Analysis on the New Ways of International Trade Cross Border E-Commerce Research from Big Data Theory

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Abstract. With the popularity of the Internet, the server terminal will receive massive data every day. Therefore, China has entered the era of big data. Mobile terminal applications have subverted people's traditional user experience, which has brought significant changes in business model. Therefore, big data has become an important strategic resource, which has become an important means of technological innovation used by enterprises. Through big data mining and other technologies, enterprises can analyze the global price changes in international trade (hereinafter referred to as ITT). By analyzing user behavior, enterprises can push appropriate products to users. Therefore, big data technology has been applied to ITT, especially Cross Border E-Commerce (hereinafter referred to as CBEC). Therefore, this paper first analyzes the application process of big data technology to CBEC. Then, this paper puts forward the future business model. Finally, some suggestions are put forward.

Keywords: Big Data Theory, International Trade, Cross Border E-Commerce, New Ways

1. Introduction

With the rapid development of the Internet, enterprises have entered the era of data explosion. According to the data of the Internet data center, the data on the Internet increases by about 50% every year [1]. According to China's IDC industry development report, big data marketing broke through 10 billion yuan in 2015 and reached 25.860 billion yuan in 2018. Therefore, big data business model innovation will become the main competitive strategy of enterprises in the future. CBEC is a new technological revolution, which constructs a new open trade system [2-4]. Relying on CBEC, the global economic network can realize trade interconnection, which will change the traditional trade mode. Therefore, ITT has gradually changed from large and stable cross-border trade to small and fragmented trade. With the simplification of the trade process, there will be fewer middlemen, which will reduce the export cost. In this process, big data plays an important role [5-6]. At present, there are a large number of CBEC export enterprises in China, which also leads to many problems in the process of e-commerce, such as confusion of marketing ideas and weak logic. Therefore, Chinese enterprises must strengthen the application of big data, which will improve the marketing of CBEC enterprises in China [7].
2. Types of CBEC platforms

2.1. B2B information service platform
B2B information service platform is the business activity of domestic and foreign buyers and sellers publishing marketing information on the third-party CBEC website platform. According to the supply and demand situation, the two sides can negotiate. By charging the membership fees of cross-border trade enterprises, the information service platform can provide various member services for enterprises. At the same time, the CBEC platform also provides value-added services for individual enterprise customers. Therefore, CBEC platforms provide platform marketing services for enterprises' import and export behaviors, such as competitive ranking, which can bring a large number of potential customers for enterprises. In this way, enterprises can increase export volume and brand awareness. The main representative B2B information service platforms include Alibaba international station, chinachem.com, global souces, toocle, made in China, etc.

2.2. B2B transaction service platform
B2B information service platform is only the information publishing platform. The most important service of B2B trading service platform is to charge Commission and display fee for the whole process of business, including online search, consultation, negotiation, order, payment, logistics distribution, etc. B2B trading service platform provides online transactions for both buyers and sellers. At the same time, B2B trading service platform can provide online cross-border payment, which can provide more comprehensive services and attract more CBEC enterprises. Therefore, B2B trading service platform will gradually become the most important trading platform mode of CBEC export. The main representative B2B trading service platforms include Dunhuang, Yitang, cross-border and Dalong.

2.3. B2C third party platform
B2C third party platform is a way to treat enterprises as sellers, and its goods logistics will flow to individual consumers. B2C CBEC mainly has two kinds of platform services, which can be divided into the third-party platform and the self-employed platform. Among them, the third-party platform is to provide Internet platform, which can attract businesses to settle in. The platform can provide information support, payment, logistics links and other services for businesses, which will help enterprises sell to overseas retail markets. At the same time, overseas individual consumers can obtain product information and seller information through the Internet online platform. Through online negotiation and transaction with overseas seller enterprises, they can evaluate the products. B2C is a third-party management platform. Through the integration of platform information resources, both the supplier and the demander can provide information services. The main representative B2C third-party platforms include e-bay, Amazon, Alibaba, express, quanmai.com, wish, etc.

2.4. B2C self supporting platform
Self supporting platform is a kind of self-made and self-made products after analyzing consumer behavior. Through unified procurement, production, online display, trading, logistics and distribution, the platform can sell products overseas. Therefore, B2C proprietary platform can reduce the outflow of profits, which is different from the role of third-party platform intermediaries. The self operated platform controls the role of the port seller, which can control the whole process of the supply chain in the hands of the platform itself. As a seller, foreign trade enterprises directly connect with overseas retail consumers, which will reduce and squeeze out the cost of each link. The main representative B2C self operated platforms are: Lanting Jishi, globegroup.com, milan.com, DX, etc.
3. Application mode of big data in CBEC

3.1. User browsing content analysis process

Through big data, enterprises can analyze users' browsing content, which will push accurate products to users. The whole process is based on big data, and the analysis process is shown in Figure 1.

![Figure 1](image1.png)

Figure 1. Users browse the content analysis process.

3.2. Hot commodity analysis process

According to big data data, enterprises can analyze hot commodities. By counting the products that users pay more attention to in a certain period of time, enterprises can rank the recent click data, which will analyze the hot products. At the same time, the e-commerce platform can analyze and publish the most popular products through the terminal server data. The flow chart of hot commodity analysis is shown in Figure 2.

![Figure 2](image2.png)

Figure 2. Hot commodity analysis process.
3.3. User preference analysis process
We can get the user preference data by analyzing the products that users care about. According to user preferences, enterprises can push the products that users are interested in. The flow chart of user preference analysis is shown in Figure 3.

![Flow chart of user preference analysis process](image)

Figure 3. User preference analysis process.

4. New way to study CBEC in ITT

4.1. Strategic innovation of platform business based on operation process
CBEC platform business is the main channel for enterprises to interact with customers, which carries the delivery mode of products and services. Therefore, the CBEC platform is the external window of marketing mode. The platform business of CBEC is the core business and key business of enterprises. According to the results of big data correlation analysis, there is a strong correlation between enterprise platform business strategy and big data, which can return to the part of enterprise operation process. Platform business strategy is not the enterprise platform business itself, it is a precision marketing strategy based on big data analysis. Through the integrated solution of supply chain system, industrial cluster brings innovative profit model. Therefore, in the process of business strategic innovation based on big data platform, CBEC enterprises need to combine platform advantages. At present, CBEC enterprises have developed to provide multi-dimensional platform ecological services, which needs to gradually improve the CBEC platform ecosystem. Through the platform business strategy innovation based on the operation process, we can form the platform strategic business model innovation of sustainable development.

4.2. Cross border financial payment service platform
In the era of big data, cross-border payment business will no longer be affected by cross-border business such as customs clearance and tax refund. Through big data technology, cross-border payment terminal can conduct real-time trade settlement. The real-time processing of massive data by big data will become possible. At present, a number of payment platforms are in-depth research and development of this business, which can gradually open to global customers. At the same time, the establishment of cross-border financial business is mainly divided into cross-border financing and micro loans, which can speed up the financing speed of cross-border enterprises. By broadening financing channels, CBEC can complete cross-border transaction settlement in real time, which will reduce cross-border transaction costs.
4.3. Intelligent supply chain logistics system.
In the era of big data, automation, intelligence and informatization are the characteristics of modern logistics. CBEC must adapt to the characteristics of cross-border logistics. By actively establishing overseas warehousing, e-commerce can match the efficient international logistics system and service quality, which will integrate the cross-border logistics system and form scale benefits. First of all, enterprises need to establish an integrated cross-border logistics information database based on big data technology, which can integrate data sources of different logistics systems. Second, enterprises can improve the level of collaboration between CBEC and international logistics. By improving the application level of big data, enterprises can achieve better integration in strategy, resources, supply chain and other aspects, which will reduce logistics costs. Through in-depth mining of internal and external data of enterprises, CBEC enterprises can find potential profit opportunities in the market, which will make better intelligent decision-making analysis.

5. Conclusion
With the advent of the era of big data, big data technology has been applied to various aspects of CBEC. This paper analyzes user behavior through big data technology, which can provide suggestions for enterprises to make decisions. Through big data technology, ITT has changed the traditional large and stable cross-border trade mode. Therefore, e-commerce platform must be constantly refined and simplified, which can better carry out e-commerce.

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