

A STUDY ON CUSTOMER LOSS OF HB RURAL COMMERCIAL BANK UNDER THE BACKGROUND OF FINANCIAL DIGITALIZATION

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Abstract: Under the wave of financial digitization, HB Rural Commercial Bank is facing unprecedented challenges and opportunities. Customer churn, as a major challenge in bank operations, is particularly prominent in the context of financial digitization. This article aims to explore in depth the reasons for customer churn in HB Rural Commercial Bank's digital transformation process and propose effective response strategies. To Study the Identify the Reasons for Customer Churn2) To Study the Economic Impact of Quantifying Customer Churn; 3) To Study Their Effective Customer Policies

This study adopts a quantitative research method, based on the theory of customer satisfaction, and adopts a random sampling method to conduct a questionnaire survey on 132 high-quality customers through a structured questionnaire. The focus is on examining factors such as customer churn and economic factors and formulating strategies.

Keywords: Digitization, Customer Churn, Service Quality, Product Innovation

Introduction

Since 2011, China's development of digital inclusive finance has entered a new period of development. In 2011, China's digital economy index increased from 33.6 to 334.8, a tenfold increase in ten years. Finance is a natural technology. From the initial Internet finance to today's Internet finance and digital finance, we are very concerned about the integration of finance and technology. Internet finance was first mentioned in the 2014 Government Work Report. In 2015, the CSRC issued the Guidance on Promoting the Healthy Development of Internet Finance. Since then, digital finance has entered a standardized development stage.

The People's Bank of China released the "FinTech Development Plan (2019-2021)" in August 2019, proposing suggestions for China's future development goals, directions, and paths. Since the outbreak of SARS in 2020, contactless banks, digital banks, and mobile banking have provided strong support for fighting the epidemic and economic development; Since 2021, the state has increased the regulation of the Internet financial market. In recent years, with the rise of digital finance, the digital

transformation of domestic banks has become a trend. In the 14th Five Year Plan, "Bank Informatization Transformation" has also been repeatedly mentioned, with a special mention of "continuously promoting the development of financial technology and accelerating the digital transformation of banks". Major banks are also increasing their investment in technology, accelerating the development of digitalization, and establishing open banks, digital banks, and smart banks.

Since 2021, China Construction Bank has been focusing on "technology forcing" and "digital ICBC" as its core, "digital transformation" as its "three major strategies", "digital investment promotion" with "Digital Bank of China+" as its core, "accelerating digital investment promotion and winning with quality" as its core, "Postal Savings Bank" with "building a" digital China Merchants Bank "as its development direction, and" promoting digital China Merchants Bank as its core ". From this point, it can be seen that with the arrival of the wave of digital finance, China's commercial banks have also begun digital transformation, which is also the "survival path" of the current banking industry.

Research Objective

- 1) To identify the reasons for customer churn
- 2) To analyze the economic impact of quantifying customer churn
- 3) To propose effective customer policies

Literature Review

Impact of Digital Transformation on Commercial Banks at Home and Abroad

In foreign literature research (Xie, 2023) constructed an indicator system for measuring the digital transformation of banks from three dimensions: strategic transformation, business transformation, and management transformation. Using data from Chinese commercial banks, the progress of digital transformation in the Chinese banking industry was measured. The empirical results indicate that digital transformation can improve bank performance, reduce the negative impact of new technology entrants, and promote offline channel exit.

The fuzzy set qualitative comparative analysis of the digital transformation practices of Chinese commercial banks in (Cheng, 2023) article indicates that: (1) a single condition of strategic orientation or dynamic capability does not constitute a necessary condition for high digital transformation, but market orientation has a more universal effect on the generation of high digital transformation. (2) There are three configuration paths that can facilitate the highly digital transformation of commercial banks, such as the perception driven path led by strategic orientation, the integration driven path led by strategic orientation, and the market driven path led by dynamic capability. (3) There are two configuration paths that lead to non-high digital transformation, which verifies the existence of asymmetric relationships compared to the configuration paths of high digital

transformation; (4) In the path of strategic orientation, there is a substitution relationship between perceptual ability and integration ability. The research results have contributed to the literature on digital transformation and provided insights for the digital transformation of commercial banks.

Maynard (2022) conducted an empirical study on the digital transformation of Chinese commercial banks based on efficiency improvement. We analyze banks with superior efficiency in technology investment and evaluate their digital maturity and digital transformation experience. The results indicate that digital investment has a significant promoting effect on the production efficiency of commercial banks; However, heterogeneity exists between banks. Based on theoretical research and empirical experience in digital transformation in this field, we further propose a path for bank digital transformation.

Johnstone (2021) argued that despite Kenya's vast banking infrastructure, the opportunities for customers to access financial services and products are low in the presence of digital banking, which is related to poor access to financial services. The article links the convenience of digital financial services in Kagado County with financial inclusiveness. The research in the article adopts descriptive research design and quantitative analysis methods for analysis, jointly promoting the financial inclusiveness of Kagado County.

In domestic literature research, Qi (2022) used questionnaire survey data from 87 county-level rural commercial banks to empirically test the impact of financial technology on the primary business of rural commercial banks. Empirical research has found that there is an inverted U-shaped trend between digital inclusive finance indicators and the operating scale of small and micro enterprises. This means that in situations where the level of financial technology development is not high, the development of small and micro enterprises in banks is beneficial, but when it reaches a certain critical point, the operating scale of small and micro enterprises in banks is actually hindered. In the secondary classification of financial technology, only the depth index of digital financial applications and the scale of small and medium-sized businesses of rural commercial banks also show an inverted U-shape, indicating that current financial technology is to some extent achieved through the depth of digital financial applications of small and medium-sized commercial banks. From the perspective of commercial competitiveness, there are significant differences between the high and small industries, indicating that competition in the banking industry has a certain impact on this U-shaped effect.

Zhu (2021) pointed out in his article that the digital transformation of rural small and medium-sized banks in China shows obvious characteristics of a hierarchical structure. The top institutions are exploring and promoting it in all aspects, while the central hierarchical structure is moving from informatization to digitization, while the tail hierarchical structure is still in the early stage of informatization. Compared with large banks, China's small and medium-sized commercial banks still face shortcomings in the process of digital transformation, such as insufficient talent

accumulation, weak technological foundation, slow integration of business and technology, incomplete organizational structure, and difficulties in resource investment. At the same time, they also face challenges such as dual layered organizational structure and weak technological supply capacity, business challenges brought by online and intelligent transformation, and challenges brought by insufficient management capabilities. On this basis, an organizational structure of "large platform + small and micro enterprises" is constructed by integrating "functional platform", "business platform", "technology platform", "data platform", and "risk control platform", and a digital collaboration model of "technology provider + commercial execution subject" is constructed. Through collaboration with network technology enterprises, their own technical and commercial strength is enhanced. The dispersed offline banking network is used as the portal of the digital ecosystem, and "sunk information" is used as the "production factor" to build a digital collaboration model of "technology provider + commercial execution subject" in the way of "large platform + small enterprise".

Song (2021) believed in the article that the rapid development of financial technology in small and medium-sized banks has become a consensus, and the epidemic has accelerated the digital transformation of small and medium-sized banks. In the post pandemic era, small and medium-sized banks will enter a new stage of comprehensive digital upgrading and development and will face multiple challenges such as the overall shortage and supply-demand imbalance of financial technology composite talents, the differentiation and lack of motivation in digital development level structure, lagging internal agile organizational transformation and limited innovation, and intensified competition in external digital development space. Small and medium-sized banks should seize the new opportunities of the digital economy era, accelerate the implementation and upgrading of digital strategies through innovative talent mechanisms, strengthening technological integration, promoting organizational change, and expanding open ecosystems, providing support for improving governance and deepening reforms, and achieving differentiated high-quality development.

Cai (2021) proposed that the development of financial technology has two impact mechanisms on the operation of commercial banks: technology spillover effect and market crowding out effect and elaborated on its actual impact on the operation of commercial banks from three transmission channels: business customer base, financial function, and asset liability.

Zhao (2021) believed that the launch of DC/EP has intensified competition among banks, reduced operating costs, weakened physical network functions, improved payment efficiency, and increased customer stickiness. Therefore, this article proposes to strengthen the tracking and research of digital currencies, increase technological investment and reserves, accelerate the transformation of physical outlets, build application scenarios for digital currencies, accelerate digital transformation, and do a good job in risk management of digital currencies.

Research on customer churn in banks

In foreign literature research, Zhao (2014) used theoretical research and practical methods to explore how to use data mining techniques to predict bank customer churn. Identify high-risk customers and take certain measures before customers truly lose. This study will provide a reliable basis for bank decision-making.

Xiao (2005) found that the relaxation of internal regulations and widespread acceptance of new technologies in the financial services industry are intensifying competition in the financial market. The core of each financial services company's business strategy is the ability to retain existing customers and engage with new potential customers. Data mining is used to play an important role in these efforts. This article proposes a data mining method for analyzing customer churn in retail banks. We discussed challenging issues such as highly skewed data, time series data unfolding, leak field detection, and the process of data mining projects for loss analysis of retail banking customers. We used lift as an appropriate measure for wear analysis and compared the lift of data mining models integrated with decision trees, enhanced naive Bayesian networks, selective Bayesian networks, neural networks, and classifiers of the aforementioned methods. Reported some interesting findings. Our research has demonstrated the effectiveness and efficiency of data mining in analyzing churn in retail banks.

In domestic literature research, Xue (2018) believed that conducting customer churn analysis in commercial banks can help bank customer relationship managers understand the ways, characteristics, causes, and impacts of customer churn, and help banks retain existing customers and expand new ones.

Wang (2014) found that there is a negative relationship between monthly average cash deposit, monthly average consumption, maximum deposit balance, account type, monthly average transaction frequency, and response to promotions and customer churn. The maximum interval between transactions is positively correlated with customer churn, indicating that the longer the interval between two transactions in which customers actively participate, the greater the customer churn.

Yang (2022) found that while accelerating digital and business transformation, rural commercial banks should also streamline their business processing and improve their customer management system in order to reduce customer churn.

Xu (2006) conducted a case study was used to illustrate the reasons for the loss of gold customers in rural credit cooperatives. Thinking about the loss of gold customers in rural credit cooperatives, further strategies for rural credit cooperatives to cope with the loss of gold customers were proposed.

The research team of the Changde Branch of the People's Bank of China pointed out in the article that relying on rural finance, strengthening financial services, and providing support for a large group of rural private small and medium-sized enterprises. However, as the company grows in size, it

is no longer able to adapt to its increasingly diverse financial needs, coupled with fierce market competition, resulting in customer loss. The project team conducted a special survey on customer churn in 9 rural credit cooperatives in Changde City through visiting financial institutions and enterprises, holding symposiums, questionnaire surveys, and other methods. The results showed that the loss of loan customers in Changde City's credit cooperatives was on the rise, with small loan amounts, high interest rates, poor product innovation capabilities, and weak settlement functions being important factors leading to customer churn. We must realize that customer churn is a common market phenomenon, and at the same time, we need to objectively analyze the advantages and disadvantages, encourage credit cooperatives to change their concepts, strengthen services, and promote the continued and healthy development of their business.

In recent years, with the development of economic globalization and market diversification, and the increasingly fierce market, the goods or services within enterprises have become more and more similar. The original "product centered" service concept has changed, and more companies have begun to use the concept of "customer centered", customer relationship management (CRM), and IT system construction methods to improve customer service. Research shows that when customer turnover is below 5%, a company's profits will increase by 1.3-1.8 times. Developing new customers requires a significant investment of resources and high costs, which are 4-6 times more expensive than retaining an old customer. So, an issue that every company is very concerned about is how to retain old customers, predict potential lost customers in advance, and retain them.

Wang (2016) selected relevant information and data of customers from commercial bank databases and used data mining methods to establish a prediction method for customer value segmentation and customer retention from two aspects: customer value and customer retention. Based on the analysis of customer characteristics, a suitable retention strategy has been proposed. In the process of retaining customers, it is important to find ways to retain them, reduce customer churn rates, and improve customer satisfaction.

Concepts related to digital transformation

The "digital transformation of banks" studied in this article is a commercial bank with digital information technology as its core, which has been greatly improved in business processes, system structure, risk control, operational management, and other aspects, thereby providing customers with safe, efficient, convenient, and personalized financial products and services. Under the trend of digitization, networking, and intelligence, especially under the influence of "platform + ecosystem", many commercial banks are experiencing their own subversion and value reshaping. The so-called "digital banking revolution" refers to the use of technological means to analyze data and improve the effectiveness of its internal operations

Concepts related to customer satisfaction and loyalty

Customer satisfaction is a method of measuring customer satisfaction. Usually, sampling is used to obtain relevant conclusions based on the customer's rating data for a specific satisfaction index, using a weighted average method. A marketing strategy that emerged in the 1990s - customer satisfaction management - requires both understanding the satisfaction level of external customers and researching, analyzing, and solving the satisfaction status of internal customers - employees of the enterprise.

Customer churn concept

Customer churn is caused by external market factors, customer reasons, and the interaction between the enterprise and customers, resulting in a certain degree of interruption between the enterprise and customers. In various industries, customer divestment has its own definition. For commercial banks, it is generally the transfer of huge funds from existing customers. Due to the characteristics of financial business, customers usually do not choose to transfer money first and then cancel it. Therefore, during a certain period, a significant decrease in customer wealth is referred to as "customer loss" by commercial banks.

Methodology

The purpose of this survey is to conduct in-depth research on key issues in bank customer relationship management by conducting research on customer attitudes towards products, services, equipment, relationships, brand image, etc. At the same time, the customer relationships of the branch offices were tracked, and services were provided to key customers. On this basis, the internal reasons for customer relationship satisfaction were analyzed, and the best and guarantee strategies for HB Rural Commercial Bank's customer relationship management were proposed.

This survey is aimed at HB Rural Credit Cooperatives, which categorizes high-end customers based on their total assets, namely high-end wealth management customers with savings and financial assets of millions of yuan or more. In the questionnaire, random sampling was used based on age and gender, resulting in a relatively fair evaluation of the overall questionnaire of H Bank R Branch.

The investigation includes two aspects. The first aspect is the general information of the survey subjects, including gender, age, occupation, and customer risk tolerance; The second aspect explores the level of customer satisfaction with commercial banks. Including comprehensive services, employee services, product services, lobby services, and so on. This survey was conducted for customers, including 5 regions and 20 small questions, in order to identify and improve the reasons for the loss of high-end financial customers.

Results

The specific steps of this questionnaire survey are as follows:

First of all, the questionnaire is designed to produce problems that are easy for individual

customers to understand and judge, and select the working time of the survey distribution time, so that more customers can complete the survey timely and effectively.

Secondly, we should issue the questionnaires, contact the customers in advance, provide the explanation work, and issue the questionnaires after obtaining the consent of the customers, so that the customers can voluntarily answer the questions, and ensure the objectivity of the answers. The author mobilized the branch personal finance customer manager to distribute the questionnaire together. Due to the large number of individual customers, both the online and offline distribution method is adopted. The content of the questionnaire is only for academic research, so there is no need to worry about information leakage and form filling, so as to ensure the objectivity of the questionnaire.

Finally, the respondents were collected and sorted out, and the survey results were summarized. HB Rural Commercial Bank has 6 personal financial business managers and 25 managers in each sample. The poll included 150 customers, including 120 electronic materials and 30 printed materials. A total of 132 valid questionnaires were recovered, with an effective rate of 88%. The basic information of the respondents including age and occupation is very different, which can be a real evaluation of most HB rural bank customers.

In terms of age composition, the number of consumers aged 20 and under was the smallest, only 2.90%; Among them, the elderly aged 21-34 accounted for 15.22%; Among them, the proportion of people aged 35-49 was the largest, which was 39.863%; The second is the population aged 50-60 years old, which is 25.36%; There are also 16.67% of people aged 60 and above. In the composition of this proportion, the customer composition of R branch is relatively comprehensive. At present, the customer age of HB rural commercial bank is between 35 and 60, and the total proportion is as high as 65.22%, as shown in the figure below.

From the perspective of occupation structure, the highest proportion of HB rural commercial bank customers is enterprise employees, accounting for 27.54%; Followed by individual businesses and retirees, accounting for 23.91% and 16.67% respectively; Other occupations and teachers account for the least, accounting for 2.90% and 5.07% respectively. From the perspective of occupation distribution, there are no representative occupations with obvious differences, but it can be found that for R branch, enterprise employees, individual businesses and retirees are the main customers of R branch, as shown in the following figure.

Overall, 79.71% of the surveyed customers were satisfied with the bank, 2.90% were very satisfied, and 11.59% were average. Five customers were dissatisfied, accounting for 3.63%. Three customers were very dissatisfied, accounting for 2.17%.

The questionnaire mainly analyzes customers' satisfaction with the overall service from the five dimensions of employees, products, image, service and convenience. According to the results of the questionnaire survey, the customers of R branch of Bank H are not very satisfied with "employees", "products" and "services", and only about 71% of customers are satisfied with or above

the employee satisfaction of R branch of bank H; About 65% of customers are satisfied with HB rural commercial bank's products or above; About 63.7% of customers rated the service satisfaction of R branch of bank h as satisfactory or above. However, they were quite satisfied with the internal and overall "image" of the bank and the "convenience" provided, reaching 89% and 82%.

Discussion

Through the employee satisfaction study of HB Rural Commercial Bank, we can see that the most prominent problem that customers are dissatisfied with the quality of their personnel is their professional skills and working attitude. Among the 138 customers interviewed, a total of 81 were "medium and below" satisfied with the professional knowledge of HB staff, with a total of 58.69%, while about 14.49% were dissatisfied with the professional knowledge of the staff. Satisfaction with service attitude at H Bank R Branch was "moderate" or "below", with a total of approximately 54.34%. Among them, about 6.52% of customers do not like the service of the staff of H Bank R Branch.

As for the product reasons, we can find that the overall options of customers focus on "satisfied" and "general", while the overall customers of "dissatisfied" and "very dissatisfied" options are relatively small, which fully shows that high-end financial customers do not have high evaluation of the products of HB Rural Commercial Bank. It is more obvious that in the product factor satisfaction survey, the worst performance is the product diversity and product customization services. 58.70% of the customers think that the product customized service of HB Rural Bank is general, 10.14% of the customers are not satisfied with the customized service of H Bank R Branch, 2.17% of the customers are very dissatisfied with the product customized service of HB Rural Bank,

In terms of service factors, respondents had low overall service satisfaction with HB Bank; only three customers were very satisfied with their service process and information obtained, while a large number of survey results focused between satisfaction and general. For the unsatisfactory and very unsatisfactory evaluation, mainly focus on the hardware facilities and waiting time. Seven customers of each were very dissatisfied with the hardware facilities and waiting hours of H Bank R branch, accounting for about 5.07% of the total.

Conclusions

With the accelerated development of financial digitization, traditional banking services are facing unprecedented challenges. Especially for local financial institutions like HB Rural Commercial Bank, how to consolidate their customer base and prevent customer loss in the digital wave has become an important issue they must face. This article aims to explore how HB Rural Commercial Bank can take effective measures to prevent customer churn in the context of financial digitalization.

Financial digitization has provided new impetus for the growth of banking business, and new

financial models such as mobile payments and online lending are gradually becoming popular. However, this has also brought considerable challenges to HB Rural Commercial Bank. On the one hand, the customer base is gradually shifting towards online, and the advantages of traditional physical branch services are weakening; On the other hand, the new financial model has had an impact on traditional businesses and reduced customer stickiness.

1) Strategies for improving customer satisfaction and loyalty

In order to strengthen the customer base, HB Rural Commercial Bank should attach importance to improving customer satisfaction and loyalty. By optimizing service quality and enhancing user experience, such as simplifying business processes and improving service efficiency. At the same time, special events such as customer festivals and financial product promotion events will be held to enhance customers' sense of identification and belonging to the bank.

2) Improve product and service innovation

To meet the needs of different consumers, HB Rural Commercial Bank should increase its efforts in product and service innovation. Introduce financial products that meet the needs of farmers in the rural market, such as agricultural insurance and rural loans. At the same time, by integrating online and offline, we provide convenient financial services to meet the diverse needs of customers.

3) Marketing channel optimization and expansion

The integration of online and offline marketing strategies is the key to attracting and retaining customers. HB Rural Commercial Bank should strengthen the construction of online channels, such as mobile banking and online banking, to improve the quality and convenience of online services. At the same time, offline channels should also be renovated and upgraded to provide a more attractive service experience.

4) Data analysis and marketing accuracy

The use of data analysis techniques for precise marketing targeting different target customer groups is an effective way to improve marketing effectiveness. HB Rural Commercial Bank should establish a comprehensive data analysis system, deeply explore customer needs and behavioral characteristics, formulate personalized marketing strategies, and improve the targeting and effectiveness of marketing.

5) Policy support and optimization of internal management system

Government policy support plays an important role in reducing customer churn rates. HB Rural Commercial Bank should actively seek government policy support, such as tax incentives, financial subsidies, etc., to reduce operating costs and improve competitiveness. Meanwhile, optimizing the internal management system, improving work efficiency and service quality are also important measures to prevent customer churn.

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