

Research on Rural E-Commerce Precision Marketing Strategy under the Background of Big Data

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Abstract: The arrival of big data era brings new development opportunities for the development of rural e-commerce, however, limited by factors such as infrastructure, talent technology and so on, most rural e-commerce enterprises do not have deep excavation and effective use of operation data, and fail to achieve efficient marketing transformation, so that how to use big data technology to apply precision marketing to rural e-commerce is very important to its own development. This thesis analyzes the current progress situation and existing problems of rural e-commerce under the background of big data, and puts forward the precision marketing strategy of rural e-commerce, in order to improve the rural e-commerce ecology and promote the sustainable development of rural e-commerce.

1. Introduction

With the rapid development of mobile internet and intelligent terminal technology, the speed of data's growth is faster than expected. According to the relevant data reports, the scale of our country's big data has been gradually increased since 2014, the marketing scale of big data has already achieved 23.4 billion RMB in 2017, and is expected to reach 57.8 billion RMB in 2020. With the development of big data technology, all professions and trades are doing research on big data and the state has formulated incentive policies to encourage the development of big data technology. E-commerce enterprises can make use of the big data technology to collate and analyze the mass data, in order to achieve precise data to guide marketing direction, which can not only save costs for enterprises, but also bring good marketing transformation.

2. Overview of big data and precision marketing

2.1 Definition and characteristics of big data

The definition of big data was first mentioned in the world famous consulting company-McKinsey's report. At present, academic circles has not given a specific standard definition for the concept of big data. Through relevant literature we can know that big data is a large number and a wide range of data sets formed on the network under the background of the rapid development of the information age and internet technology. These mass data have the value of exploitation and usage, and can be stored in the cloud, through information technology processing and analysis, so as to obtain great value. Big data has the following four characteristics:

Big data scale: Big data has massive data scale, which is "beyond the capability scopes of the data sets of traditional database software tools in acquisition, storage, management and analysis". It is showed in relevant data reports, the total global data in 2014 was 6.2zb (trillion GB), and the total global data in 2015 was 8.6zb. At present the growing speed of global data is about 40 percent per year, and the global total data is predicted to reach 40zb by 2020

Fast data turnover: Data is timeliness so that if the collected big data doesn't go through turnover, it will only expire eventually. Just like most data collected from internet enterprises are the business

behaviors of some users in a certain period of time. If the rapid turnover and timely analysis of these data cannot be achieved, then the data collected this time will lose their values, so that only constant turnover can ensure the freshness and values of the big data.

Various data types: The formats of data are various, such as words, images, videos, audios, geographical location information and so on. It can also be various data types and different sources, single behavioral data is not enough to describe the behaviors of complex individual users. At present, the use of big data in the internet industry is mostly through the analysis of user trajectory, understanding of user behavior habits, and thus marching user portrait, so as to achieve accurate recommendation.

Low value density: Data volume of big data is huge, the transformation of big data from data to value only can be realized through analysis from collection to realization of information. Therefore, big data have massive information, but the real valuable data may only be a small part. The analysis of mass data can be achieved through cloud computing.

2.2 Implication and characteristics of precision marketing

Precision marketing in short is the analyzing result of using big data. Then subdivide the markets and customers through internet and big data mining technology, have deepen targeted communication with the subdivided customers and understand their needs, so as to recommend the most needed products and services to them at the most appropriate time. Precision marketing can promote the marketing efficiency, at the same time, it can reduce the enterprises' operating costs, contributing to help the enterprises realize low-cost and high-efficiency marketing targets.

Main characteristics of precision marketing are:

Selectivity of targeted customers: Through various information technology tools to seek potential customers, effectively find out potential customers who may purchase goods, subdivided the potential customers and classified them with different labels.

Effectiveness of communication strategy: That is, through the confirmed customer classification group, different communication strategies are formulated for different groups, so as to achieve accurate and effective communication.

Economic efficiency of communication behavior: Through taking the use of various modern communication technologies, such as messages, telephone, instant messaging software, social media and so on, communication costs can be greatly reduced.

Measurability of marketing results: Take use of modern information technology, calculate the number of times of the viewed product advertisements, the click of the internet advertisements, the number of visitors, the number of orders and the conversion rate of the flagship stores on the B2C platform, and analyze the characteristics of customers, to realize effective control and evaluation of the marketing cost and the marketing performance.

3. Current situation and problems of rural e-commerce development under the background of big data

3.1 Current situation

According to relevant research data, up to the end of 2017, the proportion of rural internet users in China was 27.0%, the scale was 209 million, and the number of rural online stores reached 9.658 million, bringing more than 28 million jobs. China's rural online retail sales exceeded the trillion mark, reaching 1244.88 billion RMB. Rural e-commerce is a significant measure to transform agricultural development, through innovate reform to speed up the development of rural e-commerce. The era of big data will bring new opportunities for the development of rural e-commerce, realizing the rapid expansion of rural e-commerce, so as to create a complete system of rural e-commerce development under the background of big data.

3.2 Existing problems

3.2.1. Lack of data awareness

Because of lacking scientific management technologies in developing e-commerce industry in rural areas, most farmers do not receive higher education, fail to see the positive effect of data generated by e-commerce on improving production efficiency and customer experience. Without big data thoughts and top-level design, advanced network technology cannot be used to enhance economic benefits, so that big data in the e-commerce industry in rural e-commerce development has not effectively realized the application function value.

3.2.2. Not enough of brand cultivating

Farmers lack systematic understanding of brand and the analyzing competences of necessary data, leading fail to have an integral planning and strategy for branding building, besides they cannot observe the consumption environment and product competition environment, and the product homogeneity is high.

3.2.3. Lack of effective big data support

For the development of rural e-commerce, only high-quality data can grasp the pain point of rural e-commerce, and the right medicine can solve the problem. But the data collection, storage and analytical application of rural e-commerce are still in the primary stage. The collection and updating of data are difficult to be effectively integrated, leading lack of timeliness, effective data analysis and low value of the data collected by rural e-commerce.

3.2.4. Data technology talents are short slab

Data technology talents are the core factors OD developing rural e-commerce, playing an important role in the development of e-commerce industry. Under the era of big data, rural e-commerce faces the problems like untimely data mining and updating, and difficult data analysis and processing. However, talents who are familiar with comprehensive platform of rural electric business and know the data processing of e-commerce are few.

4. Effective strategies for rural e-commerce to achieve big data precision marketing

Precision marketing under the background of big data is based on internet platform mass data, through precise positioning, using big data mining technology, to establish a personalized customer service system.

It can make the enterprises' targeted markets more detailed, marketing modes more accurate and advertisement putting more precise, eventually to realize the enterprises' prospective marketing goals. To carry out big data precision marketing for rural e-commerce, we should pay attention to the following points:

4.1 Promote the recognition and awareness of big data

As for the development of big data, must start from the local resources and industrial basic situation, in order to do a good job in the construction of local rural product database and local e-commerce big data center. Effectively make use of the guidance of data and adjust local enterprises' operation concepts and directions, timely adjust the direction to avoid the marketing risks and look for a more suitable big data development path.

4.2 Carry out rural e-commercial brand strategy

Although the operation of rural e-commerce is mainly based on local characteristics, fully reflecting the advantages of local characteristic industries, most rural e-commerce enterprises lack of design innovation and don't establish brand effect, which lead to the weak competitiveness of their products and the misunderstanding of low price marketing. If want to accelerate the brand building of agricultural products and promote the brand awareness of rural e-commerce practitioners, it is

supposed to analyze with big data and classify various markets according to the customers' needs, purchasing abilities and different consumption standard, in order to exploit products with local brand characteristics and increase the added value of products

4.3 Structure big data platform of rural e-commerce

Based on the rural e-commerce service platform, a development mode of the integration of farmers, big data service center and consumers can be structured. Building rural e-commerce data platform can achieve information data sharing and adjust agricultural structure according to the feedback data of big data center, which meets the needs of network market.

4.4 Strengthen the construction of professional and technical talents of rural e-commerce

Actively cultivate farmers to understand the e-commerce industry and related network technology, and actively encourage university students to become self-employed in rural areas, solve the problem of lack of professional and technical talents in the e-commerce industry, so as to improve the development level of rural e-commerce. In addition, it is needed to strengthen the cultivation of farmers' comprehensive quality, enhance their awareness of e-commerce data, economic globalization and integration of internet and so on, in order to promote the capacity of practitioners, achieving the improvement of the application level of e-commerce in rural characteristic industries.

4.5 Carry out precision marketing with big data

With the support of big data technology, the agricultural products information can be recommended to the customers through big data analysis. Make use of transaction platform tools to collect the comprehensive data of different customers' clicking page views, and recommend agricultural products information according to customers' preferences; Make use of big data to tidy up the customers' information, and personalized business can be recommended according to the customers' basic information; According to the statistical analysis of user data matching, and then according to the matching content of hot recommendation, attract the attention of users, and increase the ordering of products.

Classify the customers' information brought by big data, deeply analyze and demonstrate the needs of customers, and precisely analyze the needs of customers. Increase the products' design, innovate products, increase new products, at the same time, classify big data market more precisely to improve the benefits of rural e-commerce enterprises.

Relying on the support of big data, the enterprises' new products can be recommended through registration channels, search engines, social media, portal websites, e-mail, messages and other channels. Then grasp the consumption preferences of users to recommend high-quality information and service, in order to expand marketing channels. Make the best use of the advantages of big data, the recommended advertisements can be screened and optimized, to maximize the recommendation effect, and improve the customer experience with big data.

5. Conclusion

In conclusion, how to apply big data to the development of rural e-commerce and promote its good development, and how to use big data technology to build a good marketing system for rural e-commerce enterprises are not only issues that need to be paid attention to in the development process of rural e-commerce, but also issues that must be paid attention to in the future rural economic development. So that it is profound and lasting to make precise marketing research on rural e-commerce under this background.

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