

Exploration of E-Commerce Platform for the Development of Agriculture and Animal Husbandry under the Internet+ Sharing Technology

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Abstract: With the continuous progress of Internet technology and the rapid development of the sharing economy, the "digital business agriculture" and "Internet+" development model is further promoted. The Internet electronic technology is conducive to promoting the construction of agricultural and animal husbandry characteristics, further expanding the new mode of agricultural and animal husbandry development, and broadening the channels of agricultural and animal husbandry development. At the same time, in the sharing mode is conducive to achieving the advantageous integration of agricultural and animal husbandry resources, increasing the utilization rate of agricultural and animal husbandry resources, maximizing the realization of the goal of agricultural development. The article analyses the development trend of Internet+ sharing technology at this stage, explores its application prospects and problems in revitalizing the agricultural and animal husbandry industry, and puts forward solutions to further achieve the characteristic development of the agricultural and animal husbandry industry.

Keywords: Agriculture and Animal Husbandry; Internet+; Sharing Technology; Resource Integration; Characteristic Development

1. Introduction

1.1 Background of the Study

E-commerce for agriculture refers to the use of the Internet and e-commerce platforms to improve agricultural production, distribution and sales. This model connects agricultural

products directly with consumers by breaking down traditional offline channels, providing farmers with more sales channels and opportunities, and helping consumers to buy fresher and safer agricultural products. Its through a variety of modern information technology, in the production and processing of agriculture and distribution and sales process of the full import of e-commerce system, online to complete the purchase of products or services, sales and electronic payment and other business processes. Agricultural e-commerce takes the agricultural website platform as the main carrier, involving the government, enterprises, merchants, consumers, farmers, as well as certification centers, distribution centers, logistics centers, financial institutions, regulatory agencies and other factors, and organizes the relevant elements together through the network, in which information technology plays an extremely important and fundamental role [1]. The sharing economy refers to an economic model that connects supply and demand through the sharing and utilisation of resources, as well as through online platforms. In the sharing economy, individuals or organisations can share goods, skills, services, etc. through online platforms to obtain economic gains or satisfy needs. Sharing economy is an effective remedy for the shortcomings of the development of traditionalised business models, and its effective development is conducive to the recycling of surplus resources in social production and life, which is conducive to the rationalisation and allocation of social resources [2].

1.2 Significance of the Study

In this paper, through the study of how to integrate the sharing means and e-commerce to

create a new type of fun and marketing as one of platform to help farmers, for the existing e-commerce platform to add more fun modules, to meet the consumer's entertainment needs, to further attract customers, and to enhance consumer stickiness. This will enhance the competitiveness of the existing e-commerce model, expand the sales channels of agriculture and animal husbandry, and realise the specialised development of agriculture and animal husbandry by putting forward more theoretical research and practical application suggestions.

2. Characteristics and Advantages of Internet+ Shared Technologies

2.1 Status of Development

Internet + sharing technology has penetrated into various fields in today's society, including sharing economy, online education, intelligent medical care, logistics and distribution, and financial technology. With the continuous development and application of mobile Internet, Internet of Things, big data, artificial intelligence and other technologies, the Internet + sharing technology has been further enhanced. And with the popularity of the Internet, people's awareness and acceptance of sharing platforms, such as shared bicycles, are also increasing. More and more users are starting to participate in Internet + sharing. In the future, Internet + sharing technology will continue to maintain the momentum of rapid development, and with the continuous progress of technology and the continuous expansion of application fields, the development trend of Internet + sharing technology will be even more fierce, and it will be applied in a wider range of fields [3].

2.2 Characteristics

2.2.1 Comprehensive universality

Driven by Internet+, sharing technology is not restricted by geographic location and time as well as language, and it enables people all over the world to conveniently access information, social entertainment and other activities through Internet+ sharing technology. Whether it is urban or rural, moreover, whether it is domestic or foreign, people can have access to Internet+ sharing technology. In addition, with the development of mobile Internet and the popularisation of artificial intelligence, the

application of Internet + sharing technology is becoming more and more widespread, such as the shared bicycle and shared charging treasure services that we can often see [4].

2.2.2 Intelligent

Internet + sharing technology achieves intelligent management through big data analysis technology, Internet of Things intelligence and other technologies, providing a development platform for various industry sectors, attracting more suitable users and consumer groups, providing users with more accurate and detailed services, and improving the efficiency of resource utilisation and service quality.

2.2.3 Transparency

In the process of using Internet + sharing technology, it can ensure the transparency and fairness of the transaction, and users need to fill in their relevant information, and there will be corresponding legal maintenance about privacy, which will not be leaked maliciously. Transparency is mainly reflected in the transparency of the transaction process for users, the transparency of the evaluation system, the transparency of the rules, etc., to protect the rights and interests of users.

2.2.4 Multifaceted integration

Internet + sharing technology can combine the advantages of different fields and industries to achieve integration and innovation in different fields. By integrating data and resources from different fields together, brand-new products and services can be created, which not only meet the changing needs of users and improve the quality of services, but also fully integrate resources, improve the efficiency of resource utilisation and promote sustainable development.

2.3 Advantages

2.3.1 Expanding the market

The sharing economy model can comprehensively help individuals or micro-enterprises to break through geographical limitations, expand audience groups, create new business models, and promote industrial synergy and cooperation. Through the sharing platform, enterprises and individuals from different industries can cooperate and innovate more conveniently and adjust their products and services.

2.3.2 Optimising resource allocation

The sharing model can not only reduce the

production costs of individuals or enterprises, but also avoid the waste of resources. Through the sharing platform, two parties with different capabilities can cooperate, with one party providing resources and the other providing technology and other division of labour, which can more effectively achieve the rational allocation of resources, reduce the waste of resources and improve the utilization efficiency.

2.3.3 User experience

On the sharing platform, users can obtain the resources they need by selecting the appropriate services according to their needs and preferences. The sharing platform can also continuously optimise the quality of products and improve the level of services, thus enhancing user satisfaction and the sense of experience and belonging [5].

3. The Realisation of a New Type of Pinghe Constructed Under the Internet + Sharing Technology

3.1 Technical Issues

The construction of a sharing platform needs to rely on advanced technological support, including mobile Internet technology, big data technology, artificial intelligence technology and blockchain technology. The application of these technologies has gradually matured and has been widely used in various fields. Therefore, in terms of technological issues, the construction of a new type of sharing platform already has a better foundation.

3.2 Economic Support

Driven by the rapid economic development of society nowadays, the sharing platform can better achieve the optimal allocation of resources, reduce transaction costs, promote innovation and entrepreneurship, promote social and economic development, promote sustainable development, and provide more opportunities for the development of traditional and emerging industries through the extensive and comprehensive nature of the Internet. Therefore, in terms of the economy, the construction of a new type of sharing platform has greater potential.

3.3 Social Development

The construction of a sharing platform needs to be in line with the needs and development of

society. The sharing economy model can meet public demand, improve the efficiency of resource use and promote sustainable development. In addition, the sharing platform can provide more convenient and efficient services and improve people's quality of life. The promotion and application of sharing platform development can help reduce resource waste, improve resource utilisation efficiency, and enable more people to enjoy quality resources and services. Therefore, in terms of society, building a new type of sharing platform has a greater potential.

3.4 Information Security

Sharing platforms inevitably involve a large amount of user data and transaction information, and therefore need to have high security measures as well as strong technical protection capabilities, which include data encryption, access control, security auditing, defence technology, blockchain technology, privacy protection technology and so on. With the progress and development of society, these technologies are also constantly evolving and changing, and the sharing platform will also constantly update and improve its security protection measures and establish a perfect security management system. Therefore, in terms of information security protection, building a new type of sharing platform has a perfect protection system.

3.5 Legal Safeguards

The construction of sharing platforms needs to comply with relevant laws, regulations and policies. In the course of the development of the sharing economy, a series of laws, regulations and policy documents have been issued to provide legal protection for the construction of sharing platforms, including the Data Security Law, the Personal Information Protection Law, the Regulations on the Security Protection of Critical Information Infrastructure, the National Security Law and the Cybersecurity Law, etc., which ensure that the platforms are constructed in accordance with national security, social public interests and the requirements of users' personal rights and interests. Therefore, in terms of legal protection, the construction of a new type of sharing platform has strong legal support.

3.6 Resource Utilisation

Sharing platforms bring together people from all over the world to achieve the integration and optimisation of resources, centralise the management and scheduling of various information resources in different fields, and achieve the sharing, interoperability, docking and comprehensive use of resources, so that users can enjoy more convenient and efficient services. Therefore, in terms of resource utilisation, the construction of a new type of sharing platform plays a more important role [6].

4. Feasibility of new Platforms to Assist in the Development of the Agricultural and Livestock Sector

4.1 Direction of Development

Agriculture and animal husbandry are becoming increasingly important in China. It is one of the important agricultural industries in China and one of the main sources of income for farmers. The development of rural agriculture and animal husbandry is crucial to farmers' livelihoods and economic development. However, the traditional mode of agricultural and animal husbandry production and management suffers from high production costs, a single mode of operation, low scientific and technological content, uneven levels of breeding, a lack of scientific guidance, difficulty in realising the development of special features, a lack of full use of resources and integration, and a lack of obvious benefits [7]. Therefore, to promote agricultural and animal husbandry science and technology to help farmers to increase income action, improve the scientific and technological content of agriculture and animal husbandry and product value-added, to achieve the diversification of agricultural and animal husbandry development mode, speciality is a new platform for agricultural and animal husbandry development of an important direction to help. Taking sheep farming as an example, an online shared farming cloud platform can be built through co-operation with ranches to establish a simulated farming method that interacts with customers, bringing immersive and interesting farming experiences to customers. The platform connects farms and users through the Internet, and after users adopt a lamb, the platform can apply

blockchain technology to create a specialised name plate for the lamb and wear it for the lamb, which allows users to view the daily walking mileage of the lamb online and react in real time to whether or not the lamb is being carefully grazed by the farm. In addition to the farms and users connected by the platform, the platform can also join forces with third-party partners. The wool and milk produced during the growth of the lambs can be sent directly from the farm to the third-party industry through the platform to be processed and transferred to the user. Users can receive exquisite gifts made from the wool of their own lambs as well as processed goat milk. At the same time, the platform should also have the ability to sell on behalf of the sheep, in the sheep grow up, the user can choose the platform on behalf of the sale or access to their own sheep: if the user chooses the platform to sell on behalf of the platform, the platform will be sold at the current market price of adult sheep, the actual proceeds returned to the user; if the user chooses to receive exclusively for their own sheep, the platform contacted the third party according to the user's needs at any time slaughtering from the grassland to the table, the whole process of positioning, traceability, security and peace of mind. From grassland to table, the whole process is locatable, traceable, safe and secure; from source to tongue, eliminating the intermediate refrigeration link, reducing costs, fresh and direct. This enhances the convenience of the user, while the platform can also develop interesting boards to further meet the user cloud farming sheep recreational needs, enriching the user's sense of experience. Thus enhancing customer stickiness, hit the agricultural and animal husbandry characteristics of the name [8].

4.2 Case Studies

At the beginning of 2016, Liu Dong Qiang, Chairman of the Board of Directors and Chief Executive Officer of Jingdong Group, proposed the "Running Chicken" project. Each chicken feet with a special pedometer ring to record the chicken's walking mileage, run to more than 10,000 steps of the chicken will be recovered by the Jingdong triple the price of the local. From the early days of the project to recent years, Jingdong's "running chicken" is sold at three times the price but sold out of

stock. A deeper look into the series of factors behind the success of "running chicken", from the technical support of the ankle bracelet to the demand of the masses. Jingdong "running chicken" the whole process of breeding technology training and related professional guidance, supplemented by step foot ring, intelligent monitoring and other high-tech elements, half a year after the free-range, and then by the Jingdong Fresh after standardised screening from the hands of the farmers to buy at a high price, with the advantage of the Jingdong platform, from the acquisition of the sales, distribution to the home of all the aspects of the direct control to ensure that the "running chicken" success story. The quality of "running chicken" is not at risk. This nearly transparent scientific breeding methods, strict screening of the sale chain and convenient delivery home service. So that customers do not have to worry about hormone-ripened chicken and other food issues, to meet the needs of customer healthy diet. From the social aspect, China's current rapid social and economic, Internet technology means constantly upgraded, the development of the public consumption level is constantly rising, consumption is constantly upgraded. Health is the inevitable pursuit of food consumption, quality consumption has become an important direction of food consumption upgrade. "Running chicken" project application of Internet technology, its launch in line with the direction of social consumption development [9].

5. Conclusions and Outlook

5.1 Conclusions

This paper explores the feasibility and impact of the new e-commerce platform built under the integration and development of Internet + sharing technology to help the development of agriculture and animal husbandry. The new e-commerce platform built under the Internet + sharing technology has a broad development prospect, and its transparent sharing cloud farming launched by the joint ranch. It not only meets the demand for healthy diet at the consumer's life level, but also satisfies the sense of participation in the farming process at the consumer's spiritual level as well as the spiritual enjoyment of leisure farming in a busy life. However, the transparent farming

and animal husbandry farming module involved in the new platform faces immature technology application and involves a large number of industrial chains leading to more difficult management. How to manage the platform scientifically and deal with the optimal allocation of resources of all parties is an important challenge for the platform. In addition, the fun module added by the new platform has increased the difficulty of optimising and upgrading the platform while meeting consumers' demand for entertainment. Promoting the new platform to help the development of agriculture and animal husbandry requires further technical advancement, and it is a long way to realise the characteristic development of agriculture and animal husbandry.

5.2 Outlook

Internet + sharing technology will continue to deeply affect our production and lifestyle, and become an important means to promote the development of agricultural and animal husbandry characteristics, and promote the innovative development of the social economy. The further development of "Internet + sharing" technology in agriculture and animal husbandry is not only in line with the trend of social development of people's consumption level and consumption demand. It is also an important exploration of the development and upgrading of traditional industry characteristics in the new era. The mature development of its technical means still needs continuous efforts. At the same time, we should also pay attention to the challenges and problems it may bring, such as data security, privacy protection, laws and regulations. Therefore, to promote the development of "Internet + Sharing" technology, the government, enterprises and all walks of life need to work together to formulate reasonable policies and measures to promote the healthy development of Internet + Sharing technology.

References

- [1] Zhou Yanrong, Zou Yong. Research on the problems and countermeasures of developing agricultural e-commerce in China. *Agricultural Network Information*, 2007(10):89-97.
- [2] Jing Liye. Research on the causes and connotation of sharing economy and its

- business model. Finance and Economics, 2021(11):9-10.
- [3] Zhang Jingjing. Research on the Development of Sharing Economy Model under the Internet Environment. Academic Hall (Hunan Finance and Economics Industrial Vocational and Technical College. 2021(5): 2-3.
- [4] Xu Tianxiao. Sharing economy in the context of the Internet. Finance and Economics, 2016(24): 1-5.
- [5] Yin Lili, Lian Wenjun. An Analysis of Sharing Economy Development under the Perspective of "Internet Plus". School of Business Administration, South China University of Technology, 2022(7): 1-2.
- [6] Tang Yachun. Information and Computer. College of Electronic and Information Engineering, Hunan Institute of Science and Technology, 2018(10): 26-27.
- [7] Shu Hongmin. An overview of problems and suggestions for the development of animal husbandry in Yiyang County. Jiangxi Journal of Animal Husbandry and Veterinary Medicine, 2020(6):1-5.
- [8] Chingbatu. Interpretation of the current situation and suggestions for the implementation of the Internet+ strategy in animal husbandry. People's Government of Baoriyusu Town, Bahrain Right Banner, Chifeng City, Inner Mongolia Autonomous Region, 2020(12): 3-6.
- [9] Zhang Shu, Xuan Ya. Opportunities and challenges of rural e-commerce poverty alleviation from Jingdong's "running chicken". China Poverty Alleviation Research Institute, Renmin University of China, School of Agriculture and Rural Development, Renmin University of China, 2019(1): 92-94.