

Discussion on the Application of E-commerce in Agricultural Products Trade

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Abstract

e-commerce infrastructure is not perfect, according to the China Internet network information center (CNNIC) released "2007 China rural Internet survey report", by June 2007, the scale of rural Internet users reached 37.41 million, in the 737 million rural residents, the Internet penetration rate is only 5.1%. The weakness of rural Internet infrastructure has become the biggest bottleneck hindering the development of agricultural products e-commerce trade. E-commerce is a trading activity carried out on the basis of the Internet, and its realization is based on the application of Internet technology. If the Internet cannot cover every link of the production, supply and marketing of agricultural products, then the e-commerce trade of agricultural products can only be an armchair strategy.

Keywords

agricultural products; Trade; E-commerce; To discuss.

1. Low Quality of Participants

At present, most of the producers of agricultural products in China are single farmers who are important participants in agricultural trade. Deputy agriculture minister pointed out that, in China's 490 million rural labor force, has a high school education or above accounted for only 13% of elementary school culture level of 36.7%, under the system of agricultural vocational and technical education of less than 5%, and the application of e-commerce must master the network information technology and electronic technology, such as electronic data interchange (edi), E-mail, electronic bulletin board system, bar code, image processing, smart card, etc. The low cultural quality of farmers has become a major obstacle to the popularization and development of e-commerce.

2. The Quality Standard System of Agricultural Products is not Sound.

In e-commerce transactions, the buyer and the seller through the network to complete the premise of business negotiations is to provide information must be reliable, e-commerce platform to show the user is a unified, standardized commodity information, but the agricultural production in China is still a one mode of production and operation, farmers' organization degree of dispersion, the production and processing capacity is low, the efficiency is not high, the low degree of industry intensive, difficult to form a strict quality standard system, there are obvious differences between products.

The circulation of agricultural products is not smooth and the information is not well informed. A significant feature of e-commerce is the transformation of an objective physical entity into an electronic data through a set of electronic tools, including products, currencies, transaction vouchers, business negotiations, etc., so it needs the support of a powerful information system. However, at present, China's agricultural information release channels are not smooth,

information receiving mode is backward, mainly using one-way transmission mode, the lack of information feedback mechanism.

Lack of unified agricultural information system. On the whole, all provinces, cities, counties and towns are building stations, buying machines and entering the network. The administrative segmentation has led to the low-level repetitive construction of network development and the low level of integration and standardization of agricultural information system. The development of agricultural information market is slow, especially the agricultural information service market, agricultural product design market, agricultural capital market, agricultural product processing market, agricultural product storage and transportation and packaging market, etc. have not been developed or formed, and the agricultural information system is not yet perfect.

3. Development Prospect of the Project

3.1. Development Trend of Agricultural Products E-Commerce Industry

From the trend of the development of e-commerce, online, offline, "new retail logistics in harmony", "new intelligent, personalized and customized manufacturing" has become the industry consensus within a certain scope, help users save time, users choose professional, using high brand preemption public knowledge become the target of chasing the Internet economy. Based on chongqing agricultural vivid practice keeping track of electricity industry development research, combined with domestic agricultural electricity industry leading provinces and cities, leading platforms, famous online store for standard analysis, on the basis of summarizing the relevant research results at home and abroad, we integrated research found that domestic agricultural electricity industry development present "scale, the up and down interaction, item lead, reverse custom, cross-border integration" development trend.

3.2. Scale First

The e-commerce industry of agricultural products shows the trend of scale first in the industrial chain links such as online marketing resources, platforms, logistics and distribution, and consumer welfare.

From the perspective of online marketing resources, the planting and raising scale of featured agricultural products is the basis of the scale economy of featured agricultural products industrial chain. The particularity of agricultural products often leads to the bad "" good is not much, much, the scale of agricultural production can improve the standardization of farming, picking, pretreating, packing conditions of marginal cost, thus promoting the development of characteristic agricultural products to the direction of standardization, quality, and supply of electricity industry of current agricultural product standardization is the " pain points ". For example, the navel orange in southern jiangxi, which was awarded prime minister thumb up, achieved an e-commerce transaction volume of 1.3 billion yuan in 2015, with a planting area of 1.57 million mu and an industrial cluster output value of more than 10 billion yuan, helping millions of farmers and fruit farmers increase income and become rich.

From the perspective of third-party platforms, the essence of platform economy is scale, and the scale of suppliers and consumers is the basis for the same-side network effect and cross-side network effect to play a role. The characteristics of the agricultural products determines the degree of information asymmetry is higher, consumers have been established reputation evaluation information reduces the search costs of new consumers so that consumers the growth of the population continues to increase, the total number of consumers to attract more suppliers to join platform, an increase in the number of suppliers has enriched product category to increase consumer switching costs makes the platform consumers "sticky". The platform switching cost of consumers makes them not easily go to other platforms, and the third party

platform presents a "winner-takes-all" competition pattern. For example, in the B2C market, Tmall's market share has been maintained at more than 50% in recent years.

From the perspective of self-run platform, the cost of platform development, operation and maintenance technology, storage rental and construction, distribution, and human resource costs mainly belong to fixed costs, which tend to be relatively large. The cost of purchasing agricultural products mainly belongs to variable costs. Only when the self-run platform reaches a certain scale can it exceed the break-even point and become profitable. For example, the number of daily youxian users exceeds 3 million, the monthly active users exceed 1.5 million, the monthly repurchase rate reaches 80%, and the daily order quantity reaches 30,000 to 50,000. In July 2016, the regional profit was realized in Beijing.

In terms of logistics distribution, the storage, sorting, packaging and distribution requirements of agricultural products are higher than those of industrial products. In particular, fresh agricultural products must rely on the whole cold chain, in which the cost of cold chain transportation, multi-functional cold storage and cold chain packaging are all relatively high. Delivery costs can only be reduced if a certain scale is achieved to improve the utilization of cold chain storage and distribution.

From the perspective of consumer welfare, because the SKU of agricultural products sold on self-operated platforms and third-party platforms must follow the road of quality and differentiation, the domestic agricultural products sold on the Internet, especially fresh agricultural products, will still be dominated by "scarce high price" for a period of time, and the main consumer group is the urban high-income population. Only when the online sale of agricultural products reaches a sufficient scale and the economies of scale effect can make all the market subjects of the agricultural products e-commerce industrial chain profitable, will online sale of agricultural products be promoted to the direction of "good quality and low price", thus increasing consumer welfare.

4. Up and Down Interaction

Due to the "winner-takes-all" effect of well-known third-party platforms, most domestic agricultural products e-commerce platforms adopt the development path of "self-run B2C deep cultivation and replication in other places". In addition, the non-standard characteristics of agricultural products aggravate the difficulty of establishing a stable supply chain, and the simple online development of regional platforms will face the dual dilemma of "no goods to sell, no good goods to sell" at the supply end and "too many complaints and returns" at the delivery end. Therefore, they must be combined with offline development and present the trend of online and offline integration and interactive development.

From the perspective of online development, regional platforms usually need to solve the important problems of network trading settlement platform construction and network promotion. In terms of trading settlement platforms, most regional third-party platforms adopt self-built online trading platforms to access third-party payment, while most regional self-built online trading platforms incorporate well-known third-party platforms to obtain online traffic. Network promotion usually adopts network advertising, SNS and other promotion modes.

From the perspective of offline development, most of the regional third-party platforms rely on the offline entity wholesale market or trading market with a certain scale to promote market merchants to enter the platform. Most of the regional self-operating platforms rely on leading enterprises in the production, processing and circulation of agricultural products to obtain stable product supply. Leading platforms cut into the upstream links of the supply chain through self-built farms and joint farms. Meanwhile, most self-built regional storage facilities and distribution teams cut into the downstream links of the supply chain to control product circulation quality and improve delivery satisfaction.

For example, chongqing "xiangmanyuan" relies on the customer resources formed by the caiyuanba fruit wholesale market over the years and the strong local distribution capacity of chongqing transportation. Chongqing "jizhihui" relies on yongchuan jizhihui international agricultural trade logistics city to build an online platform to promote the online integration and development of offline businesses. Another example is chongqing "fruit love doctrine" self-run platform relying on the largest imported fruit wholesaler in the west, self-built storage logistics to achieve instant delivery. For example, the "food line fresh", which started in suzhou, does not provide fresh cabinets for delivery in the community, and has achieved the expansion of suzhou, Shanghai, Beijing and wuxi.

5. Single Product Leader

"Hot style" is not only a concrete realization of economies of scale, but also an important means to improve the brand awareness of sellers and strengthen the stickiness of consumers. It is also a starting point for the self-run platform of agricultural products and the online stores with third-party platforms to improve their business ability.

Hot style achieves economies of scale. Agricultural products SKU, which sells a lot on the e-commerce platform of agricultural products and enjoys high popularity, has achieved high sales volume. On the one hand, high sales volume is conducive to the seller to break even and achieve sound operation; on the other hand, "hot style" can improve the standardized cost boundary and further reduce operating costs. For example, the top ten hot style sales of hot style agricultural products taobao in chongqing in 2016 all exceeded 1 million yuan, and the top ten hot style sales of Tmall all exceeded 3 million yuan, laying a foundation for the sustainable and healthy operation of these online stores.

"Hot style" increases brand awareness. "Hot style" has a large number of orders and a large number of consumers. Product brands and platform brands related to "hot style" and online store brands have a wide audience. Some "hot style" marketing has even received extensive attention from professional media and mass media. For example, the "original life" platform quickly increased its influence with the help of the hot style product chu orange, and used social media as the main channel of communication. Consumers remembered chu orange and remembered the original life website at the same time. Moreover, fresh platforms such as tianyuan orchard, sf best choice and jingdong have improved consumers' cognition of fresh agricultural products on the platform through the competition of "cherry seeds" hot style.

"Hot style" strengthens consumer stickiness. "Hot style" is the seller's selection of goods, use the herd mentality, consumers through the seller's recommendation and other consumer buying these signals show that the mechanism, improve the efficiency of the consumer decision making and buying, some hot style combined with platform marketing guide consumers "collection" store, thus greatly strengthen the consumer viscous, makes consumer repeat purchase.

6. Reverse Customization

Traditional supply chain of agricultural products mainly in agricultural leading enterprises as the core, the production, processing, circulation of agricultural products often makes it a regional and seasonal retail link in the "have to sell what you" awkward status, and supermarket, the farmer's market, market and other traditional retail area coverage is very limited, market signals from production to consumption often end a one-way flow. The cross-time and cross-space advantages of agricultural products e-commerce can centralize consumers' scattered demands and promote the flow of market signals from the consumer end to the supply end and production end, so as to realize "production on demand" or "purchase on demand" at the production end or the supply end. Farmers produce according to demand

orders, which not only guarantees certain scale returns, but also gives sufficient time to prepare and guarantee product quality. It can be seen that through C2B, group purchase, pre-purchase and other reverse customization means, the supply chain of agricultural products will be reconstructed into a supply chain with e-commerce platform as the core, and the supply-side structural reform of agriculture will be promoted.

Reverse customization has a larger scale of consumer end. Generally speaking, ord-based agriculture is mainly signed by farmers (cooperatives, production bases, etc.), intermediary organizations (brokers, wholesalers, etc.) and leading enterprises, while community-supported agriculture (CSA) is mainly signed by farmers (cooperatives, production bases, etc.) and community consumers with close geographical location. Through C2B, group purchase, pre-purchase and other reverse customization methods, e-commerce agricultural products are significantly different from ord-based agriculture and community-supported agriculture in that online virtual space enables consumers in scattered geographical locations to gather their demands on a larger scale.

Reverse customization promotes production based on sales. For a long time, due to certain periodicity and seasonality of agricultural production, production organizations tend to "depend on the weather to eat what they have", which is seriously out of line with market demand and lacks price elasticity of demand, exacerbating the price fluctuation of agricultural products. Through reverse customization of agricultural products e-commerce, market demand can be locked in advance, production can be fixed by sales and purchase can stabilize price expectation, thus slowing down the fluctuation of agricultural products price, and producers and consumers can benefit.

The trend of reverse customization is big data analysis. Through big data analysis, the consumer data accumulated by the agricultural products e-commerce platform can predict the demand of agricultural products in a certain region and a certain season, and place orders in advance to the production base according to the growth cycle of the category, which can produce according to the orders and standards. For example, in the fresh C2B2F model of food bank, according to the big data of the platform, the demand of a certain city or a certain stage is estimated to place an order to the production base several months in advance. For example, song xiaocai, a B2B platform, focuses on 50-70 kinds of products according to different requirements of each city, and purchases dozens of tons of each product every day. When the platform is of sufficient scale, local demand can be predicted through data over a period of time, so as to help suppliers make supply plans in advance and promote the transformation from reverse supply chain to reverse industrial chain with orders.

7. Cross-border Integration

Agricultural products e-commerce makes use of the advantages of "entrance" and flow to promote the mutual integration and penetration of various business models and the deep integration with other primary, secondary and tertiary industries. With the deepening of the "Internet +" initiative, the e-commerce business model of agricultural products has shown a trend of mutual integration and integration with agricultural production, agricultural processing, sightseeing agriculture, scene agriculture and other fields, becoming a big platform covering the common development of primary, secondary and tertiary industries. For example, the emerging formats such as experiential planting, participatory picking, special tourism festival and trunk economy, which are increasingly popular around urban areas, combine the sales of agricultural products with urban leisure tourism and exhibition activities through online marketing and social communication, and achieve a win-win situation for multiple parties. Another example is the web celebrity live broadcast of "lobster fighting night", which is cooperated with douyu during the 618 quality carnival in 2016.

8. Conclusion

"E-commerce + live streaming" not only achieves the "eye-attracting effect", arouses many consumers' deep interaction, but also effectively drives the sales of products. During the 618 promotion period, the order volume of jingdong's self-operated fresh products reached 6 times that of the same period last year, and the mobile end accounted for 88%. On May 30, 2016, the rural taobao "village red" root (rural selling agricultural products) nationally televised debut in xiushan tujia and miao autonomous county, lead the net friend in video broadcast way deep mountain fields, real-time display the original farm goods from home collection process abroad, consumers can buy, specify by watching them buying, so that the chongqing agricultural products to the country, to help farmers' income to get rich.

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