# Research on the direction and path of rural commercial bank digital transformation under the background of rural revitalization

Xiang Luo<sup>1, a</sup>, Zhiyi Hu<sup>1, b</sup>, and Wen Hu<sup>1, c</sup>

<sup>1</sup>School of Logistic, Chengdu University of Information Technology, China;

<sup>a</sup> lyangxixi@163.com, <sup>b</sup> 1348270870@qq.com, <sup>c</sup> 735213215@qq.com

**Abstract.** At present, the digital transformation of commercial banks has become a trend. Compared with large banks, small and medium-sized rural banks are facing huge pressure from both the external environment and internal conditions. Small and medium-sized rural banks should combine the advantages of rural revitalization policy, improve the digital innovation of banking business, and strengthen cooperation with other professional service institutions. Based on the idea of "double chain linkage" proposed by Taihui Zhu and Yutong Zhang, combined with "financial service supply chain, rural industry supply chain and new infrastructure construction chain", digital financial services based on this idea are proposed to achieve collaborative innovation of the three. This paper has certain scientific reference significance for solving the "last mile" problem of rural commercial bank's digital transformation and helping rural revitalization.

**Keywords:** Rural revitalization; rural commercial bank; digital marketing; supply chain finance; new infrastructure construction

# 1. Introduction

Rural revitalization is the national plan for a century of rejuvenation, in which industrial revitalization is the material basis for rural revitalization, and finance is the key to breaking the industrial development. This paper studies that rural commercial bank can effectively optimize the bank's internal structure and product business portfolio and promote the construction and improvement of rural financial system by strengthening financial products and service innovation through digital transformation and upgrading under the background of rural revitalization; Promote the development of rural industry and rural modernization; Build a non-financial services to sink into rural areas, popularize financial knowledge, and prevent financial risks.

This paper focuses on "customer first, data based", accurately grasping customer needs, enabling high-quality products and services to help the coordinated development of the industry, and getting rid of the traditional view that most rural commercial banks start from business or themselves. At the same time, on the basis of "double chain linkage", from the perspective of mutual collaborative innovation and development of finance, industry and new infrastructure construction, the digital transformation scheme of online, offline, business process and other aspects is proposed to enable rural revitalization.

# 2. Content Of Rural Commercial Bank's Digital Transformation Under the Background of Rural Revitalization

# **2.1 Digital Innovation of Main Business**

### 2.1.1 Deposit and Withdrawal Business

The existing rural banks are mostly distributed in the township centers, with a wide range of services. It is extremely difficult for customers far away from the township centers to complete the deposit and withdrawal business. To solve this problem, Rural Commercial Bank can set up "convenient service outlets" in each administrative village. Customers who need deposit and

Advances in Economics and Management Research

ICMSMI 2022

DOI: 10.56028/aemr.3.1.180

#### ISSN:2790-1661

withdrawal service make an appointment the day before by phone or SMS, and the bank prepares relevant formalities in advance.

### 2.1.2 Credit business

Credit products can be roughly divided into collateral loans and credit loans. However, for rural areas, a large number of customers are farmers, who have few assets, and it is difficult to obtain mortgage loans. Therefore, in rural areas, credit loans are more widely used. However, the credit line is low and it is difficult for banks to judge, so a strong risk control model is needed as a support. Rural Commercial Bank can obtain age, education, occupation, income and expenditure, overdue and dishonest behavior and other data to establish risk control model through independently uploaded data and database. And after the loan is issued, the consumption data, mobile phone positioning and other indicators are called to monitor the borrower's capital flow. When abnormal conditions are found, the loan can be quickly terminated to reduce risk. For the collateral, the bank can add relevant equipment for real-time monitoring, from "manual monitoring" to "Internet plus+equipment" real-time monitoring.

# 2.1.3 Financial management business

Nowadays, the customers of Rural Commercial Bank are relatively poorly educated and have little knowledge of financial management. Therefore, when promoting financial products, banks should focus on personalized recommendation through big data analysis of customer consumption behavior to help customers choose appropriate financial products.

# 2.1.4 Agency business

Agency business is mainly aimed at enterprise users, including collection and payment of various fees for enterprises, remote stamping, agent securities business, agent insurance business, agent policy banking business, and agent commercial banking business. For rural commercial banks, they should pay more attention to agent enterprise users to improve service efficiency and quality.

# 2.2 Extended Business Digital Innovation

# 2.2.1 E-commerce B2C platform business

With the development of mobile Internet and online marketing technology, the e-commerce of bank's main business is an inevitable development trend. Banks should focus on the actual needs of rural areas, develop a new e-commerce B2C platform, and help farmers complete online deposit and withdrawal booking, credit, wealth management, agency and other business services.

### 2.2.2 E-commerce B2B resource integration

Banks can build a supply chain platform to meet the communication and procurement needs of farmers, manufacturers and sellers. The three parties complete communication, information confirmation, procurement, service and other businesses on the platform, and banks can also provide online transfer, online payment and other related financial services, thus forming a complete upstream and downstream industrial chain integrating information flow, capital flow and logistics.

### 2.2.3 Non financial scenario application of e-commerce ecosystem

In the digital era, financial institutions can not be limited to narrow main business models. It is also necessary to broaden the scope of services and build service scenarios. For example, build an online mall to meet people's shopping needs; Provide community services to meet people's living and consumption needs; At the same time, the bank can also contact agricultural science and technology enterprises, solve farmers' planting related problems in real time through expert online teaching, and provide various electronic professional planting and breeding manuals and videos to meet farmers' training needs.

# **3. Rural Commercial Bank Digital Marketing Innovation under the Background of Rural Revitalization**

# 3.1 Create Characteristic Bank Outlets

Although online banking is popular, some rural customers still choose offline outlets to handle business. Rural Commercial Bank can create characteristic signboards to attract customers. For example, the interior decoration of the bank has regional customs, and the characteristic decoration can enhance the user experience and establish a good image in the customer's mind; At the same time, bank outlets can launch bank featured activities on the monthly market day in villages and towns to attract customers and promote communication.

# 3.2 Get Through the "Last Mile of the Countryside"

Getting through the "last mile of the countryside" is not only to set up an inclusive service station so that logistics and distribution can reach home, but also to extend financial services to home. Efforts were made to solve the financial problems of rural entrepreneurship and development of farmers. Financial personnel went home to handle business for farmers, help farmers solve their immediate interests, gain popular support, and develop potential customers to expand the mass base. Strengthen financial publicity, not only by loudspeakers, but also by door-to-door guidance, mobile publicity vehicles and other forms. Promote financial knowledge and business in dialect, example demonstration and other grounded ways, so that villagers can understand, understand and build a good image in the hearts of villagers.

# 3.3 Offline Advertising

Compared with the era of underdeveloped Internet, the current physical advertising can quickly find the target audience group, which is more accurate and timely. This is also the embodiment of the technology application in the digital era. The rural market is vast but difficult to develop. In the vast rural towns and townships, banks accurately and timely publicize in supermarkets, village committees and other places by issuing leaflets, pasting posters, doing business publicity and other ways. They can also put advertisements on bus stop boards, light boxes, shopping malls LED screens and other methods, which are simple but attractive. This is also the most effective way to expand the elderly customer group in rural towns and townships.

# 3.4 Widely Use New Media to Spread

With the development of modern technology and the live broadcast industry, the effect of relying on new media such as WeChat, Tiktok and other social and short video software to promote has become increasingly significant. The bank opens its own WeChat official account and applet to meet people's daily business and consulting needs, and pushes messages for customers in a timely manner. At the same time, a "customer friend circle" is established to effectively notify every potential customer, and customers can also consult any business questions. While improving the user experience, it can effectively protect customer privacy, develop potential customers and expand the customer base. At present, Tiktok covers a wide range of users' lives. Many bank branches have started to promote and market on such platforms and have accumulated a large number of fans. The bank helps "agriculture, rural areas and farmers" by selling agricultural products live on the short video platform; By taking small videos to promote the product, enhance their sense of existence and emphasize their own value.

# 4. Rural Commercial Bank's Digital Transformation Path Under the Background of Rural Revitalization

# 4.1 Present Situation

At present, rural enterprises mostly play the role of raw material supply and primary processing in the industrial chain. Compared with mature enterprises, these rural enterprises are small in size, weak in asset mortgage capacity, difficult to borrow from the Rural Commercial Bank in case of capital shortage, and have weak financial anti risk ability. In addition, the direct application of "urban financial system" in rural areas is difficult to play the role of the main channel of rural revitalization financing to support industrial development. In 2020, China will lift out of poverty in an all-round way. However, looking at the distribution of rural areas across the country, the development of rural industries in China's coastal areas is strong and the infrastructure is relatively sound; The rural industrial infrastructure in inland areas is weak, the industrial development is at the initial stage, and the anti risk ability is weak. The rural small and medium-sized banks face many weaknesses in serving the rural revitalization. The root cause is the poor circulation of the financial service supply chain and the lack of coordination with the rural industry supply chain. At the 2018 Central Economic Work Conference, the CPC Central Committee proposed that the "new infrastructure construction " will play a positive role in the development and transformation of the digital economy, and provide important infrastructure guarantees for promoting the transformation and upgrading of rural industries, consolidating the achievements of poverty alleviation, and enabling rural revitalization. Therefore, the main body of financial services should cooperate with the main body of rural industry supply and the main body of new infrastructure construction to develop and promote each other, and further play the key role of finance in rural revitalization.

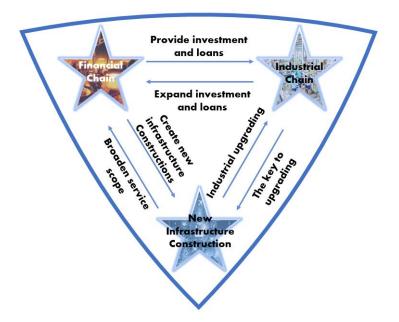


Fig.1 Overall framework of digital financial services based on "double chain linkage"

# 4.2 Linkage Between "New Infrastructure Construction Chain" and "Rural Industry Supply Chain"

Nowadays, the key to industrial development is the improvement of technology and equipment. In the face of the unprecedented change in a century, it is particularly necessary to promote enterprises in the supply chain to innovate products and improve production processes under the Advances in Economics and Management Research

ISSN:2790-1661

DOI: 10.56028/aemr.3.1.180

background of domestic and international double cycle development. The new infrastructure construction is the infrastructure for industrial innovation. In order to promote the upgrading of the industrial foundation, the modernization of the industrial chain, and improve the core competitiveness of enterprises, it is extremely important to grasp the fourth scientific and technological wave of China's "new infrastructure construction ". New infrastructure construction is an inevitable trend of local industrial adjustment. The seven fields of new infrastructure construction can be classified into: network communication infrastructure represented by 5G communication; New technology infrastructure represented by artificial intelligence; Computing infrastructure represented by data center, etc. The communication network infrastructure provides fast, convenient and efficient communication for the supply chain, and breaks the barrier of traditional rural information blockage; New technology infrastructure is used in the primary industry, and artificial intelligence is used to independently analyze the growth trend of agricultural products. A large number of field labors are liberated. Blockchain technology improves the traceability function of agricultural products. Therefore, it is particularly important to focus on the local characteristic industries, analyze the weak links of the industry, and implement relevant new infrastructure construction projects accurately and orderly.

# 4.3 Linkage Between "Financial Service Supply Chain" and "New Infrastructure Construction Chain"

In order to give play to the synergy between the financial supply chain and the new infrastructure construction chain, the Rural Commercial Bank should actively promote the construction of new rural infrastructure and jointly enjoy the dividends of new infrastructure construction. Under the guidance of the national policy of "new infrastructure construction ", the Rural Commercial Bank gives full play to the strong power of serving "new infrastructure construction", flows financial funds to the real industrial economy, and helps the real economy to increase efficiency, especially invests funds in high-tech industries to serve the development of new infrastructure construction; Focus on promoting the implementation of seven new infrastructure construction areas in the countryside, promote the transformation and upgrading of local industries, improve quality and efficiency, and expand the scale of rural industry development.

The improvement of new infrastructure construction also opens up a new track for the high-quality development of Rural Commercial Bank. Industrial reform has brought down the cost of supply chain enterprises in the industry, improved production efficiency and enhanced the core competitiveness of the industry in the market. In order to enhance enterprise income, enterprises expand their scale, increase the demand for financial capital, and promote the development of financial service supply chain. The new infrastructure construction provides development opportunities for the digital transformation of Rural Commercial Bank of China to achieve intelligent and digital management in the fields of big data, artificial intelligence, etc. At the same time, the new infrastructure construction also provides new business development opportunities for Rural Commercial Bank of China. The new infrastructure construction has introduced a number of high-tech enterprises to invest and settle in the local area. By serving these enterprises, the Rural Commercial Bank can also tap into new business needs.

### 4.4 Linkage Between "Financial Service Supply Chain" and "Rural Industry Supply Chain"

In order to solve the problem of lack of synergy between the financial service supply chain and the rural industry supply chain, the Rural Commercial Bank should seek ways of development on the common business model of the financial supply chain and the rural industry chain in multiple scenarios and multiple channels, actively promote the "coordinated development of two chains", share digital technology capabilities, and play the role of data in multiple scenarios and multiple channels based on data.

From the perspective of individuals in the supply chain, individuals in the financial supply chain and rural industry chain will go through the process of "market research - demand determination -

DOI: 10.56028/aemr.3.1.180

product design - marketing - risk decision - operation - management" when they operate in the market. Through a common business model, Rural Commercial Bank develops a digital platform, which is shared by banks and rural enterprises, to enhance their data vitality, improve the operational efficiency of rural enterprises and reduce labor costs; In addition, the Rural Commercial Bank can supervise the fund trend of rural enterprises through this platform, eliminate the information gap between the Rural Commercial Bank and customers, and improve the financial information analysis model.

From the perspective of the whole supply chain, in order to solve the problem of "new farmers", Rural Commercial Bank can adopt the mode of "digital industrial credit" to ease the problem of rural SMEs' lending. In the whole supply chain, the upstream and downstream enterprises exchange products and funds. The upstream enterprises deliver products to the downstream enterprises, and the downstream enterprises pay funds to the upstream enterprises, which are then transferred to consumers level by level. In the industrial supply chain, there will inevitably be many influential enterprises in the core position. These enterprises have large size, strong asset mortgage capacity, high credit in the bank, and little difficulty in borrowing. Rural SMEs apply for "industrial credit" through the digital platform of Rural Commercial Bank of China, and take core enterprise credit as guarantee to reduce the financial pressure of rural SMEs and ensure the supply chain production capacity. And after the loan finance, rural SMEs need to upload the relevant production dynamics of the upstream and downstream supply chain to facilitate bank supervision and reduce financial risks. In addition, the Rural Commercial Bank extends the financial service chain and fully participates in the rural industrial chain from multiple scenarios and multiple channels, which can not only promote the rural supply chain to digital development, but also fill the "information depression" of the financial supply chain. In terms of application scenarios, Rural Commercial Bank of China has developed e-commerce platforms for agricultural products, information sharing platforms, smart agriculture, etc. They share their own scenarios and channels and improve and optimize their own supply chains.

# 5. Summary

This paper combines the digital transformation of rural small and medium-sized banks with the national strategy of comprehensive rural revitalization. On the basis of the existing digital transformation of rural small and medium-sized banks, it further puts forward more systematic countermeasures and suggestions from the three levels of digital innovation of product business, digital marketing, and supply chain finance: give play to the positive role of rural commercial banks' financial service supply chain in the allocation of scientific and technological resources, and help rural areas improve new infrastructure construction, Realizing the adjustment and integration of rural local industrial structure. Rural small and medium-sized banks are an important economic link to connect farmers and an important link in promoting the development of inclusive financial services, which are closely linked with rural revitalization. Therefore, small and medium-sized rural banks should make full use of their policy advantages, promote the development of rural financial services and empower rural revitalization with the help of science and technology.

# References

- [1] Xia Tongshui & Leng Qian. (2016). Analysis of Supply Chain Finance Journal of Xinjiang University (Philosophy · Humanities and Social Sciences Edition) (02), 32-40
- [2] Current Situation and Trend of Digital Marketing [R]. Beijing: China Mobile Research Institute, 2021
- [3] Cao Fei. How to deal with the non-financial scenario of the SME banking ecosystem [Z]. March 28, 2020

ISSN:2790-1661

DOI: 10.56028/aemr.3.1.180

- [4] Zhu Taihui & Zhang Yutong (2022). Research on Digital Transformation of Rural Small and Medium Banks to Enable Rural Revitalization -- and on the innovation of "double chain linkage" model Southern Finance (4), 55-69
- [5] Feng Chuanqi, Wu Qingyue. Urban commercial banks actively integrate into new infrastructure construction [J]. China Finance, 2021 (05): 41-42
- [6] Zhou Yongliang. Strategic Basis for Industrial Development in the New Era of New Infrastructure Construction [J]. Enterprise Management, 2021 (1): 33-34