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Research on the Development of Rural E-commerce in China

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Abstract At present, rural e-commerce is characterized by obvious improvement in market prospect, development scale and development momentum, but there are also some problems, such as farmers' low acceptance of e-commerce, lack of promotion and training of rural e-commerce, and lack of rural e-commerce talents. Based on these problems, the government needs to increase financial support for rural e-commerce, improve the distribution logistics system, and strengthen the training of rural e-commerce personnel to promote the sustainable development of rural e-commerce.

Key words E-commerce, Rural areas, Internet

1 Introduction

With the development of Internet shopping, e-commerce has become a very important part of people's life, and the e-commerce system in China is becoming more and more perfect, which can be seen in both urban and rural e-commerce. With the informatization and modernization of economic development, the Internet has spread all over various industries. Under the guidance of taking the road of socialist rural revitalization with Chinese characteristics and fully implementing the rural revitalization strategy, rural e-commerce has developed rapidly^[1]. The e-commerce system is gradually improving, and the level of e-commerce is also gradually perfected^[2]. In the first half of 2020, rural online retail sales reached 766.85 billion yuan. The media rushed to report that the era of rural e-commerce has arrived. In 2020, due to the COVID-19 epidemic situation, rural e-commerce has developed better. With the application of the Internet, information and e-commerce websites suitable for farmers appear in front of people. The most extensive mode of combining Internet with agriculture is rural e-commerce.

2 Characteristics of rural e-commerce

2.1 Strong service feature It provides maximum service in

third-party platforms and reduces some risks. For example, in the process of transporting materials to the market by manpower, there may be loss of goods, and it is impossible to predict how many goods can be sold and whether there will be surplus, and the labor cost of transporting them home should also be considered. If the third-party platform is used to improve the after-sales service of agricultural products, online sales can bring better service to customers, increase the sales volume and sales profit compared with the traditional sales method of cash on delivery.

2.2 Low cost^[3] Different from other physical stores, e-commerce can avoid the rental cost of stores, and save some of the cost of hiring labor to a certain extent. The cost and investment are greatly reduced, especially in some well-known e-commerce platforms. They have a large number of users, which can effectively reduce the cost of product promotion. Therefore, the selling price is reduced and it is more competitive.

2.3 Informational characteristics Due to information advantage, the e-commerce platform can realize online communication between suppliers and buyers, reduce the risks brought by information asymmetry, and constantly update and transmit information, so that our farmers can better understand the market demand, and also enable customers to buy goods that meet their own requirements, thus achieving a win-win situation for both buyers and sellers.

2.4 Good macro development environment With agriculture, rural areas and farmers' problems being raised to an unprecedented height, all departments attach great importance to e-commerce, Internet entry into villages and informatization. In the process of promoting rural informatization, the state has issued more policies and more funds to support rural informatization industry. In the future, the Internet economy will gradually replace the traditional entity operation, and the sales share of agricultural

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products in JD.COM, Pinduoduo and Taobao will gradually occupy a certain sales proportion. Rural e-commerce has grown fully in the development environment supported by the government.

3 Characteristics of rural e-commerce development in China

3.1 The market prospect is very broad With the improvement of informatization and consumption level, the development space of the whole rural e-commerce is huge. The total amount of e-commerce transactions in villages and towns accounts for a small proportion of the total amount of physical transactions, it is a market that can be directly tapped, and the imagination space of the market is huge.

3.2 The number of Taobao villages has increased steadily The number of Taobao online stores in Zhejiang, Guangdong and Jiangsu ranks in the forefront, the number of Taobao villages is gradually increasing, the number of active online stores is increasing, and the number of Taobao villages that meet the standards is also increasing. The operation and service level of Taobao shop has gradually improved, and the large-scale offline construction activities of Taobao Village have also brought powerful impetus to the construction of rural e-commerce^[4].

3.3 Many online shopping platforms have gone to the countryside Many online shopping platforms have introduced many measures to help rural e-commerce, sending website talents to help the construction of rural online stores, and giving them very generous subsidy conditions. From the aspects of farmers' product design, distribution and sales, Taobao, JD.COM and other shops have given great support to our farmers, helping them to sell their products to every corner and region of the country through the Internet. Sales of agricultural products can be completed without leaving home. It's convenient for our farmers. It has brought about an increase in the wages of our farmers, and to a certain extent, it has also alleviated the problem of the loss of young and middle-aged rural labor force.

4 Rural e-commerce development status

With the continuous increase of policy support for agriculture, the Internet has been popularized, the number of rural netizens has been increasing, and the penetration rate of the Internet has been greatly improved. Although the population of rural areas is gradually decreasing, the number of netizens in rural areas is steadily increasing. Since 2014, the introduction and implementation of a series of policies, such as e-commerce demonstration in villages and e-commerce poverty alleviation, have made rural consumer groups tend to be younger. With the outflow of rural labor force, netizens in rural areas are generally between 20 and 29 years old, and the proportion of netizens over 30 years old is low. Therefore, the future development potential of this consumer group is greater than that of cities, and this consumer group also has greater room for expansion than cities^[5].

Farmers' online shopping basically pays more attention to

practicality. Most people think that farmers' online shopping is for cheapness. Although this idea is unfair, farmers' online shopping does pay more attention to price. Farmers' online shopping products also cover electric bill, social insurance payment, insurance purchase, medical insurance and so on in daily life. What farmers mainly pursue is not the beauty of the product, but what benefits it can bring to them and what role it can play. And price is also an important factor for farmers to consider. What they care about is the price of goods first, and then the quality of goods. They also have to consider logistics, after-sales, payment methods and the types of products they want to buy.

5 Problems of agricultural e-commerce

5.1 Low general quality of farmers^[6] Most farmers can't use the Internet, mobile APP and electronic devices skillfully. They are not very familiar with how to buy and sell agricultural products through the Internet, and they can't skillfully understand the needs of users and how to better serve customers through chat software. Most local farmers have become accustomed to trading on the spot in fixed places, such as vegetable markets and places with large traffic on street corners, so as to buy and sell agricultural products in exchange for money. In addition, farmers' own characteristics, ideas and cognitive level tend to be conservative, so they may accept new things that suddenly appear slowly. They may not be able to accept WeChat payment and Alipay payment today, and are more willing to accept cash payment. In addition, once the buyer breaks the contract in the transaction, the harm to farmers is huge, and the shelf life of some agricultural products is very short. If it is not sold in time and turned into money, farmers have to bear the losses themselves, which may lead to the ruin of the whole family. The self-sufficiency of small-scale peasant economy, strong small-scale farmer awareness and fear of taking risks make it difficult to carry out e-commerce in rural areas.

5.2 Lack of promotion and training of rural e-commerce The promotion of e-commerce is not in place, and the training and publicity of rural e-commerce are not enough. The government has not stepped up efforts to organize lectures for farmers on training rural e-commerce, so that farmers can learn basic knowledge of agricultural e-commerce. Farmers are unfamiliar with the concept of e-commerce and are not very happy to accept such a new sales model. The government's support for rural e-commerce and financial support is not enough, so that farmers can safely sell their own agricultural products through the network platform. It is necessary to support farmers accurately, help them open up markets and broaden markets, so that they can accept this new sales method happily, to let farmers realize the benefits of e-commerce. The lack of funds and the reduction of training and lectures have made farmers less interested in e-commerce.

5.3 Lack of rural e-commerce talents^[7] China's rural e-commerce is short of talents, and the educational level of Chinese agricultural producers is generally not high, which makes it difficult to meet the requirements of e-commerce for talents.

Competent and educated e-commerce talents are more willing to go to big cities with higher development level and better infrastructure. Because of the problems of household registration, employment, medical care, old-age care and education, the conditions in big cities are better and more perfect than those in rural areas, so it is difficult for rural areas to retain talents. Rural e-commerce talents are not interested in the rural online shopping market where the current network operation and management are relatively simple. At present, the online shopping force of rural e-commerce is basically the young and middle-aged, generally under 40 years old. It is common for farmers to go out to work, the purchasing power of the elderly and left-behind children at home is low, and the consumption in rural market is insufficient, which reduces the enthusiasm of rural e-commerce employees and leads to the loss of related e-commerce talents.

5.4 Lack of rural characteristic brands The homogenization of agricultural products is obvious. At present, the problem of rural e-commerce is that there is no characteristic brand and it is impossible to have its own characteristics. When it comes to air conditioning, we think of Gree, Midea, Haier and so on, and there is no characteristic brand of rural e-commerce. When we open our mobile shopping application, there are many products of rural e-commerce. However, most of the goods sold are similar in type and have no outstanding characteristics. When consumers mention a certain product, they do not give the first consideration to the local rural brand. Homogeneous goods are piled up, the sales scope of stores is the same, and the model is rigid.

5.5 Imperfect rural logistics system and poor logistics distribution China is a country with vast territory and vast land area. Our country is divided into central region, eastern region and western region. The highway system, railway system and aviation system in some central and eastern regions are imperfect. Our common logistics companies such as Zhongtong, Yuantong, Deppon and Shentong directly exclude some remote areas, so those who want to engage in rural e-commerce in these areas can only give up. Some agricultural machinery and equipment do not have special agricultural transportation technology, and agricultural products such as meat, eggs, milk and poultry are prone to deterioration and spoilage. In addition, the transportation in rural areas is underdeveloped and distribution points are scattered, so the requirements for logistics are higher. At present, there are many requirements for logistics and distribution points in rural areas, and the existing conditions cannot meet the current needs of developing rural e-commerce.

6 Recommendations for rural e-commerce optimization

6.1 Cultivating a new type of farmers who are educated and technologically savvy^[8] It is necessary to pay close attention to the education and training of farmers, so that farmers can have at least a junior high school education level, master some basic agricultural technologies, know some management knowledge, have

better political consciousness and moral level, and have their own business strategy and business model. It is necessary to rely on professional farmers who graduated from agricultural colleges and universities and stayed in rural areas to engage in agricultural production and management, and focus on various agricultural radio and television schools, agricultural colleges and universities, agricultural research institutes, agricultural technology extension institutions, rural economic cooperation organizations, leading enterprises in agricultural industrialization, *etc.* By taking centralized classes and lectures, expert guidance, distributing scientific and technological materials, setting up distance education, opening consultation hotline, *etc.*, farmers should be trained according to their needs and production development requirements.

6.2 Increasing government support for rural e-commerce and capital investment The government should introduce more preferential policies to support the development of e-commerce, encourage local farmers to actively engage in e-commerce, and increase publicity efforts to make farmers have a clear understanding of the concept of e-commerce^[9]. It is necessary to increase the support for funds, so that farmers can safely and boldly try this model, and farmers can be given more financial support and preferential subsidies. The agricultural enterprises in this city should play a leading role, help promote and organize lectures on the theme of e-commerce technology. Some e-commerce experts should be invited to train, so that farmers can master basic operation techniques and e-commerce sales skills. Helping farmers can better increase income, make agricultural products better sold, open up markets and produce marketable products.

6.3 Strengthening efforts to cultivate e-commerce talents It is necessary to increase the training of local talents, cultivate e-commerce talents, and establish cooperative relations with local agricultural colleges and e-commerce platforms, so that students can be exposed to e-commerce practice during internship. It is necessary to combine study with practice, train e-commerce talents to serve the local areas, improve the salary and treatment of e-commerce talents, give certain subsidies, and strengthen the introduction of talents, and attract more e-commerce talents to develop agricultural e-commerce. It is necessary to strengthen the training management of rural e-commerce, further improve the quality of training and increase the value of talents. It is necessary to encourage college students to return home to start businesses, improve the treatment in medical care, education, employment and housing, and regularly organize talents to study and train in cities. It is necessary to promote the hierarchical training of talents from the aspects of age, education level and work field.

6.4 Creating good brand and image of agricultural products It is necessary to dig out the cultural value behind agricultural products, and tell brand stories well. First of all, we should explore the regional characteristics and the differences in cultural connotations between local areas and other places. From the local customs^[11], cultural habits and historical accomplishment, we should explore our own differences and avoid homogenization. We

should create a batch of distinctive agricultural product brands, let local leading enterprises promote brand development, develop local brands, and sell goods based on the most popular livestreaming at present. We can cooperate with some livestreaming influencers and invite them to speak for the brand, drive sales and make a good reputation, so that more people can gradually understand the local characteristic brands, to drive the local rural economic development and promote local farmers to increase profits.

6.5 Improving the logistics system to improve the efficiency of rural distribution The government should strengthen the construction of rural roads and basic public roads, overhaul roads in time, improve basic road construction, build a number of rural logistics distribution points, and increase capital investment for the construction of logistics points. For rural logistics distribution personnel, they should strengthen service awareness and business training, so that they are familiar with the location of rural logistics sites and increase transportation efficiency. It is necessary to strengthen the construction of logistics system and improve the distribution of logistics stations.

7 Future development trend of rural e-commerce

Rural e-commerce will maintain a rapid development momentum with the application of big data technology, 3S technology, remote sensing technology and cloud computing technology. Rural e-commerce will be combined with smart agriculture, smart consumption and smart circulation to form a complete circular chain, and the overall service environment of this industry will be improved. Various professional service providers enter the countryside to provide raw materials, production and storage of goods. Professional talents enter the countryside to process and beautify the pictures, plan how to sell agricultural products, how to operate online stores, and deal with the after-sales problems related to contracts. How to promote the brand? How to increase sales, and how to give back gifts for the greatest benefits? In view of this series of problems, there will be professional talents to think and answer in the future. This can promote the faster and better development of rural e-commerce, and the industrial chain of rural e-commerce will be extended. It will change from retailer status to distributor, from simple channel business to brand business. From the procurement of raw materials to processing and then to distribution to other dealers, a complete vertical industrial chain has gradually formed. There will be online and offline integration development, and offline stores provide high-quality services. Stores show their own sources of goods to customers, let customers experience

products, and finally decide to buy products. Both buyers and sellers feel very happy in this link. Whether customers buy products no longer depends on looking at online pictures and online reviews, but on the real experience. With the increase in sales volume, talent level and service level, rural e-commerce will make great progress.

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