

Agricultural Product Marketing Evaluation Index System Based on Complex Social Network

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Abstract: The paper expounds the development of the network marketing channel of agricultural products and the existing performance evaluation system of the agricultural product network marketing. According to the relevant researches around on performance, website performance and customer relationship of enterprise, the author establishes an agricultural product network marketing performance evaluation system, and used AHP to determine the weight related factors, by fuzzy comprehensive evaluation method and objective evaluation on the agricultural product network marketing channel performance, providing a means of comprehensive evaluation for agricultural product network marketing.

1. Introduction

China is changing from the traditional agricultural model to the modern model, and the marketing problem of agricultural products is perplexing the further development of modern agriculture. In 2012, the central No. 1 document once again proposed to expand and improve the circulation channels of agricultural products. In many ways to expand the marketing channels of agricultural products, the network marketing model of agricultural products has been paid attention to by the whole society. As a new marketing mode came into being under the background of the great development of e-commerce, the network marketing of agricultural products can solve the sales problems of agricultural products to a certain extent, and make up for the shortage of traditional agricultural marketing mode. According to the "Research Report on agriculture related e-commerce", as of the end of last year, the total number of rural online shops was 131 000, with an average of 1.63 farmers online. At the same time, data show that there are about more than 40 professional websites of fresh agricultural products in China, and 5 websites such as China fruit information network ranked among the top 100 websites of agriculture. Although most of the agricultural products enterprises in China have established their own network marketing channels more or less, the effect of attracting customers is not significant. This is because the network marketing of agricultural products in China is still in the primary stage and has failed to form an effective system. From the current situation, how to evaluate the performance of agricultural products online marketing is also obviously lack of a scientific and reasonable way, and the objective and effective evaluation system of network marketing is very important for the development of agricultural product network marketing.

2. Performance evaluation of agricultural product network marketing

For a long time, most enterprises believe that marketing results are more obvious and easy to evaluate, which results in marketing performance being simply equated to financial performance, and sales or sales decide everything. Financial evaluation is the core content of enterprise marketing performance evaluation. But marketing performance is usually reflected in many aspects. With the development of time, the evaluation system based on customer satisfaction and other non-financial indicators has more and more influence on the development of enterprises. According to the past purely financial evaluation indicators to evaluate the performance of network marketing, it has been unable to comprehensively measure the level of marketing performance of enterprises and its future development trend. As a marketing mode with long development time, the network marketing of

agricultural products is not mature to a certain extent. Most enterprises do not know enough about the marketing of agricultural products online. At present, China's agricultural products enterprises only do some simple advertising promotion and publicity for agricultural products through the Internet, or make a basic overview of the basic information and price information of the agricultural products sold. Some enterprises even simply introduce the name and address of the enterprise, the scope of the business, the telephone and the introduction. In fact, this single network marketing model is not a real network marketing of agricultural products. The real network marketing must be built on a good credit system and a complete service, at the same time, relying on the higher awareness of the agricultural products enterprises. Only in this way can consumers accept the new type of shopping on the Internet to buy agricultural products, thus forming a huge market appeal. Therefore, the deviation in the knowledge of network marketing is also reflected in its performance evaluation for network marketing. At present, most agricultural enterprises have almost no performance evaluation in network marketing, or rely solely on financial indicators to measure the performance of agricultural product network marketing. This evaluation model is obviously unfavorable to the development of the network marketing of agricultural products. With the agricultural products to the scale of operations, the impact of agricultural enterprise value more and more depends on the non-financial indexes of the marketing model innovation, organization and management performance, brand value, and make a greater contribution to the development of enterprises in the complicated competitive environment requires network marketing in the future. The author thinks that the agricultural enterprise network marketing performance evaluation system should not only reveal whether the enterprise network marketing strategy and its implementation brought sales and profits increase and improve profitability, but also pay more attention to the network marketing customer relationship performance and website performance evaluation. These will affect the final development of the enterprise, but it is also a part of the current evaluation system. For example, enterprise network marketing can expand the scope of customers to a certain extent, but because it is not face-to-face communication with customers, it puts forward higher requirements for the evaluation of customer relationship management. In addition, most agricultural enterprises do not pay attention to the construction of marketing website, and the construction of marketing website can not only improve the visibility of enterprises, but also improve the performance of enterprise network marketing. Therefore, the author thinks that the performance evaluation of modern agricultural product enterprise network marketing should not only focus on the actual effect of marketing operation process and its contribution to enterprises, but also pay attention to the evaluation of the construction of customers and websites. I will be in the following discussion, using the qualitative and quantitative methods from several business performance, website performance, customer relationship performance and other aspects of the performance evaluation of network marketing of agricultural products, in addition to strengthen the evaluation financial evaluation outside competitiveness and corporate image and other aspects of the evaluation indicators, fully reflect the network marketing enterprises in the network marketing competition status, to support enterprises and enterprises to adapt to the changing environment, to ensure the ability of future profits, but also reflect the customer relationship with the website about the construction of long-term development ability evaluation.

3. Significance of network marketing for agricultural products

Network marketing makes every link in the marketing process of agricultural products can be effectively linked. Using modern network technology and means to carry out information interaction is of great significance for the production and sale of agricultural products.

3.1 Increase trading opportunities

Agriculture is seasonal, strong timeliness of the industry, the market of agricultural products supply varies with seasonal agricultural production, especially some fresh agricultural products, there is difficult to sell, the buyer's market stage, many areas have high yield and sharp

contradiction between the narrow market. The Internet will be able to transmit the information to every corner of the world, the implementation of the network marketing of agricultural products, can use advanced and convenient network technology, the establishment of a market information system of agricultural products, the producers and consumers of agricultural products and agricultural products at home and abroad to understand the variety, quantity, supply and demand, price changes and other information, break the limits of space to achieve diversification, transaction, provides more opportunities for producers and consumers of agricultural products, increase trading opportunities.

3.2 Reduce transaction costs

Because of the characteristics of the industry, agricultural information has the characteristics of dispersiveness, complexity and comprehensiveness. The exchange of information in the traditional way is rather slow and difficult, and the cost of information acquisition is high. With the implementation of the network marketing of agricultural products, the producers can communicate directly with the consumers, reduce the circulation of agricultural products and shorten the circulation chain. In addition, due to the transparent, real-time and highly interactive information between the supply and demand parties, the cost of small network marketing is significantly reduced.

3.3 Beneficial to the decision-making of enterprise production

Agricultural enterprises through comprehensive analysis of the Internet to obtain information on the supply and demand, can better grasp the market dynamics, according to market demand and price changes, formulate the corresponding production decision, scientific organization of production, not only solve the lack of understanding of market information is not suitable for planting of agricultural products caused by the waste of resources, but also can find the new market and, according to the production, in order to obtain greater sales space, get more profit.

3.4 Beneficial to the establishment of product brand

The network marketing of the network media, has the advantages of low cost, fast production speed, wide coverage, good dynamic effect, the spread effect is much better than traditional media marketing, which makes the effect of communication through the network marketing to achieve more rapid, more accurate and more widely. Especially in the network environment, information transmission, communication with consumers, and the use of network to display commodity image are all conducive to the establishment of product brand reputation, cultivate potential consumers of brand products, and finally become brand loyalists.

3.5 Good for customer relationship management

The emergence and large-scale application of the Internet has made the management mode start a major change from the core of the product to the core of the customer. For modern agricultural marketers, the existing customer database plus data for customer service links will provide strong support for every customer to solve problems effectively, and create a special relationship between agricultural marketers and customers.

4. Performance evaluation index system of agricultural product network marketing

According to the principles of systematicness and practicability, this paper establishes a relatively complete and easy evaluation of the performance evaluation index system of agricultural products online marketing from three aspects: enterprise performance, website performance and customer relationship performance. After evaluating the performance of enterprises on various indicators, the weight of related factors is finally determined by AHP, so that the performance of network marketing can be determined. The index weight of evaluation index system is based on the importance of experts' influence on the indicators of agricultural network marketing performance, and the weight of each index calculated by AHP. The consistency test results of the two level

indicators relative to the first level indicators are: 4.01, 3.05, 3.01, and the CR values are 0.0037, 0, 0.0079, respectively, indicating consistency test. The consistency test results of the three level index relative to the two level index also show the consistency test. As a result, we get a reliable index weight. After determining the weight of relevant factors, we establish multi-level fuzzy comprehensive evaluation, ask experts to evaluate the performance of relevant indicators, and ultimately determine the performance of agricultural product network marketing. As a result of the qualitative index is the index that can not obtain the specific value. In order to quantify the qualitative indicators, a set of comments can be set up. A set of comments is a set of evaluation results that may be made to the evaluation object. It can be expressed as: $V=\{V_1, V_2, V_p\}$, and we finally determine the set of comments: $V= \{ \{, \text{good, medium, poor} \}$. After establishing the first level and the two level and the three level fuzzy comprehensive evaluation, we can take the maximum membership degree principle, take the three largest fuzzy comprehensive evaluation set of vector's largest evaluation index corresponding evaluation element as the result of judgement, that is the conclusion of network marketing performance evaluation.

5. Conclusions

We mainly evaluate the performance of the network marketing of agricultural products from three aspects of the performance of the website, the performance of the enterprise and the performance of the customer relationship. It can not only inspect the present performance, but also pay attention to the long-term development of the network marketing of agricultural products enterprises. We establish the performance evaluation index system of agricultural products online marketing, hoping to promote the standardization of the performance evaluation of agricultural products network marketing, so as to promote the better marketing of agricultural products enterprises.

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