

The Road of Banking Innovation and Development: Taking Shenzhen Qianhai We Bank as an Example

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Abstract. With the continuous evolution and reform of the financial market, private banks, as a new type of financial institution, have increased the diversity of the financial system. To better meet the needs of customers, private banks have expanded innovative business models and technology applications, promoted the competitiveness of the financial market, and improved the efficiency of financial services. This article concentrates on the operation pattern of Shenzhen Qianhai WeBank and uses the SWOT analysis method to analyze the advantages, disadvantages, challenges, and opportunities in its operation process, also finds out the differences between traditional banks and emerging Webanks and puts forward suggestions for bank operation mode. Shenzhen Qianhai WeBank is currently the leader of Internet banks in China, and it also ranks first among private banks in terms of its asset scale and the number of customer groups. The study of Shenzhen Qianhai WeBank bank can shed light on the innovative operating model for banks from its powerful Internet technology gene, excellent financial linkability, and diversified ecological cooperation.

Keywords: Private bank, SWOT analysis, banking innovation.

1. Introduction

The continuous development of China's Internet industry has brought a huge impact on the development of China's market economic system. The number of Internet users has exceeded one billion by 2023, up to 1.79 billion. The rapid growth of the number of Internet users also has profound impacts on the service model of financial business, further stimulated the progress and change of the financial sector, and made the financial industry and the Internet industry a closer relationship. Under the Internet model, financial institutions' value orientation and experience value have reached a new height, and emerging financial institutions that rely on the Internet or online channels were born accordingly. Internet-based financial institutions use advanced Internet information and communication technology and online channels to create new operation modes such as payment, clearing, and platform intermediary services which fully meet the personalized needs of consumers. Internet-based financial institutions also strive to make new breakthroughs in the development of inclusive finance with more convenience and autonomy and Internet banking is one of the representative products of the financial industry.

WeBank is a private bank located in Shenzhen, Guangdong Province, and relies on the Internet platform and technological advantages. Its development history is only about 9 years and it is less famous than the four major banks and shareholding banks with a large number of offline physical outlets. At present, there is little research on WeBank. In addition to the introduction of WeBank, the relevant literature will also be combined with the industry background of WeBank, namely the concept and origin of Internet banking.

In the early stage, this article will expound pertinent literature on the operation mode of Internet banks and traditional banks, combined with the establishment background, current operation situation, and specific operation mode of Shenzhen Qianhai Webank. Then, this article will use the SWOT method to analyze the advantages, disadvantages, challenges, and opportunities of Shenzhen Qianhai Webank from eight aspects including the target customers, product positioning, development space, financial implementation, system construction, risk control management, channel marketing, and human organization.

In addition, this article will also put forward future development countermeasures of Shenzhen Qianhai Webank and suggestions for the transformation of other banks. Webank, as one of the Internet banks, provides customers with 7*24 hours uninterrupted pure network financial service which is the most novel and popular operation model in the banking industry, and realize the unprecedented changes in coverage, availability experience, and so on. The operation of Webank opened banking institutions to a new way of innovation and transformation, and it has a strong leading role and representative significance. Taking it as the research object is forward-looking for other banking institutions, and at the same time, it has strong practical significance for the traditional banking industry on how to deal with future challenges and how to innovate and develop.

2. The Characteristics and Challenges of Traditional Banks in the Big Data Era

2.1. Characteristics of traditional banks

Previous banks provided simply face-to-face counter services while traditional banks at present divide business scenarios into online and offline. Off-line, they handle various banking services for people at their own business locations. On the other hand, they launched their own mobile banking APP online to provide people with convenient online services, people can transfer money and other operations anytime, anywhere on their mobile phone [1].

Traditional banks had set up a series of physical branches in various regions to provide face-to-face financial services, including bank branches, ATMs, checking and deposit stations, etc. They encourage customers to go to branches to do business themselves, because this face-to-face communication builds trust, and customers can get real-time help and answer questions. In addition to ordinary deposit services, traditional banks also provide a wide range of financial products and services, including savings accounts, checking accounts, loans, credit cards, investment products, insurance, and trust services. In addition, traditional banks will also provide clients with professional services such as financial advice, investment strategies, and financial planning through professional financial advisers. Traditional banks usually build a reputation through long-term operation, so customers have a high degree of trust in traditional banks. Not only that, but they are also subject to strict supervision to ensure the stability of the financial system and the role of protecting customers. But at the same time, traditional banks are relatively expensive to maintain branches and hire professionals and usually have a conservative culture, leading to slow innovation and relatively difficult coping with the rapidly changing fintech sector.

2.2. Challenges of traditional banks in the big data era

Today, the rate of technological change in the banking sector and the entire economic ecosystem is extremely high. These changes have a significant impact on the dynamism of individuals and the socio-political community that no one could have imagined. Increasing data usage, machine learning based on artificial intelligence, the Internet of Things, and digital technologies play an important role in this process [2]. Internet finance in the big data era can effectively improve the situation that traditional bank transactions were limited by time and space in the past, and provide convenient services for many aspects, which is the innovation of Internet finance [3].

The era of big data requires banks to be able to effectively manage, store, and analyze large amounts of data coming from transactions, customers, markets, and risks to extract valuable information and use it for business decisions. In the digital age, customers have higher expectations for personalized and real-time services, so banks need to use big data to understand customer needs, provide personalized products and services, and pay attention to security and privacy protection. New entrants such as emerging fintech companies and digital banks have used big data and innovative technologies to change the competitive landscape of traditional banks. Traditional banks need to keep up with these competitors and keep innovating to maintain market share. The development of big data technology can help banks to better identify risks and take corresponding measures, but it may also introduce new risks, such as data breaches and cyber-attacks. Therefore, banks need to strengthen

network security and data privacy protection. Traditional banks often have a large and complex technology infrastructure, and upgrading and integrating these systems to meet the requirements of big data can be a huge challenge that requires a huge investment.

In order to compete in the changing digital landscape, banks have to adapt. The banks of the future, both incumbents and challengers, need to address liquidity transformation, data, trust, competition, and the digitalization of financial services [4].

2.3. Characteristics of Internet banks

Companies are facing fierce competition in the modern era of web-based technologies, when customers prefer using the web for their commercial and daily use, such as banks [5]. Therefore, the business model in which a banking industry operator provides services to consumers through a physical bank will be phased out, while consumers' needs for financial services will be satisfied via digital, Internet-based, and mobile financial services [6]. Internet banking is the latest technological development that allows consumers to have direct access to their financial records and transactions online [7]. Internet banking offers a myriad of advantages, including accelerated marketing through enhanced customer accessibility, streamlined introduction of new services, broader dissemination of information, competitive edges, customer attraction and retention, increased revenues, reduced costs, greater potential for time efficiency, heightened innovation capacity, improved communication channels, and elevated levels of customer satisfaction and loyalty. With the help of Internet mobile phones, internet banks can provide services such as fund transfers, utility bill payments, payment of insurance premiums, online shopping, balance inquiries, etc. Different mobile banking interfaces such as UPI, E-wallets, and mobile banking applications of banks have enhanced the usage of mobile banking in recent eras [8].

3. Shenzhen Qianhai WeBank SWOT Analysis

3.1. Introduction of Shenzhen Qianhai Webank

In recent decades, internet finance has significantly developed in China. This new financial service format has significantly impacted China's economic growth [9]. China's economic trajectory has demonstrated sustained improvement over the long term, showcasing apparent advantages in fostering a more robust circulation within the domestic economy. The ongoing refinement of the socialist market economy aligns seamlessly with the concurrent drive toward advancing the "four modernizations." The banking industry, experiencing a phase of reasonably steady growth amid scarce opportunities and challenging conditions, is integral to this developmental landscape. In pursuit of an ideal modern financial system, a pivotal milestone was achieved on March 11, 2014, when the China Banking Regulatory Commission granted approval for the pilot operation of the initial cohort of five Internet banks. [10]. Shenzhen Qianhai WeBank Co., Ltd., initiated by Tencent, Baiyeyuan and Liye, was officially opened on December 16, 2014. It is the first commercial bank funded by a private enterprise in the People's Republic of China. WeBank has settled the credit card department, business department, Science and Technology Department, Strategy Department, micro-enterprise department and other departments, making it a typical Internet bank with the platform to support online transactions and asset-light characteristics, mainly taking individual consumers and micro enterprises as the service object. The business scope of the bank is mostly to absorb the deposits of small and micro enterprises, personal deposits. At the same time, loans are issued to micro-enterprises and individuals, including both short-term loans and medium-term and long-term loans. In addition, WeBank can also handle bank cards, domestic and foreign settlement, foreign exchange and bond services. WeBank has no physical business outlets or counters, and issues loans through facial recognition technology and big data credit rating, without requiring property guarantee.

3.2. Strengths of Shenzhen Qianhai Webank

3.2.1. Target customers

Since the date of the establishment of Shenzhen Qianhai WeBank, its business direction has been locked in the direction of inclusive finance, and its target customers for general public such as free operators, working class and shop merchants, as well as startup entrepreneurs and micro operators which play a complementary role with traditional banks.

Small and medium-sized customers usually have different needs and characteristics. By focusing on this market segment, Webank can better understand customer needs and provide more precise products and services to increase customer stickiness. Moreover, the size of the main customer of Webank is relatively small, which means the risks are comparatively controllable and the customer relationships are easier to build which is beneficial to reduce credit risk and meet customer needs.

3.2.2. Product positioning

Compared with other private banks and joint-stock banks, the product of WeBank has fully considered the target customer in design. Shenzhen Qianhai Webank is a special service provider whose self-operated products focus on personal deposits and micro-loans and these businesses have sufficient considerations that correspond to transaction scenarios such as mortgage repayments. The other part of its operation is the consignment business which is relatively comprehensive and provides personalized financial plans.

In the deposit and loan business of Shenzhen Qianhai Webank, it provides personalized and convenient financial solutions by focusing on small and micro-enterprise services, digital innovation, and effective risk control, which consolidates its leading position in the field of small and microfinance. In terms of agency products, relying on the huge customer base and digital platform, WeBank is able to achieve personalized recommendations, and a wide range of sales channels, and provide diversified products through partnerships, thereby gaining competitive advantages in the market. This comprehensive and synergistic positioning enables WeBank to meet the diverse financial needs of customers while providing an excellent service experience through digital innovation.

3.2.3. Expansion capacity

From the total asset growth rate and the scale of customers, we can see the rapid growth of Shenzhen Qianhai Webank, and we can analyze its development space potential from its business ecological foundation and inclusive credit space.

According to the annual report disclosure of various private banks, WeBank's assets, profits, revenue, and other aspects are ranked first place. From 2016 to 2019, 34 large state-owned banks and joint-stock listed banks were selected to compare the total asset compound growth rate while WeBank has reached 134.6%, significantly higher than other listed banks, indicating that the growth rate of WeBank is very fast and the future space is still considerable.

Diversified scenes such as social networking and continuous ecological business flow advantages constitute a unique touch ability, which is the development basis for serving the micro customers and is also the main source of high growth space for its future development.

As trusted data provision of micro customers makes it difficult to meet the requirements of traditional banks, there are more difficulties in providing service to personal customers. As of May 2020, according to the official website of the People's Bank of China, China's inclusive small and micro loan services only cover 28.63 million people and the coverage of inclusive finance is only a quarter according to the data provided by the State Administration for Market Regulation. Therefore, three-quarters of the small and micro players in the market still need financing support and equal banking services, which also provides the future development space for Internet banks such as WeBank.

3.2.4. System construction

WeBank does not adopt the "gold architecture" practice of traditional banks, which can avoid the IOE high-end equipment purchase fee and software license, and using standardized hardware and open-source software to build the system can effectively reduce the cost. Moreover, WeBank has built a set of autonomous and controllable technologies, replacing a large number of operation and maintenance support that require manual operation, and effectively reducing the annual system operation and maintenance costs. According to the data released by WeBank, the annual technical operation and maintenance cost of a single account can be reduced to less than 10% of the same industry. The operation and maintenance cost of each account is about 20 to 100 yuan, and the cost of each loan is less than 2 yuan, while the traditional bank needs about 2,000 yuan.

In addition, the core system of WeBank is the first basic system design in China that does not rely on foreign equipment giants, which avoids high dependence and obtains better data security and protection.

3.2.5. Marketing channels

Compared with other private banks, the main operating channels of WeBank are beside the small programs of various banking products on WeChat, the main wireless operations also include the WeBank APP (mainly for individual consumers) and Wep APP (mainly for small, medium-sized enterprise operators), while other private banks lacking an exclusive enterprise service APP. At this point, the service channel of WeBank is more comprehensive and thoughtful.

Internet banks mainly acquire customers online, so the efficient and accurate positioning of target customers is the characteristic of their operation mode, and also an important starting point to achieve business performance. WeBank has applied its world's leading federal learning technology to the advertising and marketing of financial products and realized the precision marketing effect without uploading the back-end data and protecting customer privacy. To ensure that customers with needs are met, the whole process takes a series of financial services in a few minutes online, WeBank named this marketing capability "Federal Recommendation".

3.3. Weaknesses of Shenzhen Qianhai Webank

3.3.1. Difficulties in opening a settlement account

Although WeBank operates as an online Internet bank, However, the individual settlement households and unit settlement accounts should still follow the People's Bank of China "(2016) 302" and "Hair (2016) 261" requirements to achieve face-to-face signing, Therefore, compared with the traditional banks with a large network of branches, it is much more difficult to open individual first-class households and unit settlement households of Webank. Customers need to go to the business department of their Shenzhen headquarters or use the process of door-to-door verification to complete the account opening. Therefore, at present, the deposit, withdrawal, and transfer business of WeBank is mainly realized through the individual second-class account carrier, and the second-class individual account can be opened online only when the customer needs to hold the first-class personal bank account.

3.3.2. Difficulties in improving debt structure

In terms of the debt structure, WeBank has no physical branches and there is still a big gap between brand awareness and public trust and traditional banks. Webank also shows a great weakness in absorbing low-cost deposits. According to the debt structure data of WeBank from 2016 to 2020, Webank's interbank liabilities exceeded 95% in 2017. As relying heavily on interbank liabilities has a significant impact on lending capacity and loan pricing, it is not conducive to serving micro, small and medium-sized enterprises.

3.4. Opportunities of Shenzhen Qianhai Webank

China's digital financial market is still growing, and WeBank has an opportunity to expand its market share as more people access online banking and payment services. WeBank can continue to work with fintech companies to launch innovative products and services to meet changing customer needs. In addition, Webank could also consider expanding its international business, especially in fintech and digital payments, to expand its market.

3.5. Threats of Shenzhen Qianhai Webank

China's digital banking market is highly competitive, and WeBank is facing competitive pressure from other digital banks, traditional banks and international fintech companies. The changing regulatory environment in the financial industry may create uncertainty about Webank's business and compliance. WeBank needs to invest more resources to ensure the security and privacy of customer data to deal with the potential risks of data breaches and cyber-attacks.

4. The Enlightenment to Bank Operation Mode

Through specific operation mode analysis of Webank, it is known that Webank has a strong contrast advantage in various aspects of the operation mode. However, there are also some difficulties and challenges, for its scale efficiency, needs to be improved, group shareholders' advantage to be strengthened, and equity to be more diversified. Besides, Webank needs to improve capital scale reduce operating costs, and try to expand in the field of high-quality customers at the same time. Therefore, based on the analysis results of this paper, specific development strategies and suggestions are put forward for the future development of Webank's operation model. At the same time, combined with the success of WeBank's operation mode, it puts forward the ideas for the operation mode of traditional commercial banks, hoping to provide some reference for the future development of the banking industry.

4.1. Suggestions to Webank

Webank should deepen the group shareholders' advantage cooperation, and get more internal and external flow support. In terms of product positioning, do not large or small loan companies, reduce costs and transform into comprehensive financial services. on the marketing channels, enhance the level of equity diversification, improve public trust, and improve the brand image and visibility through the Internet. In terms of risk control, it should comply with the requirements of regulatory compliance and prudence, and pursue high efficiency and safe operation.

4.1.1. Target customers

During the epidemic period, Webank provided preferential measures such as delayed repayment and interest reduction for the affected customers. At the same time, Webank increased the credit supply to the epidemic areas to increase the first loan rate of small and micro enterprises, truly serving the customers that traditional banks could not really serve, and fully supporting the resumption of work and production of small and micro enterprises. However, all this is also attributed to its advantages in scene process data and technical risk control ability. Therefore, obtaining better quality and available data and getting more trusted data are important ways for its future development.

At present, some user data of WeBank comes from the ecological scene of the group, lacking financial attributes and low credit conversion rate. Therefore, credit data sources can be increased, such as information sharing with cooperative banking institutions, and obtaining trusted data of other financial institutions through compliance channels. Secondly, we can consider more cooperation with Internet platforms outside the Tencent ecosystem to obtain more online real, customer transaction background data or payment behavior, and obtain traffic data with high financial attributes and more comprehensive dimensions.

4.1.2. Product positioning

WeBank should continue to strive for the possibility of an online account opening pilot, and reduce the operating cost of account opening. As mentioned above, WeBank has great restrictions on user payment experience and debt products in the problem of settlement account opening. With the continuous development of biometric technology such as face recognition and the influence of the epidemic environment, the silver, Internet Banks, such as active, priority in a certain service scenario pilot the possibility of opening an online account, through online biometric technology upgrade and offline after the door to verify, in ensure the user account security and meet the premise of fraud prevention and control level, achieve first try first, the possibility.

4.1.3. Marketing channels

Like other Internet banks, although WeBank operates through online channels, its popularity and trust are still not as good as traditional commercial banks in the years of development. The public trust in the main body of a bank is the basis of a bank, which is the starting point to ensure its liquidity and safety. First, we can consider trying more diversified equity subjects, such as introducing capital scale advantages and more famous financial institution partners. Second, it is suggested that on the basis of differentiated services focusing on data and technology, it can help the public to know more about and contact Internet banks, so as to accumulate more public foundation for the development of Internet banks and constantly improve the public's trust in them. The third is the combination of online and offline brand building. In addition to the online activity, it is also suggested to organize offline mobile brand story publicity, such as multimedia mobile car stage and business physical story labels or public welfare activities, so as to make up for the congenital deficiency of no physical outlets.

4.2. Suggestion to Traditional Banks

The layout of traditional banks in the physical network is both an advantage and a pain point. How to make good use of the current advantages of branches is still continuously explored. From the analysis and research of the operation mode of WeBank, the future integration of bank branches and various industries and the purchase of an open digital bank operation mode is the way to advance. On one side, banks can connect with the industrial business flow, the value of industry and banks, such as bank outlets + tourism in the outbound and foreign exchange business concentration areas. Traditional banks can also use bank outlets to build consumer platform products, make offline experiences or deliveries, and provide corresponding installment credit services and other content at the same time to guide the online and offline flow. When parents buy financial products such as educational funds for their children, traditional banks can connect with education platforms to provide children's growth education programs, etc. Through the combination of industries, the digital and open integration of traditional banks can be realized.

In the pursuit of digital development today, the operation of banking services promotion is also in the subtle change, and life scene more closely set involves our food and clothing and all aspects, convenient and efficient financial services must be with these scenes and aspects can organically together, and can realize anytime and anywhere and personalized service, this is the traditional bank to face. And the platform is an important business model change. On the one hand, traditional commercial banks can rely on their own technical strength and existing customer users to establish their own life scene platform; on the other hand, traditional commercial banks can also form cooperative alliances with non-financial service platforms, effectively combining banking services and platform scenarios and realize the financial service coverage of the whole scene. Cloud computing, the Internet of Things, artificial intelligence, and big data provide the possibilities for development and transformation.

Compared with Internet private banks, the advantages of traditional banks lie in the loan funds. Traditional banks can combine the advantages of Internet platforms to make the funds flow to small and micro enterprises more quickly. In addition, traditional banks use Internet data to quickly evaluate the business conditions and capital needs of enterprises. For example, a large number of transaction

data of catering enterprises accumulated by the Internet review platform are used to quickly evaluate the real operating conditions and capital demand of enterprises, and the efficiency of bank credit decision-making is greatly improved. At the same time, on the premise of clarifying the access mechanism of cooperative institutions and doing good risk control, both parties can further reduce financing costs and improve service efficiency.

5. Conclusion

The main body of the research and analysis in this paper is the operation mode of WeBank. First of all, the article introduces the concept, characteristics, origin, advantages and challenges of Internet banking, the introduction and the operation mode of WeBank. Secondly, the specific cases and related statement data introduce the specific operation mode of WeBank, including the analysis of its main operation position and product structure, the growth, profitability, and risk control ability of the operation mode, as well as the challenges and problems faced under the current operation mode. Finally, the relevant suggestions for the future operation mode of WeBank and the important enlightenment for the development of traditional commercial banks are obtained.

The development course of Chinese Internet banks is not long, only for about a decade. However, many private banks and state-owned banks are positively speeding up the process of online financial services. Shenzhen Qianhai WeBank, as the leader of internet banks, its operation mode of continuous try and exploration for other trade provides a model for reference, which is the trend of banking development in the future. In the future, with the development of Internet fintech and the gradual improvement of the corresponding regulatory system, the operation mode of WeBank will be more mature and more innovative. Therefore, the research on the operation mode of WeBank can be more in industry competition and differentiated innovation development in the future.

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