefit balance of financial support and financial inclusion. ^[3]Secondly, in the era of financial technology, the effective improvement of process coordination and optimization can reduce the overall operating costs of commercial banks. Commercial banks can make use of big data to conduct comprehensive analysis of business processes in order to optimize, deploy and share internal resources for all types of work processes, thereby minimizing operating costs. At the same time, refined management of the customer operation process and the rational application of lean measures can lead to the continuous improvement of management efficiency. ^[3]Third, channel cost reduction. In addition to combining financial technology to improve channel efficiency, it should also combine customer behavioral preferences and habits, rationally arrange customer service methods and places, and fundamentally change the service model of traditional commercial banks to minimize costs.

4. Transformation Strategies and Practices of the Banking Industry

4.1. Bank transformation strategy

4.1.1. Establish partnership with fintech companies

The banking industry should actively establish partnerships with fintech companies to jointly develop innovative products and services. By partnering with fintech companies with advanced technology and innovation capabilities, banks can introduce new technologies more quickly, expand their business scope, and provide better services to their customers. The forms of cooperation include joint research and development, resource sharing and channel cooperation.

4.1.2. Internal Innovation

It is crucial to promote innovation within the bank to stimulate the creativity of employees and strengthen the innovation culture. Banks can encourage employees to come up with innovative ideas by setting up specialized innovation teams and providing them with relevant resources and support. At the same time, banks can also establish innovation investment funds to support the incubation and development of internal innovation projects. These initiatives help banks achieve breakthroughs in areas such as technology, products and services, thereby enhancing market competitiveness.

4.1.3. Digital transformation of services

To achieve digital transformation of banks, it is necessary to digitize traditional business and service processes. By establishing an integrated digital platform, commercial banks are able to improve the efficiency and level of their business activities. For example, services such as online banking and mobile banking are developed to enable users to make transactions and inquiries at any time and place. On this basis, a new approach based on data analytics, artificial intelligence and big data is proposed to improve the ability of enterprises in risk management, customer relationship management and marketing.

4.1.4. Strengthening Security and Compliance Management

With the rapid development of financial technology, banking needs to strengthen information security and compliance to ensure the security and legality of customer data. Effective prevention and control of cyber-attacks is one of the key challenges facing China's banking industry. Commercial banks should strictly comply with relevant laws and regulations to ensure the legitimate operation of fintech business.

4.1.5. Build an open platform and ecosystem

By building an open platform, banks can open their core functions and interfaces to third parties and cooperate with fintech companies and innovative enterprises to create a favorable ecosystem. Such an open platform will attract more participants in the development of new products and services, realizing the goals of resource sharing and collaborative innovation.

4.2. Specific Practices

4.2.1. Digital Banking Services

In order to provide more convenient and efficient digital banking services, many traditional banks have launched online and mobile banking. These systems enable users to conduct transactions and inquiries anytime, anywhere, thus improving the user experience. The motivation for this initiative is to respond to the habits and needs of consumers in the digital age and to compete with fintech companies. The result of this approach is broadened business channels and increased customer stickiness and satisfaction.

4.2.2. Collaboration with fintech companies

Many banks have established partnerships with fintech companies to develop innovative products and services. For example, some banks have partnered with payment platforms to develop mobile payment systems that enable users to make payments more conveniently using their cell phones. Such cooperation aims to leverage the advantages of fintech companies in technology and innovation to expand their business scope and offer different products to customers. The result of the cooperation is to accelerate the speed of product launch and enhance market competitiveness.

4.2.3. Data analytics and intelligent risk management

Currently, the banking industry is increasingly inclined to use data analytics and artificial intelligence to optimize risk management and decision-making processes. By analyzing big data, commercial banks can more accurately assess risks, anticipate customer needs, and provide personalized products and services to consumers. This initiative aims to improve the accuracy and efficiency of risk management and reduce potential losses. The result of this approach is to maximize improved risk control and enhance the customer experience at the same time.

4.2.4. Open platform and ecosystem building

Currently, some banks have begun to build open platforms and open API interfaces to third parties, aiming to build a benign ecosystem. By cooperating with fintech companies, innovative enterprises and developers, they can realize collaborative innovation and resource sharing, and provide customers with more diversified products and services. Such cooperation is driven by the need to expand business scale, accelerate innovation and attract more partners, which ultimately leads to a diversification of products and services, thereby enhancing the competitive advantage of the enterprise.

5. Policy Recommendations

5.1. Deepen digital cognition and clarify strategic positioning

Currently, the domestic banking industry is experiencing a new historical period. In the face of challenges such as financial disintermediation, interest rate marketization and increasingly fierce competition among peers, commercial banks must actively adapt to the new economic normal and innovate their business models and service methods in order to effectively achieve transformation to meet the challenges. In order to successfully realize this transformation, banks need to focus on the following two key issues: firstly, formulate a series of strategies suitable for themselves based on their own characteristics and in light of the actual situation; secondly, go deeper into the market and learn from the successful experience of their peers. On the basis of a clear understanding of their own characteristics, banks need to conduct an in-depth analysis of the actual needs of their target markets and customers, and formulate a targeted strategy that meets their development needs. A clear strategic positioning is crucial. Reasonable development goals should be set and a gradual development path should be planned. Digital transformation is a systematic and continuous change involving the reshaping of the bank's business processes and management system, and requires a detailed implementation plan at the strategic level. At the same time, business needs and changes in market dynamics at different stages of development should be taken into account to determine specific transformation objectives, implementation paths and key initiatives. Banks should identify entry points and continuously promote implementation. Digital transformation should focus on the real needs and problem areas of banking business. On the one hand, it is necessary to determine the exact implementation path in conjunction with changes in the market environment and customer demand; on the other hand, it is necessary to continuously promote

the implementation on the ground and adjust and optimize the relevant projects in a timely manner.

5.2. Cultivate fintech talents and lay the foundation for digital transformation

The digital transformation of the banking industry cannot be separated from the development and upgrading of new technologies. Therefore, this paper proposes new ideas based on fintech that are relevant, operational and sustainable. Specialized talents have always been the key competitiveness of banks, however, with the continuous evolution of technology, there is an increasing demand for technology talents. Therefore, banks need to increase their efforts to cultivate scientific and technological talents and establish a perfect talent training system. Through a variety of training methods to continuously improve the technical level of employees, strengthen the scientific literacy of existing employees, and regularly carry out activities such as "scientific and technological knowledge into the bank" to stimulate employees, especially key members of the enthusiasm to learn new technologies. At the same time, the introduction of more professionals will help improve the bank's financial technology level, prompting employees to deeply participate in the production and operation process, learning the process, tasks and operations of the industry chain, and realizing the interconnection and interaction between science and technology and human beings.

On this basis, it is necessary to break through traditional management methods, establish an employee incentive system, and consider incentive strategies for fintech talents. For example, business training and assessment incentives for science and technology service personnel should be strengthened to create a favorable working environment and career development space. In addition, banks are encouraged to establish a reasonable remuneration system according to the characteristics of the ST personnel in order to stimulate the work motivation of the ST personnel. Through the reform of the remuneration system, banks can cultivate and attract more fintech professionals to join them, avoiding the development difficulties caused by the shortage of talents.

5.3. Accelerate the convergence of finance and technology and promote the optimization of bank business processes

In the process of applying financial technology, the digital characteristics should be reflected, whether in terms of products, services, strategies or tactics. First, all businesses must go through a digital transformation process; second, customer experience, product innovation and channel development need to be combined with digitalization to improve efficiency; third, mechanisms should be established that can simultaneously satisfy individualized needs and achieve refined management; fourth, it is necessary to ensure that the data is unobstructed and that the behavioral trajectory of customers is understood. Improving banks' digital management is key to perfecting data depth and optimal analytics. Optimizing business processes on this basis and choosing the appropriate means is crucial. Effectively bridging finance and technology and applying them to the bank's business, processes and services to realize an intelligent business chain will not only increase the bank's efficiency and added value, but also help to improve customer satisfaction.

In the banking industry, technology and services can be effectively articulated and integrated, which requires banks to strengthen their understanding of technology. As an important financial activity of business operation, it also needs technical support. Therefore, banks need to rationally utilize modern technology to meet their business operation and strategic development needs. Through comprehensive planning, rational deployment and full application of financial technology, the key nodes between finance and technology are opened up to realize the humanization and intelligence of business processes.

6. Conclusion

With the rapid development of financial technology, intelligent financial technology products and high-quality financial services have challenged the traditional banking business model. However, some banks are not yet ready to meet the challenge. In this context, traditional banks must enhance their sense of crisis, strengthen fintech innovation, and cultivate high-quality fintech talents. Only in this way can we promote the transformation of traditional banking business model and enhance market competitiveness.

Acknowledgements

This work is supported by Anhui University of Finance & Economics 2023 Undergraduate Research innovation fund project fund, Project number: XSKY23168.

References

- [1] Yao Hakqin Textile and Clothing. Research on cross-border e-commerce system under the background of big data [M]. University of Electronic Science and Technology Press,2018.
- [2] YE Weiwei,CHEN Yufen. Research on Open Innovation Mechanism and Incentive Policy under Network Crowdsourcing Mode[M]. Science Press,2015.
- [3] Luo X. Enabling role and path of financial technology in the transformation of traditional commercial banks[N]. Finance and accounting letter,2022-05-30(007).
- [4] Zhang Dmao,Jiang Liang. The Enabling Role and Path of Fintech in the Transformation of Traditional Commercial Banks[J]. Southwest Finance,2018,(11):13-19.
- [5] Zhou Xiaotian. Research on business transformation of A bank under the perspective of financial technology[D]. Nanchang University, 2019.