

# Research on Full Link Operation of C2F Cross-Border E-Commerce Based on Global Value Chain Reconstruction

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**ABSTRACT.** With the popularization of the Internet, small and medium-sized enterprises and consumers are becoming the new main body and new impetus of global cross-border e-commerce, influencing the pattern of international trade, international division of labor and industrial structure. This paper takes the cross-border exporter enterprise established by an undergraduate student of Alibaba Business School of Hangzhou Normal University as an example, describes and analyzes its operation process and value chain structure, and summarizes the "global value chain model of C2F full-link operation". From collecting the market's hotspot information to forming the user's portrait, this model achieves product's originality, customization, globalization and branding during the whole operation process. It explores a path to rise in the global value chain for Chinese enterprises, provides the reference for the development of small and medium-sized cross-border exporters, and promotes the transformation and upgrading of traditional foreign trade industry.

## 1. INTRODUCTION

In the book called "*competitive advantage*", the value chain theory was proposed by the Harvard University professor Michael Porter [1]. He believes that the enterprise value creation process can be divided into the primary activities and the support ones. Primary activities include inbound logistics, operations, outbound logistics, marketing and sales services and so on. Support activities include procurement, technology development, human resources management, enterprise infrastructure and so on. In his view, the value chain was a collection of activities that each enterprise designed, produced, marketed, delivered and supported the product. The cross-border e-commerce value chain research is based on Porter's traditional value chain theory. The domestic scholars Wei Xi & Fang Rong [2] analyzed the difference between the value chain under the traditional value chain and the e-commerce environment, and concluded the impact of the value chain under the B2B and B2C models, that is, the influence of the producer-driven enterprise value chain. They believe that traditional Chinese enterprises involved in e-commerce should take three steps, including being integrated into the corporate intranet, establishing and deepening the B2B e-commerce model, and vigorously promoting the B2C model. Zhibiao Wang [3] explained that the value chain is essentially the sum of the value-added behavior of enterprises and constitutes a value chain. The B2B e-commerce, which accounts for the mainstream of cross-border trade transactions, still retains the traditional production-oriented marketing model, and attaches importance to the product promotion and sales work of the downstream value chain, thoroughly ignoring the upstream value chain such as customer demand research and product design work, thus it is difficult to improve competitive advantage of the product and its added value. The global value chain is broadly summarized as the use of international inputs in the production process [4]. It covers the activities of a product or service from concept idea to end use, and also includes how to lay out these activities in the geographical space and across national boundaries.

The above-mentioned domestic and foreign scholars have analyzed and explored the reconstruction of the global value chain from the global economic background, and pointed out the inevitable development trend of cross-border e-commerce at the theoretical level, which provided a reference for the development of cross-border e-commerce companies in China. This article will

take a typical case to summarize the "C2F full-link operating model", C2F is "Customer-to-Factory". To meet customers' demand, the model will take small batch and personalized customization production process to subvert traditional standardization and assembly line production, including all the links from design, production, operation, and sales which are all under the control of independent brands in order to improve user experience and product added value, strengthen brand image and customer loyalty, and improve Cross-border e-commerce company competitiveness [5]. We hope to analyze the reconstruction process of global value chains through cross-border export e-commerce case studies, and promote the transformation and upgrading of traditional manufacturing industries, develop new products and new competitive industries, and create a global image of "created in China"[6].

## 2. Nansi Enterprise Case Study

### 2.1 Enterprise review

Hangzhou Nansi Electronic Commerce Co., Ltd. was established in April 2016. Its legal person is Ye Zhen, a 2015 undergraduate who majored in online marketing at Alibaba Business School of Hangzhou Normal University. This company's main products are home furnishings, which are mainly sold to European and American overseas markets. Production design and full-link management driven by consumer demand are the uppermost innovations of C2F companies represented by Nansi[7].

### 2.2 Basic activities innovation of enterprise value chain

#### 2.2.1 Design and production

Different from the traditional production-driven business model, Nansi enterprise aims at overseas consumer demand to create single product explosives, relying on big data analysis technology, integrating Chinese culture and resource advantages, and providing branded and personalized products through micro-innovation and flexible production. Take the blankets in Nansi household's rigid demand products as an example, this type of product has a huge market capacity but a fierce homogenization competition. The company combines the current search hotspots and micro-innovation to customize a blanket of a mermaid appearance. Based on consumer demand for design and production to accurately meet customer needs, the product soon became the hot products of major sites, standing out from similar products.

#### 2.2.2 Operations management

The distinguishing feature of Nansi's business different from other cross-border e-commerce is the C2F full-link operation model. It starts from demand of the overseas consumers and aims at the pain points of Chinese manufacturers, such as the badly customer service, the mismatch between supply and demand, and the overstock, especially the low added value. Through data analysis to guide the production and operation of domestic manufacturing, C2F full-link operation model covers all the business links such as the product design, production and sales, customer service and so on, ultimately realizes originality, customization, globalization and branding. In the process of pursuing these four enterprise characteristics, the enterprise gradually accumulates the ability of deep mining customer demand, through continuously driving customer data, deeply mining customer demand, and then developing related products and multiple product lines, the business can form an ecological cycle. The amount of fans is also accumulated in this cycle, eventually achieving full-link operation from the demand side to the production side.

## 3. C2F Cross-border E-commerce Full Link Operation Model

### 3.1 C2F Full-link Operation Model

The *figure 1* takes the Nansi case as an example to summarize the description of the cross-border exporter's C2F full-link operation global value chain model. Such cross-border exporters are based on platform information resources, starting from the overseas consumer demand side, conducting

product design and development through data analysis and mining, thereby stimulating domestic manufacturers' production and operations, and forming a closed loop of C2F full link operation based on the global value chain. It includes eight links: market hotspot collection, data analysis and mining, explosive model conceptual design, re-confirmation of sample, manufacture customization, product network promotion, customers data accumulation, and user portrait formation. All links are interlocked and interacting with each other, which give an impetus to the spiral development of this model.

### 3.2 C2F Full-link Operation Model Analysis

#### 3.2.1 Market hotspot collection

The first link is collecting the consumption hotspots in overseas markets through the third party software, such as Amazon Tracker and Google Trends. In details, paying more attention to the keywords with large search volume and high search frequency, then focusing on user groups, designing the products based on the market demand of hot spots. In cross-border export enterprises driven by consumer demand, the collection of market hotspots is the basis of all commercial activities, and the product competitiveness formed from this is the core of the enterprise value chain.

#### 3.2.2 Data analysis and mining

Instead of traditional market research and forecasting methods, professional data analysis software such as Google Trends is used to obtain effective data, such as the material, pattern, color, style and other aspects of the product, so as to conduct user hotspot analysis and mining. This link is the process that companies grasp and absorb market data. Based on the development of modern information technology, e-commerce companies can obtain the key market information timely and effectively, and business risks will be greatly reduced.

#### 3.2.3 Explosive model conceptual design

Based on the results of data analysis, the target market will be clearly defined. According to different target groups, the preset products is fragmented and designed to form the concept of explosive model. This link is an important part of the C2F model in which users are converted to consumers. The concept of explosion model is centered on consumers rather than producers. Enterprises take consumer demand as the primary condition, enhance consumer value, and focus on *consumer* satisfaction. Therefore, C2F is not a substitute or competitor for B2B and B2C. The true relation is that C2F extends the value chain of B2B or B2C, so there are more value-creating links and controllability factors than the latter. Targeting the full process operation and full links management of consumer demand is the core competitiveness of the C2F model, while B2B and B2C just operating on a single link or reducing cost.

#### 3.2.4 Re-confirmation of sample

After scientific analysis of the data, the sample gets further improved in the way of a large number of overseas professional buyers evaluating or voting through email, telephone, Skype and other means. This kind of feedback research on the sample is an indispensable part of meeting customer demand in the C2F model. The design of a product is a process of repeated testing and repeated modification. Modern information technology can only provide support at the technical level, while the control of the market is a dynamic process of comprehensive, multi-level coordinated planning of technologies, resources, and management. Re-confirmation of samples is not only to test whether the user needs and products are matched accurately, but also to expand the enterprise perspective from the technical level to all levels of the market, thus further to enhance the competitiveness of enterprises in the market.

#### 3.2.5 Manufacture customization

After the design sample has been repeatedly tested and confirmed, it is submitted to the company for a small amount of production. According to the verticalization of corporate organizational structure, the development process of consumer-driven cross-border e-commerce exporters is divided into three phases: C2B2F (consumer to business to factory), C2F (consumer to factory), and C2M (consumer to manufacture). In the C2B2F stage, companies design products based on

user needs, and then outsource order and production operations; In the C2F stage, companies and factories have deeper cooperation by holding a brand together; C2M advanced stage has self-built factory when the product design, sale and production have more autonomy. The C2F model is suitable for small-sized cross-border e-commerce entrepreneurs. In this model, product design and production are independent and belong to different entities. Generally speaking, cross-border e-commerce companies focus on searching information for design samples, then handing them to the factory for a small amount of production, using pre-sales to analyze sales forecasts and other refined operations to reduce the inventory pressure of both parties.

### *3.2.6 Product network promotion*

Product promotion of cross-border e-commerce requires to integrate a variety of in-station and out-of-station, domestic and overseas network marketing means, and use various marketing forms such as graphics, video, live broadcast and so on, so as to build a comprehensive system of promotion in INS, TWITTER, FACEBOOK and other social platforms. Product network promotion is a compulsory course for cross-border e-commerce companies, and also a direct factor for the product success or failure. The innovation of promotion methods and content is a corporate soft power that cannot be overlooked. Today, with the rapid development of information, companies must take the initiative to integrate and use multiple network marketing and promotion methods to expand the enterprises and their products in market competition.

### *3.2.7 Customer data accumulation*

Cross-border e-commerce companies have knowledge of consumer demand and product trends through the platform data and their technology of data mining and analysis, which provide a scientific basis for business decision-making. Customer data accumulated by successful transactions are corporate assets[8]. In the era of big data, modern enterprises must have the awareness of data resources. For enterprises, it is the basis and guarantee of good operation and the source of long-term development by using accumulated customer data to penetrate consumer demand, predict future products and demand scale, and explore related products. In the future market competition, who has customer data, who will have the right to speak and have the competitiveness.

### *3.2.8 User Portrait Formation*

C2F cross-border e-commerce enterprises with full-link operation create user portrait through a solid proprietary data warehouse, which is a link between the preceding and the following in the whole operation mode, and it is not only the end of the last enterprise product operation cycle, but also the beginning of the next cycle. Through the use of large data technology, the enterprise digs the customer's needs in depth, optimizes the existing products, and develops related products and multiple product lines which are highly consistent with the consumer's needs, thus forming a closed-loop operation process based on global value chain.

The C2F full-link global value chain model starts from the consumer demand side, then drives the domestic manufacturing production and operation through big data source. It effectively solves the problems of poor user experience, mismatched supply and demand, and excess inventory, especially the pain point of low added value, thus expands the global competitiveness of Chinese original brands and promotes the transformation of "Made in China" to "Created in China."

## **4. Conclusion**

Based on the current status and trends of cross-border e-commerce global development in the Internet environment, the reconstruction of global value chain has become inevitable[9]. In a vertical perspective, the reconstruction of global value chains is a dynamic development process. Countries around the world participate in the reconstruction of global value chains through corporate activities, and vigorously develop their comparative advantages and new industries to achieve their rise in global value chains[10]. Horizontally, the essence of global value chain reconstruction is the international division of labor, which has now entered the stage of global value chain division of service and R&D. Through the study of cross-border e-commerce for C2F full-link operation, the overall cross-border e-commerce of C2F full-link operation in the future still need to improve its innovation ability and adaptability. Innovation, network marketing, technology

development, manpower management, business operations and international culture need to be optimized continuously and thus enterprises global competitiveness will be enhanced.

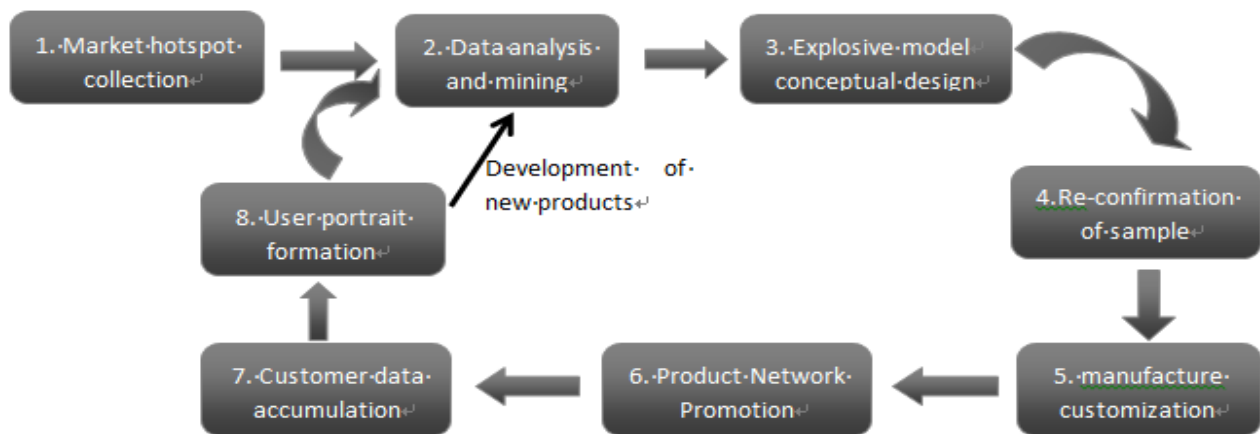


Figure 1 C2F Cross-border E-commerce Full Link Operation Model

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