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

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*Corresponding author: Tailin Zhu, zhutalin@naver.com

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.
The management ability of commercial banks 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 strengthen the use of customer data and information and strengthen 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 \(^1\). 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. 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. |
| Dig deep into customers' habits | 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.

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