

Research on Cross-border E-commerce Based on Big Data Background

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Abstract

In recent years, cross-border e-commerce has made great progress in the country and has achieved certain results, but it still faces problems such as target group identification and consumer preference prediction, global logistics and data security. In view of the above reasons, based on the current status of domestic cross-border e-commerce development, this article summarizes the existing problems and combines the application of big data technology to give some suggestions for solving China's cross-border e-commerce problems.

Keywords

Cross-border E-commerce, Big Data, Logistics.

1. Background

As an important part of e-commerce, cross-border e-commerce has become a new focus for the rapid growth of China's foreign trade. On the one hand, cross-border e-commerce can flourish due to the implementation of a series of new policies and the promotion of consumption upgrades. Rise. Among them, big data technology has been applied in all aspects of cross-border e-commerce operations, which has largely promoted the development of cross-border e-commerce.

Cross-border e-commerce has generated a large amount of complex data in several operational links such as marketing, logistics management, and online payment, and the speed of data generation is constantly accelerating. The application of big data technology can handle these complex data, and thus can be valuable Information and knowledge, improve the decision-making level of operators, improve user experience, bring new concepts to the development of cross-border e-commerce, and promote the innovation of management models. Therefore, the big data technology has been widely used in the business practice of cross-border e-commerce.

2. Analysis of Problems in the Development of Cross-Border E-Commerce

2.1. Target Group Identification and Consumer Preference Prediction Problems

At present, the market size of cross-border e-commerce is extremely large, and because target customers come from different countries and regions, there are large differences. In order to occupy a place in the cross-border e-commerce market, merchants should determine the target group Identify, classify and predict customers. Only by meeting the consumer preferences of the target group can we gain an advantage in the increasingly fierce market competition. This creates the problem of identifying target groups and predicting consumers' shopping preferences.

2.2. The Logistics Distribution System Is Not Perfect

While cross-border e-commerce brings global goods to consumers, it also faces cross-border logistics issues such as high distribution costs, delays in delivery, insufficient transportation capacity, and difficult after-sale because of its cross-border characteristics. One of the bottlenecks[1]. The cross-border logistics transportation is too cyclical and involves many links, resulting in high cross-border logistics costs. Relevant people have done statistics, and the e-commerce company's logistics costs account for more than 40% of the total cost of the product, and it will be higher if it is a single item distribution.

2.3. Customer Data Security

In the era of big data, open data is used more and more frequently, which is mainly due to the comprehensiveness and accuracy of these data. The information of these data will mainly involve the privacy of the user or the security of the information[2]. If these data are used by some bad behavior merchants, it will cause great problems for customers, and it is also a hidden danger in the development of e-commerce.

3. Major Measures to Deal with the Challenge

3.1. Application of Big Data Technology in Target Group Identification and Consumer Preference Prediction

Forecasting is the core application of big data. It has been widely used in sports event forecasting, stock forecasting, disaster forecasting and other fields, and has achieved good application results. Similarly, in cross-border e-commerce, big data technology can also be applied to solve the problem of target group identification and consumer preference prediction. Consumers generate a large amount of consumer behavior data on cross-border e-commerce platforms. Specifically, consumer behavior can be divided into search behavior, browsing behavior, comparison behavior, and purchase behavior. These four behaviors will be recorded by the e-commerce platform. Search behavior generates search visitors, browsing and comparison behavior generates clicks, and purchases. Behaviors generate payments. Through statistics, comparison and analysis of these data generated by consumers, the platform can analyze consumers' purchase intentions and consumption habits, and construct user portraits to identify target groups and predict consumer preferences. For example, by analyzing consumer behavior, Amazon can analyze customer visit pages and conversion data, and predict products that may be purchased according to titles, shopping carts, customer search paths, and other unique recommendation algorithms. Relying on this technology, Amazon has become a leader in cross-border e-commerce in precision marketing and personalized customization[3].

3.2. Relying on Big Data to Build A Logistics Service System

In the final analysis, the quality of logistics service is mainly determined by the speed of service and the cost of service. To achieve a low cost and high quality service model, we must first integrate multiple logistics service methods. Cross-border e-commerce enterprises need to integrate the overall logistics and transportation model, analyze the logistics information through big data, and formulate a reasonable and complete logistics based on the enterprise itself.

Stream system, select the appropriate delivery method, and establish a suitable service plan according to customer needs. In addition, make full use of big data technology to integrate and integrate logistics resources in the society, and then provide high-quality services to customers on cross-border e-commerce platforms[4].

3.3. Security of Customer Information

Customer information includes not only the basic information of the customer, but also some of the customer's private information. The security of this information is of great concern to every customer. The security of customer information is mainly achieved through cloud computing, and cloud computing security. It is a way to protect the number of customers. Through the continuous improvement of cloud computing information security, customer information security can also be guaranteed.

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