

Evidence from Fieldwork: Rural E-Commerce Development in China

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Abstract: In recent years, the Party Central Committee has attached great importance to the "three rural issues." In this context, this paper adopts a field survey method to review several typical models of rural e-commerce to sort out the current development of rural e-commerce. In terms of business models, the main businesses of rural e-commerce include live streaming and short video sharing of agricultural supply sources, agricultural product sharing, live evaluation, and community-based exchange circles for agricultural products. In terms of profit models, the main revenue models of rural e-commerce at present are product transaction rebate profit, mall product service fee profit, and traffic revenue. In the context of rural revitalization, a live e-commerce MCN organization is established to build up a team of anchors through systematic knowledge acquisition and skill training. At the same time, using anchors as a bridge, the resources of agricultural products, farmers, and enterprises in different areas are integrated. Build up an e-commerce platform integrating talent output, content creation, and product sales. Relying on the currently popular short videos and live webcasts, farmers and enterprises will provide products, and the anchor team will promote and sell them. This is conducive to the continuous development of rural revitalization strategies.

Keywords: Rural E-Commerce, Business model, Profit model, Rural revitalization.

1. Introduction

In recent years, the Party Central Committee has attached great importance to the issue of "three rural areas" and has repeatedly issued Document No. 1 of the Central Committee to promote the construction of a new socialist countryside and emphasized the vigorous development of modern agriculture, the introduction of e-commerce to support the development of modern agriculture[1], and adhered to the strategy of strengthening agriculture with science and technology and benefiting agriculture with science and technology; national ministries and commissions and people's governments at all levels have also responded positively to the call of the Central Committee. At the same time, economic globalization also serves as an external driving force to deepen the development of China's agricultural modernization. These reasons have led to the emergence of a number of market-tested e-trading market websites in China, creating realistic and feasible conditions for China to carry out the e-trading market model for agricultural products[2]. As a traditionally weak industry in China, agriculture has traditionally suffered from fragmented production and operation, low competitiveness of products, many circulation links, high transaction costs, and low standardization. The basis of industrial development is production, but market and circulation are the key links that determine industrial development. Poor circulation of agricultural products has become one of the important factors that hinder the healthy development of agriculture and the rural economy and affect the income of farmers and even rural stability[3]. The difficulty of trading agricultural products and the structural, seasonal and regional surplus of agricultural products, from the circulation link, there are two main problems: First, with poor information, blindly follow the trend. The formation mechanism of market information and the means of information dissemination are backward so that farmers lack the guidance of market information. Second, as

a single means of agricultural product trading, trading market management is not standardized. Now the traditional way is mainly one-to-one spot trading; modernized bulk agricultural products trading markets are not popular; futures trading and forward contract trading forms are even less common. On the other hand, due to the top of the demographic dividend and the deterioration of the competitive environment and other factors, e-commerce platform customer acquisition pressure, customer acquisition costs rise year by year, the industry is in the competition for stock, manufacturing incremental to seek growth period, which includes improving the purchase conversion rate and market sinking. Live broadcast was initially one of the means to try to improve the conversion rate of brands on the platform, similar to group purchase and short video, and since then, with the good conversion effect brought by live broadcast, the priority of its entrance has gradually increased. In addition, the entry of the content platform to bring new traffic to the live e-commerce platform means that the Express user profile and the main consumer of the e-commerce platform are highly compatible, and the e-commerce platform can also make up for the lack of resources in the supply chain when the content platform realizes that the cooperation between the two is more in-depth, bringing opportunities for the booming development of live e-commerce. Therefore, in this context, this paper will review several typical models of rural e-commerce to sort out the current development status of rural e-commerce.

2. Method and Materials

In order to better fit the research questions and achieve the purpose of the theoretical construct, an interview sample was selected for this study. The cases selected for this paper needed to meet the following conditions: First, the cases involved large rural e-commerce ventures; second, the cases covered various business models. This study adopts a

narrative history approach in the interview process, guiding the interviewees to self-report on their experiences, focusing mainly on the review of the entrepreneurial process, what difficulties and feelings there were in the process, personal education experience, major events in personal schooling careers, planning and thinking about inheritance, and family atmosphere. Through social software and telephone interviews, the proposed additional questions were asked to previous interviewees or other interviewees, and timely communication was made to proximally ensure that the interview outline would not be too structured and disconnected from the reality of the research. In order to ensure that the data sources of the case sample can maintain diversity and can verify each other to ensure the reliability and validity of the research findings, this paper intends to collect relevant data from the following aspects: (1) Secondary data (2) semi-structured interviews The field research was conducted from March 2020 to February 2022, and interviews were conducted for five rural e-commerce projects. The average duration of each interview was 60 minutes. Supplementary interviews were conducted with the people around the rural e-commerce enterprises, with the aim of making the growth trajectory of the enterprise more clear. (3) archival documents Each rural e-commerce project submitted a business plan or business plan as an important reference, which included the project introduction, team composition, profit model, business model, etc. Some enterprises also submitted PPTs and related introduction videos.

3. Business Model Analysis

3.1. Live broadcast and short video sharing of agricultural products supply sources

By connecting with local sales enterprises and farmers of special agricultural products and opening special live broadcast rooms for them on the platform, we help users understand the complete output process of agricultural products at the production end by carrying out live broadcasts on the growth, protection, picking, production, and processing of agricultural products, so as to improve users' trust in the products and establish a closer connection between them and the anchors. At present, smart phones and high-speed networks are fully popularized, so farmers can open live broadcasts anytime and anywhere[4]. In the process of live broadcasting, there can be real-time interaction with the netizens watching the live broadcast, while supporting a key purchase when watching the live broadcast and a key share in the circle of friends. In addition to the form of live broadcast, farmers and enterprises can also record the content in the form of short videos and publish them on the information platform, and there will be a special team in the company to post-process the videos for the farmers or enterprises in need to further improve the quality level of the created content. The platform collects special agricultural products from all over the country[5], and the agricultural products can be handed over to the enterprises for selection after the farmers have passed the quality inspection. After the local cooperative enterprises make the unified selection and integration of the featured agricultural products, they can submit the agricultural products' pre-sale order and liability guarantee to the company to ensure that the agricultural products are of high quality, rich in nutrition, and have a stable output. Finally, the company helps them upload the agricultural products to the platform mall through the company. The platform

integrates and classifies the products provided and builds up a special agricultural products mall. The mall has a detailed classification of agricultural products, and users can select and buy online according to their needs. In the future, we can cooperate with Taobao, Jingdong, and other major e-commerce platforms to develop platform columns and expand sales channels[6].

3.2. Live agricultural products sharing and evaluation

Through the incubation of the anchor team, we carry out live agricultural product sharing and evaluation on the platform. Through business cooperation and external suppliers, we recommend and share agricultural products in the form of live broadcasts, and at the same time, we will regularly evaluate relevant products according to the sales volume of products and feedback from users. The evaluation is mainly in the form of live broadcasts and short videos combined with graphics. It mainly includes personal tests on the taste and texture of agricultural products, nutritional efficacy, etc., and comparative evaluation with other similar agricultural products. Through the evaluation of agricultural products, the sales volume of "popular products" can be further enhanced, thus expanding their brand influence[7]. For products with low user ratings, improvement plans can also be found in the evaluation and communication, and farmers can be guided to improve the planting methods, processing methods, enterprise storage capacity, and logistics cold chain technology[8].

3.3. Agricultural products community-based exchange circle

As the relevant users of the platform include farmers, related enterprises, and ordinary consumer users, In order to strengthen communication and promote win-win cooperation among all parties, the platform provides users with a community communication platform called "Farmers' Circle." Each user can register their own exclusive account and space. In the space, you can not only share the graphics of agricultural products but also share your life and experience in various aspects. The account owner can publish short videos, photo albums, articles, etc. at any time to attract other users' attention through the content. Users can comment, ask questions, and share during the browsing process[9]. In the process of communication, farmers can learn excellent planting techniques, the public can make more like-minded partners, enterprises can learn from excellent representative enterprises to promote their own transformation and development, and consumers can post their own feelings and opinions after tasting certain agricultural products to provide a reference for other consumers. Meanwhile, all contents are supported for sharing on WeChat, QZone, Weibo, etc[10]. The platform gives certain rewards to active users and "Netflix" users. Basically, the excellent characteristic agricultural products of each region are closely related to the local folk culture or natural geographical environment, so this function takes the agricultural products as the carrier, excavates and composes the folk culture and landscape environment behind them, and shares them with the consumers through short videos and a combination of graphics and text. The sharing of special folk culture not only improves the competitive soft power of agricultural products but also allows users to understand and learn about many traditional cultures that have not been discovered or are on the

verge of disappearing, which plays the role of protecting excellent culture and promoting the inheritance and development of excellent culture[11]. The platform will push the special folk culture and tourist attractions of the corresponding areas to the users according to their purchases or browsing records. The company contracts a number of photography enthusiasts, copy editors, and self-media platforms to help discover and promote local folk culture in the early stages and later complete the fission of communication by attracting users to share their hometown culture themselves. By cooperating with local scenic spots, the company obtains preferential prices for tickets to scenic spots and encourages farmers to host farmhouses and family hostels to promote local economic development. As farmers and college students share their familiarity and love for their hometowns, they add to the sense of conviction among users. Local residents are more familiar with the distribution of attractions and the surrounding accommodation, food, and transportation conditions and can provide users with more reference value for travel routes, providing convenience for users while creating heat for their hometown[12].

4. Profit model analysis

First, the product transaction rebate profit, the mall as a middle bridge between the merchant and the buyer, after the completion of the transaction, the merchant to pay profits to the platform in return, that is, the common life of the "rebate" form. Transaction rebates will also be one of the main ways of income for the platform later. Using "live" visibility and trust, low cost and rapid diffusion of eye-catching features, agricultural product publicity and promotion work, and increased sales, The use of "live shopping through train" for rapid sales is intended to improve the live conversion rate, while the platform will charge a certain live discount goods brokerage fee. Second, the mall product service fees generate profit, and in the case of agricultural products, mall goods with better sales provide a variety of paid services: Bidding ranking: the software opened a product drive-through channel; after the company's professional technical team examined and paid for the channel, the corresponding agricultural products will appear in the priority position. Agricultural products live broadcast playback priority channel: the software opened the agricultural products live broadcast playback function, and will be real-time live broadcast playback recommendation, after the company's professional technical team inspection and payment channel, the corresponding live content and short video content will be priority push. Thirdly, through "agricultural products + live" and "agricultural products + short video," continue to attract traffic, create net-red agricultural products and net-red anchors, charge praise and gift intermediaries[13], and discount fees. And through the cooperation with the web-celebrity anchor, insert the advertisement to promote the agricultural products and carry out the advertisement to realize. Using the powerful social fission function it has, it quickly fractures new customers and the sales network and is a profitable tool for merchants to cash in on traffic. In the community, e-commerce enterprises understand customers' needs and provide targeted, customized solutions; publish texts and pictures to introduce products, improve users' product knowledge, answer customers' questions, teach users how to identify and select high-quality agricultural products, and establish brand image. During the sale, we follow up on logistics issues to ensure timely delivery, share information on how to eat the products,

recipes, and how to match them with other ingredients in the community, and design promotional programs to stimulate sales. After sales, we respond to customers quickly in the community, deal with problematic products in a timely manner, coordinate returns and exchanges, and improve customer satisfaction. Through value-added services during pre-sale, sale, and after-sale, we accumulate potential customers, attract community members to make secondary purchases and cross-purchases, and encourage community members to recommend products in their social circles to increase the lifetime value of customers. increase the potential value and realize profit[14].

5. Conclusion

In the context of rural revitalization, a live e-commerce MCN organization is established to build up a team of anchors through systematic knowledge acquisition and skill training. At the same time, using anchors as a bridge, the resources of agricultural products, farmers, and enterprises in different regions are integrated. Build up an e-commerce platform integrating talent output, content creation, and product sales. Relying on the currently popular short videos and live webcasts, farmers and enterprises will provide products, and the anchor team will promote and sell them. This is conducive to the continuous development of rural revitalization strategies.

References

- [1] Liu M, Zhang Q, Gao S, et al. The spatial aggregation of rural e-commerce in China: An empirical investigation into Taobao Villages[J]. *Journal of Rural Studies*, 2020, 80: 403-417.
- [2] Laudon K C, Traver C G. E-commerce[M]. Boston, MA: Pearson, 2013.
- [3] Kshetri N. Rural e-commerce in developing countries[J]. *IT Professional*, 2018, 20(2): 91-95.
- [4] Tang W, Zhu J. Informality and rural industry: Rethinking the impacts of E-Commerce on rural development in China[J]. *Journal of Rural Studies*, 2020, 75: 20-29.
- [5] Leong C, Pan S L, Newell S, et al. The emergence of self-organizing E-commerce ecosystems in remote villages of China[J]. *Mis Quarterly*, 2016, 40(2): 475-484.
- [6] Yu H, Cui L. China's e-commerce: empowering rural women?[J]. *The China Quarterly*, 2019, 238: 418-437.
- [7] Cui M, Pan S L, Newell S, et al. Strategy, resource orchestration and e-commerce enabled social innovation in Rural China[J]. *The Journal of Strategic Information Systems*, 2017, 26(1): 3-21.
- [8] Jin H, Li L, Qian X, et al. Can rural e-commerce service centers improve farmers' subject well-being? A new practice of 'internet plus rural public services' from China[J]. *International Food and Agribusiness Management Review*, 2020, 23(5): 681-695.
- [9] Chen M, Zhou Y, Huang X, et al. The integration of new-type urbanization and rural revitalization strategies in China: origin, reality and future trends[J]. *Land*, 2021, 10(2): 207.
- [10] Liu W. Route optimization for last-mile distribution of rural E-commerce logistics based on ant colony optimization[J]. *IEEE Access*, 2020, 8: 12179-12187.
- [11] Liu M, Min S, Ma W, et al. The adoption and impact of E-commerce in rural China: Application of an endogenous switching regression model[J]. *Journal of Rural Studies*, 2021, 83: 106-116.

- [12] Yang J, Yang R, Chen M H, et al. Effects of rural revitalization on rural tourism[J]. *Journal of Hospitality and Tourism Management*, 2021, 47: 35-45.
- [13] Gladwin C H, Long B F, Babb E M, et al. Rural entrepreneurship: One key to rural revitalization[J]. *American Journal of Agricultural Economics*, 1989, 71(5): 1305-1314.
- [14] Jalali A A, Okhovvat M R, Okhovvat M. A new applicable model of Iran rural e-commerce development[J]. *Procedia Computer Science*, 2011, 3: 1157-1163.