The Optimized Way of Commercial Bank Management under the Background of Big Data

Tailin Zhu*

Industrial Bank of Korea(China) Limited Shenzhen Branch, Shenzhen 518000, Guangdong Province, China

Abstract: With the advent of the era of big data, the commercial management activities of commercial banks are facing both new challenges and new development opportunities. In the increasingly fierce market competition, commercial banks must pay attention to enhance their core competitiveness, only in this way can they occupy a certain advantage in the fierce market environment. Therefore, commercial banks must accurately grasp the development opportunities brought by big data, and further strengthen the optimization of business management. The author explores and analyzes the impact of big data on commercial banks, and puts forward an effective way for commercial banks to optimize business management in the context of big data, hoping to contribute to the long-term development of commercial banks.

Keywords: Big data; Commercial Bank; Business management; Optimization approach

In recent years, the concept of big data has been widely used in various fields of society. Under the background of big data, the amount of information is increasing, and the speed of information dissemination is faster and faster, which is a new development challenge for commercial banks. However, big data also has a positive impact on the development of commercial banks. In the process of development, commercial banks must make good use of big data, develop their strengths and avoid weaknesses, and make further optimization of operation and management.

1 The impact of big data on commercial banks

1.1 Customer management mode is improved

In the past, the management of commercial banks only recorded the information of customers, mainly including name, address, contact number, ID card information, Bank account number and transaction flow of customers. In the context of big data, this simple customer management mode obviously does not meet the development needs of commercial banks, and the customer management mode of commercial banks has been significantly improved[1] . Customer relationship management system is a new customer management model established by commercial banks under the background of big data, which is not only includes the management of customer relationship, but also includes the management of customer life cycle and relationship marketing's relation. Life cycle management is still in the stage of theoretical research. The author believes that with the continuous development of time, if the customer value is improved, it will bring greater economic benefits to commercial banks. At present, relationship marketing has been an important content in the operation and management of major commercial banks[2] .

1.2 Management and administration mode gets innovation

Under the background of big data, people's lifestyle, communication mode and values have changed a lot, and the business management mode of commercial banks has also been innovated[3] . At present, the main operation and management methods of commercial bank are shown in Table 1.

Table 1. Main operation and management modes of commercial banks

Operation and management mode	Main content
Real-time marketing	According to the real-time state change of customers, marketing is carried out. For example: According to the customer's residence, consumption records in recent period, recently visited web pages and so on, we can implement effective market strategies.
Social network marketing	Collect and analyze customer's speech and behavior, and based on this implement marketing effectively. At present, social network marketing channels of commercial banks mainly include microblog, wechat and so on.
Events marketing	Take the event as the starting point to carry out marketing. The "event" here refers to a great change in transaction status and behavior of customers. When the "event" occurs, the management personnel of commercial banks will actively communicate with the marketing personnel, analyze the needs of customers, carry out the sense of marketing acquisition according to the possible needs of customers, and provide the possible needs of service or production for the customers as much as possible, which can greatly increase the chance of marketing success.

1.3 The management ability of commercial bank has been improved

Under the background of big data, in order to expand their own economic benefits, the commercial banks not only need to pay attention to enhance the ability of marketing and customer analysis of themselves, but also need to strength the use of customer data and information and strength internal management, so as to effectively reduce the expenses of commercial bank operation and management cost and avoid the occurrence of operation and management risks as much as possible[4]. The main items of internal management of commercial banks are shown in Table 2.

Table 2. Main items of internal management of commercial banks

Internal management matters	Main content
Operation management	Through the analysis of data and information of commercial banks, such as operation, simulation calculation , daily revenue and expenditure and so on, we can predict the impact of market changes on the financial revenue and expenditure of commercial banks, so as to provide an important basis for the management decision of commercial banks.
Risk management	Through the establishment of risk assessment model and risk management view of commercial banks, we can assess the risks hidden in the process of carrying out various business activities of commercial banks, so as to reduce the occurrence of operational risks.
System management	Use big data to help commercial banks establish a perfect data standardization system. This can not only improve the data management level of commercial banks, but also provide standardized and effective data support for the operation and development of commercial banks. The purpose of implementing system management is to ensure the integrity and unity of data and information.

2 The optimized way of commercial banks under the background of big data

2.1 Change the traditional management thinking and strengthen the application of big data

In the process of commercial bank's operation and development for many years, more and more customer data and information have been accumulated, but the important role of some data and information has not been fully played, which makes the development of commercial banks in China relatively backward compared with developed countries. The root cause of this problem is that with the continuous development of the times, commercial banks have not been updated Business management concept in time, lack of application of big data, and did not make in-depth analysis of customer data information[5]. Therefore, under the context of big data, in the processing of optimizing business management, commercial banks should actively change the traditional business management thinking, strengthen the application of big data, and increase the publicity of data in the bank, so that every staff can recognize the importance of big data, and consciously analyze customer data information, and then it can more comprehensively reflects the current operation and management status

of commercial banks and provides important basis for the management decisions for commercial bank managers[6] . To ensure that the optimization of business management mode of commercial banks is in line with the development of the times and the market, only in this way we can ensure that commercial banks develop better under the background of big data.

2.2 Establish perfect database

At present, most commercial banks have established operation and management evaluation model, market product model, credit model, etc., which can provide effective data support for bank's operation and development, but the data involved in these models is lack of unity, which makes the data information of commercial banks form a lonely island[7] . Therefore, under the context of big data, in the processing of optimizing business management, the commercial bank should actively use big data to establish a set of perfect database, so as to unify the data information of each model. In addition, in the process of establishing the database, commercial banks should take the actual operation management and development of commercial banks at this stage as the main basis, so as to not only improved the operation and management efficiency of commercial banks, but also give full play to the

important role of data and expand the economic benefit of the bank[8].

2.3 Comprehensive integration of customer information

Under the background of big data, in the processing of optimizing operation and management, commercial banks should obtain data information of customers scientifically and reasonably through various way, and strengthen the analysis of these data information to establish an interactive communication mode with customers[9]. Make the client gradually create a sense of identity to the product and service of commercial banks, strengthen the loyalty of the client, only in this way, can the commercial banks greatly improve the effect of risk management, brand value output and product marketing. Big data not only has a large amount of data information, of which the type is various at the same time, but also has the characteristics of strong timeliness, low value density and can not guarantee the authenticity of data. Therefore, in the process of applying big data, we must pay attention to strengthening the comprehensive integration of customer information. The way of integrating customer information is shown in Table 3.

Table 3. The way of integrating customer information

The way of integrating customer information	Main content
Access to customer information through various channels	Understand the data information of customers through the administration departments of industry, commerce taxation and third-party credit agencies. Dynamically integrate data and information collected by commercial banks on customer's large capital flow, cash flow, sales data and cost data. According to the integrated client data information, the service mode and product strategy of commercial banks should be adjusted appropriately.
Dig deep into customers' habits	Dig deep of customer's situation habits, usage habits, preferences, user attributes, etc., and break down the customer's requirements. According to customers' habits, carry out accurate product design, product marketing, business management and customer feedback. Fully implement the customer service concept of "people-oriented" and establish a good brand image.

2.4 Optimize the internal organizational structure of commercial banks

Under the background of big data, if commercial banks want to better optimize their operation and management, they must optimize their internal organizational structure and establish a high quality data staff[10] . On one hand, commercial banks can actively introduced a group of big data talents with perfect professional theoretical knowledge system and rich practical experience, so as to inject new talent

vitality into banks, which is more conductive to the innovation and optimization of bank. On the other hand, commercial banks should focus on strengthening the training of existing data related talents, regularly organize and carry out special lectures on big data, so as to continuously improve the professional skills and professionalism of staff, in order to make them make better use of big data to optimize the operation and management of commercial banks, and further promote the development of banks.

3 Conclusion

In conclusion, big data has a positive impact on the operation and management of commercial banks. Therefore, under the context of big data, commercial banks should pay attention to strengthening the optimization of business management, changing the traditional business management thinking, establishing a perfect database, comprehensively integrating the information of clients, optimizing the internal organizational structure of commercial bank, in order to contentiously enhance the competitiveness of banks and ensure that banks can survive and develop better in the context of big data.

References

[1] Liu XL. Credit business and risk management innovation of commercial banks in the context of big data[J]. Shanxi Agricultural Economics , 2020, (08): 161-162.

[2] Ma C. Challenges and opportunities of management accounting of commercial banks under big data[J]. Financial circles (Academic Edition) , 2020, (08): 150-151.

[3] Zhang SB, He YZ. Application of big data analysis in risk management and control of commercial banks[J]. Finance and Economics (Academic Edition) , 2020, (05): 20-21.

[4] Li M. Research on the Innovation of Commercial Bank's Management Mode under the Background of Internet Finance[J]. Economic issues , 2019, (7): 45-53.

[5] Xiong SS. Research on the precise financial marketing strategy of commercial banks in the era of big data -- Based on the perspective of 4P theory[J]. National circulation economy , 2020, (03): 171-172.

[6] Liu BZ. The Optimized Way of Commercial Bank Management under the Background of Big Data[J]. Economic and technological cooperation information , 2019, (15): 57-57.

[7] Hou CX. Research on bank credit risk management under the background of big data -- Taking bank Z as an example[J]. Regional financial research , 2018, 554 (12): 81-88.

[8] Zhang X. Management and control of personal credit risk of commercial banks under the background of big data[J]. Finance , 2018, (35): 136-137.

[9] Zhang HB. A study on the management and control measures of local small and medium-sized commercial banks in China -- Taking Heze rural commercial bank as an example[J]. Journal of Heze University , 2019, (4).

[10] Zhao YQ. Problems faced by commercial banks in the era of big data and suggestions for effective implementation[J]. Economic Research Guide , 2018, 000 (013): 65-67.