

Research on Problems to Build New E-Commerce Platform for Rural Products in Jilin Province under the Background of “Internet +”

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Abstract. During the 13th five-year planning, energetically developing agricultural and rural information becomes an urgent need to accelerate agricultural modernization and build a moderately prosperous society. Jilin Province, with abundant resources of important merchant food and green food, as well as emerging animal-breeding industry and agricultural products processing industry, has certain resourceful foundation to develop e-commerce. Advancement of “Internet +” strategy in our country also provides rare opportunities for us to develop e-commerce. Based on the theory of supply chain and value chain, the paper analyzes problems existing in the establishment of e-commerce platform for rural agricultural product and proposes corresponding countermeasures, aiming to accelerate the development of e-commerce.

Introduction

In March, 2015, Premier Li Keqiang firstly proposed the “Internet +” action plan in government work report, combining mobile Internet, cloud computing, big data, Internet of things and so on together, to play full use of Internet to optimize the distribution and integration of social resources and enhance the innovation capability and productivity, leading a new form to develop economy with the Internet as infrastructure and implementing tools. As a big agricultural province in China, with its agricultural output accounting for a large proportion of Jilin’s GDP, Jilin’s position in Chinese agriculture is unshakable. With deep and wide application in Internet, agricultural information construction that pulls the revolution of production mode and organization mode attaches great importance, as development of countryside e-commerce can promote the development of rural economy and bring benefits to farmers in these areas.

Role of Agricultural E-Commerce in Agricultural Industry

Agricultural e-commerce, a resource to graft various services onto the countryside through network platform to expand information services and services domains to make it a “three farming” information service station covering all counties, towns and villages. Integrate new management ideas of industry chain, value chain, supply chain and etc. to reduce blindness of manufacture, decrease Information Asymmetry, accurately seize the market demand to deeply integrate traditional agriculture and information technology thus to promote customer-centric and market-oriented standardization and branding in agricultural production. Properly distribute productive resources to optimize the layout of agricultural production and breed structure to realize cross-regional and transnational network marketing to form bigger and more orderly market, effectively improving agricultural industry quality and international competitiveness thus to bring new momentum and open up new space for new-type modernization, agricultural information, urbanization and modernization.

Current Situation of Countryside E-Commerce in Jilin Province

Jilin Province, with its abundant resources of merchant foods and green foods as well as emerging animal husbandry and farming product processing industry, has a certain base to develop

agricultural e-commerce. However, since the point wasn't carried out until 2010, the development of e-commerce of agricultural products in our province started relatively late. Currently, seven hundred trial terminal online shops have been built in sixteen counties and cities including Shuangyang, Jiaohe, Yitong, etc. Moreover, agricultural e-commerce trading system, called "Hao Hui Gou" has also been developed in Jilin Province. In 2012, the transaction volume of agricultural e-commerce in Jilin topped 10 million RMB, with that of agricultural product topping 0.2 million RMB. In 2012, the province added 6 new counties and cities to conduct trials of agricultural e-commerce. Additionally, agricultural e-commerce platforms have also been taken as a key construction project. Efforts have been concentrated to build 680 terminal online stores, with 100 on-line enterprises and more than 200 products being recommended and selected out. Since Jilin Provincial People's Government's implementation opinion to push countryside e-commerce to develop quickly was issued in 2015, agricultural e-commerce really took off Dunhua city, cooperated with Alibaba, has set up 45 "Taobao Service Stations in Countryside" covering the whole city including 16 towns and 303 administrative villages, allowing villagers living in remote mountain villages to do shopping within the village, effectively propelling the developments of modern service industry including countryside e-commerce and logistics. Moreover, with government's financial support and technology training, villagers' capability to operate e-commerce have also been improved dramatically.

Problems Existing in Building E-Commerce Platform of Farming Product in Jilin New Countryside

Though e-commerce of agricultural products in our province has achieved some certain developments, there are still some problems existing to be dealt with, such as talent shortage, government not providing enough support, imperfect environment to develop e-commerce of agricultural products, incomplete logistics and distribution system and so on, which have always been restricting severely the development of e-commerce platform in our province.

Rural Farmers' Lack of Understanding in Agricultural E-Commerce. Development of countryside e-commerce has been concentrated in villages, where education facility is relatively backward, leading to people's overall cultural level relatively lower. Thus, they can't quite understand those new things including Internet and e-commerce. Peasants find themselves not be able to control the network for its virtualization and mystification, leading to their lack of confidence while facing "Internet +" and e-commerce. Besides, poor network condition, shortage of necessary knowledge about Internet and etc. also hinder the development of e-commerce of farming product in countryside.

Establishment of Network Infrastructure is Inadequate. Though government's investment into e-commerce of agricultural products has had a certain foundation, both material and finance resources are limited. Currently, the establishment of network infrastructure in our province is still in the backward position. As shown in Table 1, Jilin's Internet penetration rate is merely 49.3%, ranking 18th in the nation, less than the national average. We still have a lot to do to catch up with city including Beijing, Shanghai and Guangzhou. Thus, currently it is apparently imperative to invest more to build necessary infrastructure.

Table 1 network popularization rate in Jilin Province compared with that in several other provinces

province	Number of netizens	Popularization rate	Growth of netizens	Rank of popularization rate
Beijing	1656	80.20%	7.60%	1
Shanghai	1783	75.70%	5.80%	2
Guangzhou	7092	74%	6.50%	3
Jilin	1263	49.30%	10.50%	18

Limited Resources of Talent in E-Commerce of Agricultural Products. Currently, a number of e-commerce talents have been introduced into our province through implementing regional talent introduction policies. Nevertheless, due to limitation of conditions including sluggish provincial economy and low pay level, personnel especially the talents flow frequently. But countryside e-commerce require the professionals to maintain. Therefore, countryside information network develops slowly for shortage of talent to do data collecting, database establishing, updating and other works. In terms of after-sales services, due to lack of professional to maintain the system, problems of marketing and customer communication and consulting can't be handled in time. All these problems are harsh test for Jilin Province. According to China e-Business Research Center, the most lacking talents in e-commerce enterprises at present have been shown in Fig.1.

present situation of e-commerce talents

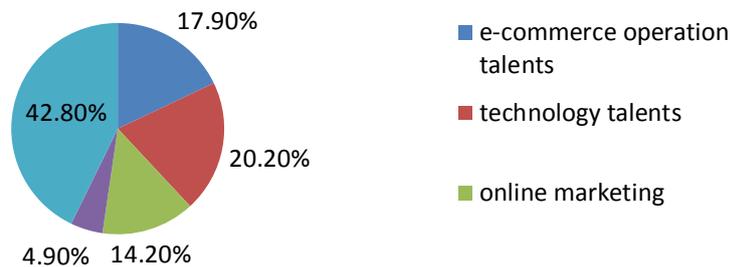


Fig. 1 Present Situation of E-commerce Talents

Lack of Standardization and Branding in Agricultural Products. Standardization can reduce the cost and increase the sales while branding can improve the reputation of product. Farming products in Jilin province has not reached standardized level, leading uneven quality of products, severely restricting the development of e-commerce. Additionally, online marketing not only makes the farming products more widely available in the market but also enhance the visibility and influence of the products. But there is few self-owned brand and well-known brands. Thus, Jilin province still need to invest more to create standardized products and special brand appropriate to modern online marketing.

Mode of Farming Products E-Commerce is Backward. E-commerce of farming products in Jilin Province still focuses on simple mode like Co-op and service station. Vanilla transaction is also mainly conducted in farm product markets. Sales channel remains comparatively single; operating mode remains the mode to be held and sold by proxy; no standardized mode or unified management; small scale; low chance of survival.

Countermeasures to Develop and Perfect the E-Commerce Platform of Farming Products

Raise Peasants' Awareness of Farming Product E-Commerce; Cultivate Main Bodies of Countryside Agricultural E-Commerce Market. Awareness of information and e-commerce in agricultural villages should be enhanced thus to better carry out e-commerce activities. Development of information in our province began relatively late; people have gone through a lengthy course from refusing to take initiative to engage themselves in e-commerce. Currently, it has a good foundation of e-commerce, thus, fostering e-commerce's dominant position in market can accelerate its development. For the first of all, strengthen government guidance and advertisement. Provincial information department should take the responsibility to organize, coordinate and guide the construction of information. Sound coordinated development mode crossing regions, industries and departments should be built up to strengthen overall planning among construction of information infrastructure, application promotion, information security assurance and so on, to form the work pattern of coordinated progress. Secondly, strengthen

e-commerce market's dominant position in countryside. Fully play the role of agricultural department, organize farming enterprises to achieve docking with vast e-commerce enterprises like Alibaba and JD to promote agricultural products from Northeastern area to be sold online. Spare no efforts to realize exportation; strive to create advantageous agricultural products brand, carry out real-time trading and real-time settlement, encourage the development and growth of vertical e-commerce and county e-commerce

Strengthen Investment into the Construction of Network Infrastructure; Popularize the use of Network in Countryside Agriculture. Successful e-commerce should be based on the network infrastructure. For the first of all, the government should invest more to build network infrastructure, accelerating fiber-optical cables entering villages and peasant households, quickening the construction of mobile broadband, constructing high-speed, mobile information infrastructure, speeding up the development of Triple Play. It is estimated that in 2020, agricultural information system of new-generation information technology integrating big data, cloud computing, mobile Internet and other technologies will be built, optical networks will cover all cities and towns, access service capability of more than 1000Mbps will be available to those core areas. A group of standardized village-level information service will be built in the countryside to achieve the goal to sell the products in our province to the whole world. Secondly, improve the ability to build, maintain and manage the information network. Inconvenience in countryside causes high maintenance costs of a large amount of equipment including mobile base station, fiber-optical, cable and so on. To encourage the operators to actively maintain the equipment, the government should fully play a functional role, appropriate to provide fund subsidy, establish shared cost system to let all counties, villages and countryside to respectively bear corresponding fee thus to decrease the running costs of operators. Eliminate the waste of resources due to human factors and aging equipment, earnestly conduct disinfection works of network and equipment to insure people's unimpeded access to the Internet.

Cultivate and Introduce into E-Commerce Talents, Help the Countryside to Develop E-Commerce Rapidly. To operate agricultural e-commerce, one needs to acquire knowledge about e-commerce and agriculture. However, in this emerging field of agricultural e-commerce, there is few talents who are willing to serve the rural people and agriculture. Therefore, it is necessary for local government to provide proper guidance to lead college students to serve rural construction or carry out various e-commerce activities to cultivate groups of talents to take root in countryside and serve agriculture. For the first of all, introduce qualified personnel. Development of agricultural e-commerce requires compound talents, thus the government needs to introduce multiple type of talents including talents specializing in computer, agriculture, e-commerce and etc. as well as experts, professionals and college students, to achieve multi-faceted and multi-level talent mode. Meanwhile, governments at all levels should provide attractive remuneration package and policy support for those talents volunteering to serve the countryside and agriculture, to encourage personnel to come voluntarily to serve villages. Secondly, cultivate local talent. There are a lot of surplus labor forces in the countryside. For some aspiring young men, we can provide professional knowledge training for free; for leaders of Rural Party Organizations, we can divide them into different groups to train them learn e-commerce and management; for other surplus labors who are willing to engage in e-commerce, we can train them to be the information collectors, maintainers, logisticians and so on, based on their own characteristics and advantages. The government can also subsidize villagers to push them to accept the training.

strengthen Standardization and Brand-Based Construction, Speed up The Exportation of Agricultural Products. Brand is not just a name and a identification. It is also a symbol, a way for customers to know the product. Brand can assemble customers' loyalty for the enterprises and contribute to put up product's price. With the help of Internet and e-commerce, it will take shorter time for enterprises to promote their brand awareness and acceptance. It is network marketing that Jilin agricultural products rely on to carry out e-commerce trading activity thus to promote their brand awareness and broaden brand influence. Brand effect will be severely jeopardized in case of noncompliance or advertisement for different products. Therefore, construction of standardization

and branding in agricultural industry needs to be carried out urgently in our province. First of all, formulate standard system of agricultural products. Products from individual peasants can achieve uniform quality standards for their uneven qualities. Thus, co-farming mode or cooperative management should be built up, in which, cultivation of the same product will be guided by the unified agricultural station or experts. And then these products will be purchased and managed in accordance with different grade of the products. In this way, the problem can be solved from the origin. Standardize the production link, regularize pesticide application, provide guidance in advance and present professional feedback in post-processing, to effectively promote e-commerce. Secondly, energetically strengthen brand effect. Characteristic agricultural products market requires the governments to keep advertising and providing guidance, help products providers and producers to conduct brand declaration and authentication, set geographical indications for characteristic counties, towns, countryside and villages, elevate the price and level of the product through brand building, build more brands including certification of pollution-free, green mark and etc. to push the promotion of e-commerce thus to increase farmers' incomes and accelerate the development of economy in Jilin Province.

Change Existing E-Commerce Mode, Cultivate Agricultural E-Commerce with Characteristics. Currently, e-commerce models in Jilin province mainly include "wholesalers + peasants" model, direct selling, green marketing, online marketing, and chain operation model. A large number of problems exist in these running processes, for example: green marketing model requires guarantee of green system, but policy in this regard has not been mature enough in Jilin Province; online marketing model require follow-up supervision and guidance in procedure of pre-market after-sales service under the overall online marketing strategy, but agricultural villages lack of combined knowledge about online marketing. Therefore, design online marketing model adapting to the condition in Jilin Province and cultivate characteristic agricultural e-commerce will be the preference for Jilin Province. First of all, establish cooperatives in rural areas. Use rural cooperatives to effectively avoid farmers' risks to obtain individual information and analyze data due to their disadvantage in terms of cultural level and literacy; reduce peasants' blind investment, help them resist risks effectively. The government and relative information department can timely release information about farming products and consumers' demand to the cooperatives, which then convey these useful message to peasants who needs, increasing efficiency and avoiding problems like repeat transmission and information omission, thus raising the speed of information-sharing. Secondly, the cooperatives can use collective funds and techniques from county and village government for publicity and promotion. Development of agricultural e-commerce needs professional support to a certain extent. All including information collection, product information releasing, communication with clients, pre-market after-sales services and etc. requires not only integrated talents with techniques and knowledge about agriculture but also great financial support. Peasants don't know too much about these professional knowledge, but they are quite familiar with planting techniques. With professional talents to help them to manage their e-commerce marketing, they can be relieved to have their planting and producing tasks finished, forming specialty division and achieving the goal of cooperation. Thirdly, cultivate e-commerce of characteristic farming products. Jilin province is famous for the characteristic farming products, including three 3 treasures in Northeast, ginseng, pilose antler, mink. Improve the quality of these products, then the cooperatives take them together, sort them into different grades, thus to achieve standardization and branding. Make full use of e-commerce platform, integrate the production and sale to open the international market and build up trading platform for Jilin's characteristic agricultural products.

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