ATLANTIS PRESS
Advances in Social Science, Education and Humanities Research, volume 172
4th International Conference on Education, Management, Arts, Economics and Social Science (ICEMAESS 2017)

Study on the Development of E-Commerce of Agricultural Products in Jilin

Bai Yan

Engineering Training Center, Beihua University, Jilin 132021

Keywords: agricultural products e-commerce; intelligent function agriculture; characteristic agricultural products

Abstract. Jilin province is a big agricultural province in China, and it is an important commodity grain base of our country. The agricultural production conditions are unique, and the agricultural resources are abundant. Grain production occupies an important position in the country. With the advent of Internet era, e-commerce has gradually entered into the field of agriculture, therefore, the development of e-commerce of agricultural products in Jilin province has changed the traditional mode of agricultural production, make agricultural products in Jilin province more standardized, at the same time, with the change of agricultural products distribution mode in Jilin Province, the income of farmers and herdsmen in the province has been significantly improved, combined with the current construction process of e-commerce platform for agricultural products in Jilin Province, this paper expounds the design principles, existing problems and solutions of the platform, to create high quality characteristic agricultural products in Jilin province and promote the development of e-commerce of agricultural products in Jilin province.

Introduction

Electronic commerce of agricultural products is a new form of circulation of agricultural products, it plays an important role in improving the circulation efficiency of agricultural products and enhancing the competitiveness of agricultural products. In recent years, e-commerce has developed rapidly in our country, and the e-commerce market of agricultural products has gradually become active. With the rapid development of electronic commerce of agricultural products, the academic research on it is also deepening. The most important feature of electronic commerce of agricultural products is that it can quickly connect with the consumer market and meet the demand of consumers for different regional characteristics and high quality agricultural products. Therefore, many scholars have done a lot of research on the e-commerce model, channel differences, optimization measures and development trends of agricultural products e-commerce[1][2].

However, due to the agricultural e-commerce involving agricultural production, processing, logistics, marketing and website construction and other aspects, leading to greater difficulty in operation, government support and supervision difficulties. The penetration rate of electricity providers may still be less than 1%. It can be seen that although the e-commerce of agricultural products is a hot market in recent years, the platforms, supermarkets and agricultural bases are pouring into the market, but the operation is difficult and the rate of bankruptcy is high. Based on the above analysis, this paper summarizes the development of China's agricultural products electronic commerce results, a detailed analysis of the main problems facing agricultural e-commerce development and its countermeasures, to grasp the trend of development of fresh agricultural products e-commerce in China, has important practical significance to guarantee sustainable development of agricultural products electronic commerce.

Agricultural Products E-Commerce Development Model and Path Selection in Jilin

Strengthen the Technical Characteristics of the Development of Smart Agriculture. Intelligent agriculture is a comprehensive and comprehensive application of cloud computing, sensor networks, 3S and other information technology in agriculture, to achieve a more complete information infrastructure support, a more thorough perception of agricultural information, more centralized

data resources, more extensive interoperability, more in-depth intelligent control, more intimate public services. In a broad sense includes agricultural e-commerce, food traceability security, agricultural tourism, agricultural information services, wisdom agriculture is cloud computing, sensor networks and other modern information technology applied to various agricultural production, management, marketing and other aspects of agriculture, intelligent decision-making, social services, precision planting full intelligent management the Internet, visual management, marketing and other advanced agriculture is a new agricultural industry stage, a set of networking, mobile Internet and cloud computing technology, it not only can effectively improve the agricultural ecological environment and improve the operating efficiency of agricultural production, but also can completely change the agricultural producers, consumers and the concept of architecture[3][4].

Platform Function of Cloud Service in Intelligent Agriculture System. ***System Construction***. Cloud service platform system including the wisdom agriculture greenhouse intelligent monitoring system, farm product safety and quality traceability system of agricultural expert knowledge base, agricultural e-commerce platform, which is divided into cloud platform, planting breeding and planting, WeChat cloud platform terminal platform, anti fake platform etc.. Intelligent agriculture system cloud service platform - system structure diagram is shown in Figure 1.

Technical Characteristics of Cloud Service Platform for Agricultural Intelligent Monitoring System. By light, temperature and humidity sensor, the temperature in the greenhouse crops, humidity signal and illumination, soil temperature, soil moisture, CO_2 concentration and other environmental parameters in real-time, automatically open or close the specified equipment (such as remote control, water switch shutter etc.). Users use computer or 3G mobile phone to observe the scene, observe the temperature and humidity data at any time and place, and control the remote intelligent adjustment of designated equipment. The main sensing equipment is shown in Figure 2.
:

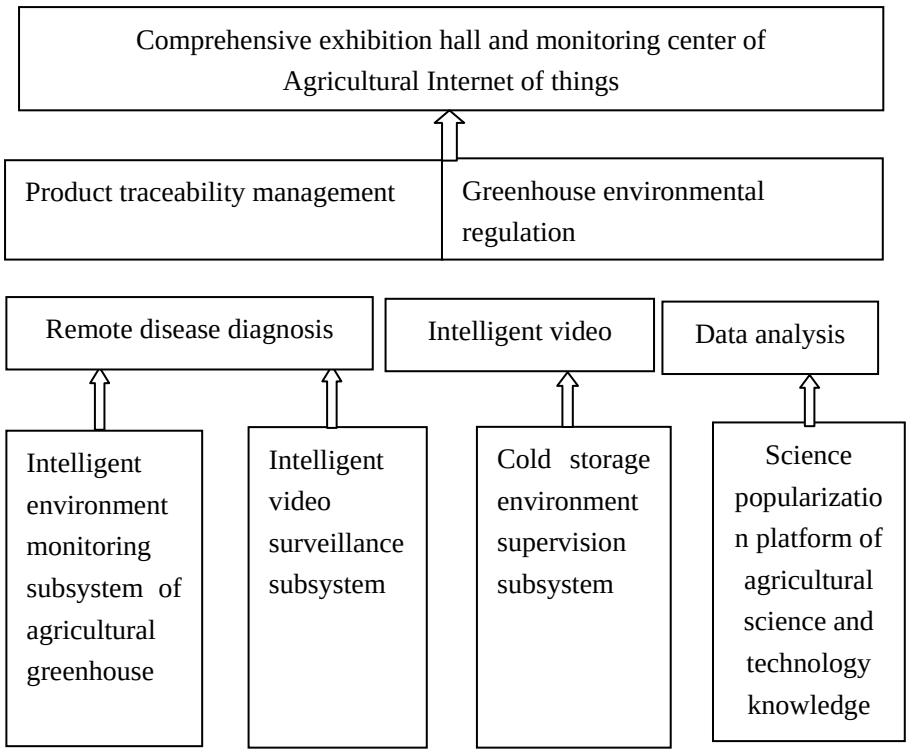

Figure 1 intelligent agriculture system cloud service platform-system structure diagram

Light collect or oxygen sensor integrated collector soil temperature and humidity sensor

atmospheric pressure sensor lighting equipment temperature humidity sensor soil salinity sensor

Figure 2 Intelligent agriculture hardware equipment

Video Surveillance System of Facility Agriculture. Remote view of the growth of crops, the running status of equipment and the production of workers at any time and place[5].

Intelligent Control System of Facility Agriculture. Through networking system, the operation of the equipment can be set in the greenhouse environment, when environment information does not meet the prescribed conditions, related equipment, such as greenhouse automatic start: the automatic adjustment of ventilation cooling, automatic adjustment of light intensity, automatic spray irrigation, automatic humidification dehumidification, automatic fertilization exterior shading fan, intelligent management, water saving, energy saving, labor saving and more worry.

Network Topology. Data sensor upload using ZigBee and Rs485 two modes. According to the different transmission mode, the greenhouse site deployment is divided into wireless version and wired version of two. The wireless version uses ZigBee transmission module to send sensor data to the ZigBee node; the wired version transmits the data to the Rs485 node by the cable way.

Preliminary Countermeasures and Suggestions

(1) Strengthen government functions and provide institutional guarantee. (2) Improve infrastructure, ensure network unimpeded. (3) Encourage agriculture related enterprises to build agricultural e-commerce websites. (4) The government should actively create a system environment conducive to the integration, development and innovation of agriculture and other industries. (5) Speed up and improve e-commerce legislation, increase investment in information construction. (6) Improve the online financial industry standards. (7) Improve the animal husbandry science and technology innovation system, and enhance the scientific and technological innovation ability of animal husbandry.

Conclusion

This paper is based on the research status of agricultural products e-commerce at home and abroad, and collects statistical information of agricultural and livestock websites.

Based on the discussion, the production and sales status of agricultural products in Jilin province was discussed; Then the development status of agricultural products e-commerce are analyzed, and combined with my personally involved in the construction of the e-commerce website experience, and then from the theoretical and practical aspects to propose strategies to promote the development of Inner Mongolian Agricultural Products Electronic commerce. The research on promoting the development of agricultural products e-commerce in Jilin province has not formed a complete theoretical system, and lacks systematic and standardized evaluation index system and empirical research content. At the same time, because of the author's knowledge structure, the space and time

constraints, the efficiency and benefit of agricultural e-commerce in various business activities of the exposition is not very full and profound, remains to be further improved.

Acknowledgement

Study on the selection of agricultural and livestock products in Jilin Province, the development of electronic commerce mode and path of research by science and Technology Department of Jilin province project (project number: 20160418024FG) support.

Reference

[1] Hong Tao, Zhang Chuanlin.2014 - [J]. e-commerce development report of China's agricultural products in 2015, 2015 (2): 44-54.

[2] Zheng Hongming. Research on the development model of e-commerce of agricultural products based on government oriented--Taking Shaoguan city as an example[J]. economic research reference, 2016 (21): 77-84.

[3] Zhang summer constant. Problems and trends of development status, fresh electricity supplier logistics [J]. Guizhou agricultural science, 2014 (11): 275-278.

[4] Zhao Ping, Luo Yi. Case analysis and Enlightenment of developing e-commerce of agricultural products Freshdirect as an example [J]. Business Economics and management, 2011 (7): 19-23.

[5] Wang Ke, Li Zhen, Zhou Jian. Analysis of agricultural products supply chain channel under the participation of E-commerce -- Taking "vegetable steward" as an example [J]. East China economic management, 2014 (12): 157-161.