

Research on the Digital Transformation Path of Commercial Banks from the Perspective of “Gyroscope Model”

Taking China Merchants Bank as an example

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ABSTRACT

With the accelerated development of big data, artificial intelligence, cloud computing, blockchain and other technologies, China has taken the digital economy as an important force to promote economic transformation. At the same time, the favorable policy environment has also injected new momentum into the digital transformation of China's banking industry. This article takes China Merchants Bank as an example to analyze the effects of its digital transformation, and then uses the Gyroscope Model to analyze the digital transformation strategy of China Merchants Bank, and finally summarizes the path that other commercial banks can refer to. These paths include leveraging their own advantages and formulating digital transformation goals; increasing capital investment, introducing and training compound talents; improving the organizational structure, and making up for its deficiencies. Through these paths, we hope to give some enlightenment to commercial banks that are undergoing digital transformation and those that have not yet undergone digital transformation.

Keywords: Gyroscope, Commercial Bank, Digital Transformation, China Merchants Bank

1. INTRODUCTION

In recent years, policies to support the development of China's digital economy and digital transformation have been continuously promulgated and implemented. The country has taken the digital economy as an important force to promote economic transformation, and the continuous promulgation and implementation of policies have injected new momentum into the transformation of China's banking industry. In November 2019, the Fourth Plenary Session of the 19th Central Committee of the CPC pointed out that it is necessary to further promote the construction of the digital economy and enhance the ability to orderly share data and digital governance. In 2020, the Financial Technology Committee of the People's Bank of China stated that it is necessary to implement the "FinTech Development Plan (2019-2021)", encourage financial institutions to accelerate the pace of digital transformation, and continuously improve the ability of financial institutions to apply financial technology. At

the same time, the impact of the COVID-19 has put significant pressure on the banking industry's loan growth rate, interest margin income, and asset quality, but it has also become an important opportunity to accelerate the digital transformation of the banking industry and realize the leapfrog development of the banking industry.

2. STATUS QUO OF DIGITAL TRANSFORMATION OF COMMERCIAL BANKS

Digital transformation is based on digital transformation and upgrading to establish a brand-new digital business model. Digital transformation does not only refer to IT or technology. It is a thorough redefinition of an enterprise's business strategy and it is a high-level transformation whose purpose is to enhance the competitiveness of an enterprise^[5].

As a modern service industry, the essence of the banking industry is to provide services to customers and

meet their needs. From an industry perspective, banks must make full use of IT and technology to change business models and improve customer service. From a business perspective, digital transformation involves a wide range of businesses such as business transactions, business operation management, and business development. And the commercial bank is a trading platform to realize the digitization of business transaction process, business operation and setting up scenes^[4].

With the support of the policy, domestic commercial banks have begun independent research and development and innovation of digital products and services. For example, China Merchants Bank launched Mobile Banking 1.0 at the beginning of 2010. After years of efforts, the China Merchants Bank APP has entered the 10.0 version era in 2021, including rapid iterations of more than 2,200 projects. For another example, Bank of Beijing launched products such as online installment "i Easy Loan" and "Digital Credit Card" in 2019, covering all channels of online credit card applications in the bank. At the same time, commercial banks have successively launched cross-border cooperation with financial technology companies. In 2013, Minsheng Bank cooperated with Huicong.com. Huicong.com integrates the financial services of Minsheng Bank to meet the needs of Huicong.com users, while Minsheng Bank has expanded its business scope and customer channels. In 2018, Huaxia Bank and Ant Financial began cooperation^[6]. Ant Financial has advanced technology to support the implementation of Hua Xia Bank's digital transformation strategy. The two parties have worked together to create an open platform with customers as the center and digital operation as a means. In 2018, after Bank of China cooperated with JD.com, Bank of China took advantage of JD Finance's big data to achieve precise customer acquisition and diversified marketing.

3. CASE ANALYSIS OF CHINA MERCHANTS BANK'S DIGITAL TRANSFORMATION BASED ON THE GYROSCOPE MODEL

3.1 Introduction to China Merchants Bank

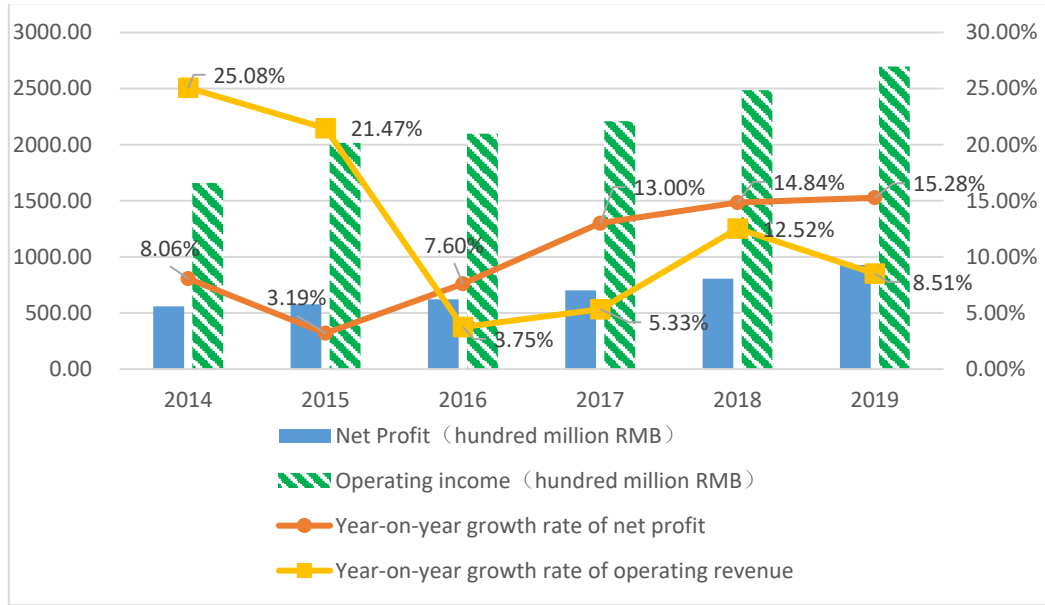
China Merchants Bank(CMB) is the first domestic joint-stock commercial bank wholly-owned by corporate legal persons, and it is also a national commercial bank with a very representative and strong brand influence.

Since the establishment of China Merchants Bank for more than 30 years, it has always adhered to the business and service philosophy of "change because of you", and has continuously innovated products and services. Since 2009, China Merchants Bank has been awarded "Best Retail Bank in China", "Best Private Bank in China", and "Best Custody New Star in China" by authoritative media and institutions at home and abroad. Especially in terms of retail business, it is one of the best in China. In the 2011 China Financial Enterprise Brand Competitiveness Index rankings released by the Chinese Academy of Social Sciences, China Merchants Bank ranked first in terms of brand development potential and consumer support, and ranked fifth in China, following the four major banks in overall ranking^[1].

3.2 The effectiveness of China Merchants Bank's digital transformation

Since China Merchants Bank's digital transformation, operating income and net profit have shown a steady growth trend, and the average off-the-counter handling ratio has also continued to break through. In 2016, the average off-the-counter handling ratio exceeded 80%, and in 2020, it exceeded 90%. With the steady growth of the average off-the-counter handling ratio, the number of physical branches of CMB continues to decline, the proportion of online channels and electronic businesses continues to rise, and the digitalization and intelligent transformation of banking channels continues to be promoted. Compared with other banks in China, China Merchants Bank has long focused on retail business. With the evolution of service ecology, CMB's retail finance business has taken the initiative to step out of the comfort zone and move forward to the digital transformation of retail finance 3.0. Therefore, the pre-tax profit of retail finance and the operating income of retail finance of China Merchants Bank have been increasing year by year, and their respective accounts for the company's pre-tax profit and operating income are also relatively stable. Digital technology has been used to optimize the product, platform and service system.

As can be seen from Figure 1, the operating revenue and net profit of China Merchants Bank increased steadily from 2014 to 2019. However, during the transition period of digital transformation, the net profit growth rate of CMB was only 3.19% in 2015, and the operating income growth rate was only 3.75% in 2016. In recent years, net profit growth rate and operating income growth rate began to rise steadily and slowly.



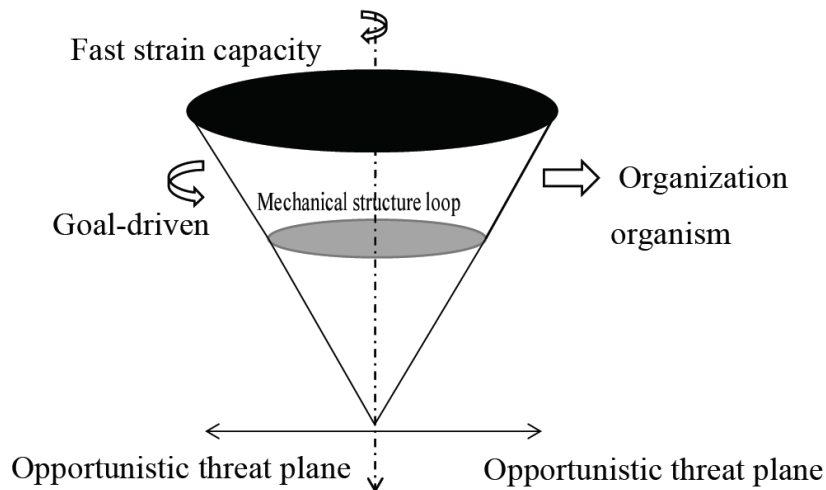
Source: Flush software

Figure 1 Net profit and operating revenue of China Merchants Bank from 2014 to 2019

3.3 Analyze the digital transformation strategy of China Merchants Bank based on gyroscope model

The digital operation system of commercial banks is balanced, three-dimensional and complete in structure. It is necessary to emphasize quick change and build a comprehensive ability with quick response ability as the core. As a physical entity, a gyro can be used to describe

the dynamic balance of objects. The gyroscope model derived from this can be used as an important tool to solve the dynamic balance development of enterprises. The gyroscope model consists of five basic elements: organization organism, opportunity threat plane, mechanism structure ring, rapid strain capacity axis and target driving force. These basic elements do not exist independently, but are interrelated, interact and cooperate with each other, so as to achieve overall dynamic and balanced development together.



Source: MBA Think Tank Encyclopedia

Figure 2 Gyroscope model diagram

3.3.1. Organize organism

The organism is a frame of the gyroscope model as well as a whole. To keep the organism moving, managers need to whip it and inject it with sustained drive. In 1999, Weihua Ma took over as president of China Merchants Bank. After he took office, he put forth efforts to find out

the key problems that hinder the development of China Merchants Bank, and started the plan of online banking to build China Merchants Bank online bank in an all-round way. The opening of CMB's online bank has greatly driven the development of retail business. Subsequently, China Merchants Bank aimed at the retail business and made retail business its strategic focus. At that time, even under the background of the not

optimistic domestic macroeconomic situation and the deterioration of bank asset quality, the managers who succeeded in taking the retail business as the development priority, proposed to "one body and two wings" as the strategic goal. "One body" means retail business, "two wings" are inter-bank business and corporate business, and are committed to building a light bank, which greatly reduces the adverse impact of the macroeconomic situation on the operation of China Merchants Bank.

It can be seen that the corporate governance ability of managers is particularly important for an enterprise, and the "focal point" of managers is the most important. When the enterprise is faced with a crisis, managers should have accurate judgment and find the right point to lash it. Without strong governing managers, the organism is meaningless.

3.3.2. Opportunity threat plane

The threat plane of opportunity describes the environment in which the gyro rotates. It is necessary to carefully observe the changes in the surrounding environment and grasp the trend of changes. As a manager, it is necessary to accurately distinguish which are the opportunities that can be grasped and which are the threats that can be avoided in order to innovate in business management. However, opportunities and threats always exist on the same plane, which also shows the complexity of the environment, so managers need to be careful to distinguish them.

In 2016, China Merchants Bank discovered that digital technology contained business opportunities. Under the guidance of digitization, China Merchants Bank has comprehensively upgraded the new digital service model of "people + technology", and realized a visualized counter, which is convenient for customers to realize non-cash transactions at the visualized counter. In order to improve service efficiency, it has also taken the lead in introducing RPA technology to comprehensively improve the level of automation and digital operation capabilities, and has been struggling to improve customer service experience. In recent years, the global macroeconomic situation has been complex and changeable, and the banking industry has faced risks and challenges. In order to maintain good asset quality and improve the ability to resist risks, China Merchants Bank has applied digital technology to the field of risk control to further improve its digital risk control capabilities. In terms of risk decision-making and anti-fraud, digital technology is used to build a real-time risk decision engine and real-time big data anti-fraud model. In retail finance and corporate finance, CMB launched an intelligent risk control platform, the "Libra System", to help retail customers and corporate customers intercept risks and alert them to potential risks. It can be seen that commercial banks should strengthen risk management

and control ability, firmly seize the opportunity to make the enterprise as a gyro, as far as possible in the "easy to win" spin.

3.3.3. Fast strain capacity axis

The rapid strain capacity axis is the central axis of gyro model, and it is also a comprehensive ability to respond in time and adjust quickly in organism. As the speed of environment changes faster and faster, the rapid response ability of this central axis is becoming more and more important in various ability sets of enterprises. It can sense changes in the environment, analyze current threats, and make decisions and changes faster to adapt to the environment.

Remote lending is the fintech innovation project of China Merchants Bank and the result of digital transformation. In this mode, it only takes less than two hours from application for loan to payment to account, and the customer and account manager have no contact in the whole process, and all operations are carried out online. In response to the impact of COVID-19, China Merchants Bank quickly exerted its resilience and launched the "remote lending model", lending 148 million yuan to relieve the financial pressure of automobile dealers severely affected by COVID-19, and 140 million yuan to support medical supplies supporting enterprises. In just three weeks, China Merchants Bank has made a total of 23.7 billion yuan in remote loans. The whole-process contenanceless lending model implemented by China Merchants Bank actually uses digital transformation to support online services, responds to customer demand, solves the urgent needs of some enterprises, and to some extent alleviates the impact on the economy during the epidemic. It can be seen that commercial banks should embed the rapid response ability into the organization's organism, take it as the axis, and run through the whole management level, in order to stand out from the competition.

3.3.4. Mechanism structure loop

In the gyroscope model, the mechanism structure loop is a cross section inside the gyro model. It is necessary to continuously transform and upgrade the organizational structure of the enterprise to improve its own capabilities.

China Merchants Bank introduced a new online banking business unit and digital GM to accelerate digital transformation. In fact, the main role of digital GM is to participate in banks' digital transformation strategies and projects, manage digital teams, and conduct cross-departmental collaboration and decision-making. Over the years, banking supervision has been relatively strict, and the banking system is complex and difficult to control. This has also increased the difficulty of developing mobile banking apps. It is not only

necessary to work hard on the development of APP, but also to get through the back-end system, cooperate with the corresponding department, and communicate and cooperate with each other. This will lead to low development efficiency and a bad user experience. Therefore, in the process of building an Internet financial ecosystem, the introduction of the online banking business unit and digital GM has made the organizational structure of China Merchants Bank more solid.

3.3.5. Goal-driven

In the gyroscope model, there is a phenomenon called the inertial development of tissue organisms. That is, a high-speed spinning top will spin even if no one whips it, but its rotation speed will slowly decline under the influence of resistance. When applied to an enterprise, high-speed operation may cause the enterprise to produce inertia and be satisfied with the existing achievements instead of setting new goals, resulting in the decrease of enterprise efficiency. The high speed operation of excellent enterprises should constantly revise or complete the existing goals, establish new goals, and strive to bring continuous motive force to the life of the organization.

In recent years, China Merchants Bank proposed to take MAU as the core index and the focus of growth, as the "North Star" index. MAU is a more important metric for Internet companies. China Merchants Bank uses MAU as the north Star indicator, indicating that China Merchants Bank wants to learn from the operation and development models of Internet companies and use complex algorithms and technical monitoring to achieve rapid growth of this indicator. Through years of efforts, the monthly active users of China Merchants Bank have exceeded 100 million^[2]. Therefore, commercial banks should play the role of the axis of rapid response ability, keep up with the trend of the times, and use digital technology to improve digital customer acquisition ability, digital operation ability, digital service ability and digital risk control ability.

4. EXPLORING THE DIGITAL TRANSFORMATION PATH OF CHINA'S COMMERCIAL BANKS BASED ON THE GYRO MODEL

4.1 Change the mode of thinking and cultivate digital thinking

The opportunity threat plane requires commercial banks to carefully observe the changes in the surrounding environment, change their thinking mode, grasp the opportunities in the era of big data, and cultivate digital thinking, including scene, technology and data thinking.

Scenario thinking requires commercial banks to transfer offline physical scenes to online virtual scenes and provide personalized services for users through big data to bring users better user experience^[3]. Technological thinking requires commercial banks to actively embrace advanced technology in the process of transformation. However, technology is not a panacea. In the process of using technology, commercial banks should also balance the relationship between technology and user experience to avoid losing one and the other. Data thinking requires commercial banks to pay attention to data reserve, broaden the access to data and enhance the ability to acquire data, give full play to the maximum utility of data, and excavate its intrinsic value.

4.2 Make full use of their own advantages and set goals for digital transformation

Objective driving force is an important part of gyroscope model. If there is a target, there will be direction and power. Commercial banks should identify their own positioning, maximize their own advantages, and develop digital transformation goals. Focusing on the two keys of fintech and customer service, fintech is the core driving force to build the "best customer experience bank".

4.3 Increase capital investment, introduce and train compound talents

Commercial Banks in the digital transformation of the starting stage, must pay attention to training compound talent. They can start the talent return program to attract employees in the financial technology field to return. This is less costly than pure school recruitment and social recruitment, and such employees' ability and quality are often higher, which can save some time and cost of cultivating talents. In short, whether it is a large commercial bank or a small and medium-sized commercial bank, the most important thing is to find the correct focus of the organization's organism, and "whip" it hard to gain something.

4.4 Strengthen risk control and make up for the lack of organizational structure

Risk control is an important part of the organizational structure. To improve the organizational structure, it is necessary to improve the ability of risk prediction and risk control. Commercial banks must be aware of the key position of the mechanism structure loop in the gyroscope model, continuously improve the organizational structure, make up for the deficiencies of the organizational structure, have a good risk control awareness, use advanced technology to improve the ability to prevent risks, improve risk prediction, and prevent potential new risks brought by new technology.

5. CONCLUSION

In recent years, digital technology based on financial technology has shown a rapid development trend, and the era of digital economy has arrived. To find a way out in a complex environment, commercial banks must keep up with the trend of the times and use digital technologies to improve their digital customer acquisition capabilities, digital operation capabilities, digital service capabilities, and digital risk control capabilities. First of all, the operating system of a commercial bank should be three-dimensional, hierarchical and complete in structure like a physical top. The core idea of the gyroscope model is to cure changes quickly, so it is particularly critical to build a comprehensive ability with rapid adaptability as the core, which plays the role of the axis of rapid adaptability.

Secondly, under the background of macroeconomic downturn, interest rate liberalization and deleveraging, small and medium-sized banks should understand the role of opportunity threat level and target driving force, seize opportunities in a complex environment, face threats squarely, and fully exploit their own advantages. Actively embrace advanced technology and use digital technology to create differentiated competitiveness and carry out digital transformation.

Finally, the stable operation of commercial banks depends to a large extent on whether the mechanism and structure are coordinated and perfected. Risk prevention and risk control mechanism is an indispensable and most important part. It is necessary to use digital means to innovate and upgrade the financial risk prevention model, evaluate new risks brought by new technologies, and establish and improve the comprehensive risk management system necessary for the digital age. Strengthen data governance and improve the organizational structure to make up for the deficiencies of the organizational structure.

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