

## Exploration on the New Model of Rural E-Commerce

Dong Xie\*, Jiayan Wu, Gang Peng, Shuhong Tang

*School of information, Hunan University of Humanities, Science and Technology, Loudi, Hunan, China*

*\*Corresponding Author.*

**Abstract:** With the rise and popularization of Internet information technology, the rapid development of modern economy, e-commerce has also touched the countryside, in the development of rural e-commerce also has a primary attempt. Various resources rural E-commerce serves the countryside through the network platform, expands the rural information service business and service field. This paper analyses the pain points of rural e-commerce, and explores a new model of rural e-commerce. Hope to provide valuable reference for the development of rural e-commerce in China. The new rural e-commerce mode is through the cooperation of several suspects such as government agencies, merchants, consumers and farmers. Moreover, the work combines traditional mode and e-commerce mode, and online and offline mode, delivery to home and self-service, all-channel multi-contact, diversified payment, convenient and quick service as one mode can bring huge convenience and economic benefits as well as higher living standards for rural areas.

**Keywords:** Rural, E-Commerce, New Mode, Network, Platform

### 1 Introduction

Rural E-commerce, by grafting various resources serving the countryside through the network platform, expands the rural information service business and service field, and makes it become the three rural information service stations all over the counties, towns and villages [1,2]. Selling agricultural products, changing the traditional mode that farmers need to buy consumer goods into towns, counties and cities, making it easier and faster for farmers to buy the daily necessities and livelihood commodities they need, developing rural economy, increasing farmers' income through business poverty

alleviation, e-commerce entrepreneurship, building a new countryside, taking root in agriculture, countryside and farmers through business platform, and serving them so as to enable farmers Become the biggest beneficiary[3-5].

### 2 Rural E-Commerce Service

#### 2.1 Online Agricultural Market

This is the most basic service provided by e-commerce platform. As an e-commerce platform, it can quickly transfer technical service knowledge, market supply and demand information to farmers, help farmers expand the market, and seek the best trading partners as soon as possible[6].

#### 2.2 Rural Characteristic Tourism

As a rural area with tourism resources, through business, we can better promote local visibility, introduce local tourism characteristics, local specialties, promote popularity, enhance tourism competitiveness and generate income for farmers.

#### 2.3 3D Farmhouse Music

Farmhouse entertainment is a new way of tourism and leisure, which is provided by farmers to urban people to return to nature and get physical and mental development. It is more and more favored by urban people. Rural e-commerce platform can more effectively combine farmhouse music, through a variety of technologies to produce a highly realistic 3D farmhouse music for publicity.

#### 2.4 Characteristic Economy

Through the rural e-commerce platform, we will strengthen the publicity of local specialty and famous brand enterprises, expand their visibility and influence, and increase their competitiveness. As a government department, it is also necessary to attract investment

through commercial platforms, to encourage more preferential policies, to encourage projects to be transparent and open, and to better attract investors to invest in production.

### **3 Pain Points of Rural E-Commerce**

#### **3.1 Weak E-commerce Infrastructure in Rural Areas**

Because of the rural economic level and cultural reasons, the number of rural Internet users is on the low side, and the hardware facilities are relatively weak. E-commerce platform is a complex system, and building rural e-commerce platform requires a lot of manpower, material and financial resources[7-10]. At present, the construction of rural e-commerce platform in China mainly depends on the government, but the government's investment in resources is limited, many communication technology, Internet technology can not be updated and popularized. Some rural networks often fail, and the cost of accessing the Internet is much higher than that of cities, which hinders the popularization of rural networks in China to a certain extent.

#### **3.2 Rural E-commerce Consciousness is not strong**

Because farmers are influenced by the traditional business model of one-hand payment and one-hand delivery, coupled with the low level of cultural knowledge of farmers born 80 years ago, the current farmers' awareness of e-commerce is not strong. In recent years, although some rural e-commerce platforms have been established, computers have been purchased and networks have been connected in some rural areas of China, most farmers still do not know how to use computers and how to use Internet resources. Many rural households' networks are not used for e-commerce, but for the usual online games and communications. Without the leadership of the government or related people, it is difficult for rural people to mobilize their awareness of e-commerce.

#### **3.3 Lack of E-commerce Talents in Rural Areas**

E-commerce itself is a subject involving many fields, but it is not easy for rural areas to master e-commerce skills. Although most rural

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areas have university student village officials at present, university student village officials can only say that they master the basic functions of the Internet. Because village officials are not e-commerce professionals, so the use of e-commerce platform, information collection, network security prevention is not clear. Online payment is the most critical step in e-commerce. If farmers encounter online dishonesty, their enthusiasm will be greatly reduced, even they will completely deny e-commerce due to the influence of traditional transaction mode. So in the countryside, there is not only a shortage of talents, but also a serious brain drain due to income and other reasons.

#### **3.4 Logistics Cost is Hard to Control and Last Kilometer**

Firstly, the basic road facilities in rural areas are not perfect, although most of them have built village-to-village highways, many remote mountainous areas are impassable in information and difficult to locate accurately. Many logistics express companies even make it clear that remote areas are not open; secondly, the weight of agricultural products is large, many agricultural products need to be fresh-keeping, and there is the requirement of distribution timeliness, which leads to high logistics costs.

#### **3.5 Unequal Supply-demand Relationship**

Selling is more urgent than buying: agricultural products are often unsalable due to marketing channels, transportation channels, quality assurance and other reasons, and ultimately have to sell cheap or even rotten, and in addition to insufficient information in rural areas, farmers blindly follow the trend, what to sell this year, what to plant next year, which leads to the market oversupply in the second year; most farmers are limited to commodities, consumer goods. Clothing and other necessities of life, coupled with farmers' low income, poor purchasing power and other factors, make the purchase demand is not large.

### **4 Exploration of New E-Commerce Model**

#### **4.1 Sales Method**

In the past, there were few sales channels for rural e-commerce: the products produced by

farmers could only be sold through traditional modes to towns, counties and a single network platform; the positioning of sales products was not accurate: farmers did not know what to sell, often the products produced could not be sold, or could not sell well; the positioning of sales objects was not accurate: farmers did not know who to sell the products produced, and sometimes sold to the local areas. This kind of product is abundant, and sometimes the products sold do not conform to consumers' dietary habits, etc.

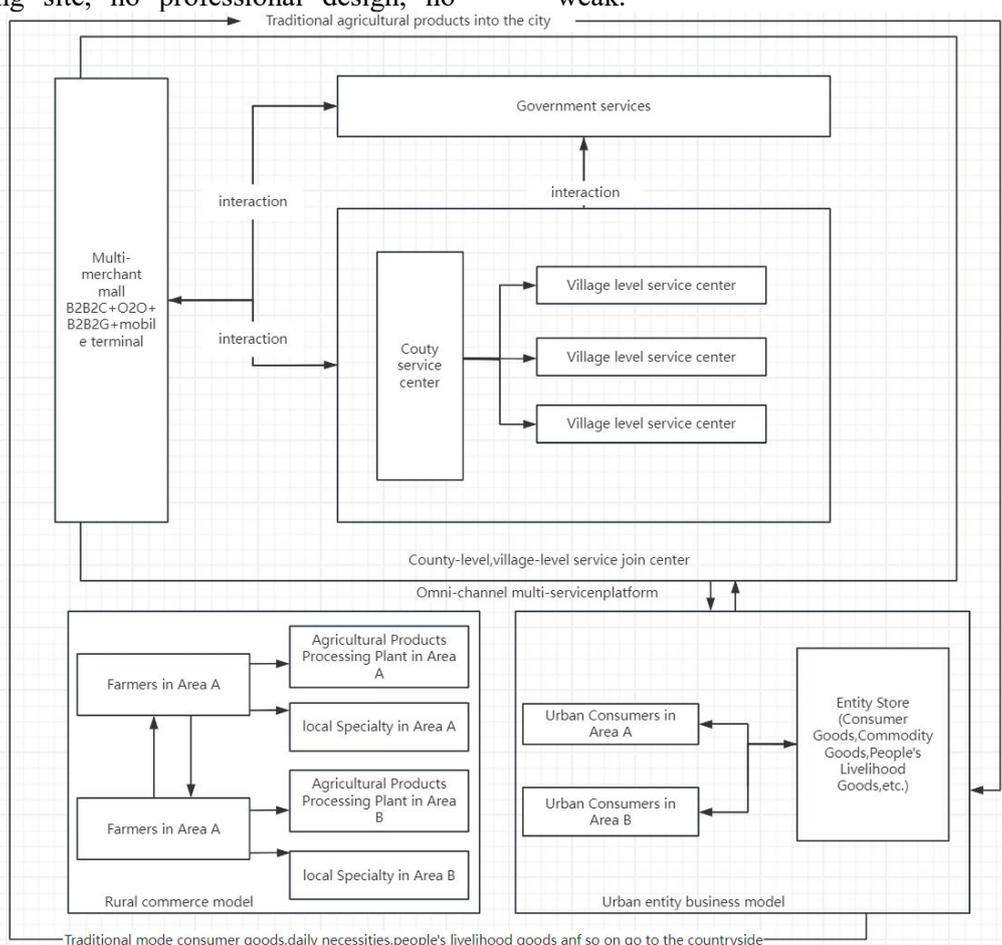
**4.2 Packaging Logistics**

Because of its special nature, agricultural by-products are difficult to store, cold chain, packaging, processing, design, transportation and publicity. Farmers have no place to store, no packaging manufacturer, no unified processing site, no professional design, no

corresponding cold chain system to keep fresh, no convenient logistics transportation, and no publicity, which often leads to the failure of agricultural products to sell.

**4.3 Consumption**

In recent years, although some rural e-commerce platforms have been established, computers have been purchased and networks have been connected in some rural areas of China, most farmers still do not know how to use computers and how to use Internet resources. Many rural households' network is not used in e-commerce, but in the usual online games and communications. Because most farmers have a low level of education, they are still accustomed to the traditional consumption mode of buying and selling in cities, and their awareness of e-commerce is weak.



**Figure 1. Rural E-Commerce Mode**

**4.4 Services**

The object of traditional rural e-commerce service is limited to farmers and businessmen, but in fact it should not only be limited to

farmers and businessmen, but also include cities, governments, etc. The types of services should not be limited to agricultural by-products, but also include life services, consumer goods, daily necessities, people's

livelihood products and so on.

#### 4.5 New Electronic Commerce Model

To sum up, the new e-commerce model should meet the needs of rural areas, farmers' sales, consumption, packaging logistics, services and other needs, so that farmers' agricultural and sideline products can be sold more easily, so that urban people can buy the rural characteristic products they want to buy, so that farmers can more easily buy urban consumer goods, daily necessities, people's livelihood products, and so on, so that farmers can enjoy convenient life services like urban people. This is the case. Based on this, this paper designs a new e-commerce model, as shown in Figure 1. Farmers can transfer agricultural products to agricultural products processing plants for processing, and local specialties can be sold to urban consumers and farmers in need through the combination of "multi-merchant mall B2B2C+O2 O+B2B2G+mobile end" and traditional mode. Consumer goods, daily necessities and people's livelihood products in the city can also be sold to the countryside through traditional mode and e-commerce mode. "Multi-merchant mall B2B2C+O2 O+B2B2G+mobile terminal" docks with government service agencies. Farmers and urban consumers can enjoy life service payment (such as broadband fees for hydropower and gas), government policy publicity, assistance, government office, guidance and other services through this platform. Establishing franchise stores and service centers in counties and villages can basically solve the problem of the last kilometer of logistics by providing farmers with services such as on-line orders, logistics self-collection, delivery home, payment of living services (such as broadband fees for hydropower and electricity), etc. Urban consumers can quickly buy fresh local products that cannot be bought in the city through multi-mall business platform. "Multi-merchant mall B2B2C+O2 O+B2B2G+mobile end" is easier to form a complete supply chain of storage, cold chain, packaging, processing, design, transportation, publicity, etc.

#### 5 Conclusion

The new rural e-commerce mode is through

the cooperation of government agencies, merchants, consumers and farmers. The combination of traditional mode and e-commerce mode, the combination of online and offline, delivery to home and self-service, all-channel multi-contact, diversified payment, convenient and quick service as one mode can bring huge convenience and economic benefits as well as higher living standards for rural areas.

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#### References

- [1] Windiana L.; Bakhtiar A.; Kurniasih V.R.; Basamah S. The Effect of Green Marketing toward the Consumers Buying Interest of Starbucks Coffee Mediated By Brand Image. *HABITAT* 2020, 31, 36-41.
- [2] Yi S.; Zhao J.; Joung H.-W. Influence of price and brand image on restaurant customers' restaurant selection attribute. *Journal of foodservice business research* 2018, 21, 200-217.
- [3] Prihatini W.; Gumilang D.A. The Effect of Price Perception, Brand Image and Personal Selling on the Repurchase Intention of Consumers B to B of Indonesian General Fishery Companies with Customer Satisfaction as Intervening Variables. *European Journal of Business and Management Research* 2021, 6, 91-95.
- [4] Cuong D.T. The Relationship Between Product Quality, Brand Image, Purchase Decision, and Repurchase Intention. In *Proceedings of the International Conference on Emerging Technologies and Intelligent Systems*, 2021; pp. 533-545.
- [5] Gu C.; Huang Y.; Wei W.; Lin S. A

- discussion of the relationship model of the purchase intention of brands, as based on food safety issues. *PEOPLE: International Journal of Social Sciences* 2020, 6, 234-256.
- [6] Huijing J.; Xuefeng Y.; Wenxue P.; Longwei G.; Linfeng F.; Yongbo S. Practical Exploration of Rural E-commerce Boosting Rural Revitalization Based on 4C Model. In *Proceedings of the 2021 2nd International Conference on E-Commerce and Internet Technology (ECIT)*, 2021; pp. 74-78.
- [7] Chen Y.-S.; Huang A.-F.; Wang T.-Y.; Chen Y.-R. Greenwash and green purchase behavior : the mediation of green brand image and green brand loyalty. *Total Quality Management & Business Excellence* 2020, 31, 194-209.
- [8] Akturan U. How does greenwashing affect green branding equity and purchase intention? An empirical research. *Marketing Intelligence & Planning*, 2018, 36(7): 809-824.
- [9] Hameed I.; Hyder Z.; Imran M.; Shafiq K. Greenwash and green purchase behavior: An environmentally sustainable perspective. *Environment, Development and Sustainability* 2021, 1-22.
- [10] Santos C, Coelho A, Marques A. A systematic literature review on greenwashing and its relationship to stakeholders: state of art and future research agenda. *Management Review Quarterly*, 2024, 74(3): 1397-1421.