

Cross-border e-commerce platform construction of the health industry and its study based on the integration of production, learning and research

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Abstract: In order to reduce the costs caused by inherent defects such as information asymmetry and the separation of space and time, traditional international trade has derived a mechanism with goods transfer and information matching as its main functions-trade platform. Moreover, the development of e-commerce can compensate the inherent disadvantages of traditional international trade to a great extent. Therefore, many scholars believe that the combination of e-commerce and international trade will eventually realize the “de-platform” of international trade. From the perspective of functionalism, the trade platform will realize the transfer of function between different carriers due to the change of international trade channels. In the context of e-commerce, e-commerce platforms with cross-border business will become new carriers to undertake the functions of international trade.

According to the overall design of the project “cross-border e-commerce platform construction of the health industry and its study based on the integration of production, learning and research”, the main research contents of the subproject of production, learning and research integration are divided into education research, domestic and overseas site construction and project research. Since the start of the project in 2017, the work has been progressing smoothly and the following remarkable results have been achieved.

1. Overview of trade platforms

1.1 Traditional trade platforms

Spulber (1996) believes that the traditional trading platform refers to an economic platform that exclusively purchases goods from suppliers and then resells them to buyers or provides a platform for both parties to trade and facilitates the transaction. Hence the traditional trading platform has two major functions: goods transfer and information matching. Generally speaking, enterprises have to pay high hidden costs in traditional international trade because of information asymmetry. According to Anderson & Van Wincoop (2004), the value-added effect of international trade costs is 74%, including 21% of transportation costs and 44% of border-related trade barriers. 44% of the border-related trade barriers can be divided into 8% of the policy-related costs such as tariff and non-tariff barriers, 7% of the language barriers, 14% of the currency exchange barriers, 6% of the

information costs based on supply and demand matching, and 3% of the security costs for the reliability of international contracts. In fact, in 44% of the border-related trade barriers, except for 8% of the policy-related costs, the rest of the costs can be classified in the broad sense of information costs, even the security costs are related to the asymmetry of information to some extent. Therefore, most enterprises will choose trade platforms to enter foreign markets in order to save transaction costs and make trade convenient and fast in traditional international trade. Ahn and other scholars (2011) have built a simple platform trade model: high-productivity enterprises choose direct exports, medium-productivity enterprises choose indirect exports, while lower productivity enterprises choose to serve the market at home. The simple model shows that non-high-profit enterprises are unable to pay high transaction costs to realize direct exports, and exporting through trade platforms is the best choice for general enterprises.

1.2 Trade platforms under the background of e-commerce

The development of e-commerce has brought great differences to the way of international trade. In the traditional international trade, the high transaction costs between enterprises and the market due to space-time partition, information asymmetry and other factors is one of the important factors that hinder enterprises' direct foreign trade, which is also the reason for the birth of the trade platform mechanism. Due to the e-commerce mode relying on internet and information technology, the problem of high costs in traditional international trade seems to be solved to a large extent. At least some enterprises can reduce the transaction costs in the process of international trade to an acceptable range by means of e-commerce. Bojnec and Ferto (2009) used the bilateral manufacturing export data of 29 countries of the Organization for Economic Cooperation and Development (OECD) to study the relationship between the internet and trade from an industry perspective. It is concluded that the use of the internet reduced the transaction costs of the manufacturing industry, lessened the negative impact of the transaction cost on exports, improved the international competitiveness of the enterprise, and promoted the increase of manufacturing exports.

Since e-commerce is conducive to reducing the high transaction costs in the process of international trade, the emergence of e-commerce certainly has an impact on the trading platform mechanism. Because the traditional trading platform is no longer the best choice to reduce the transaction costs of international trade, the use of network and information technology for foreign trade can not only save costs but also is more conducive to the long-term development of enterprises than relying on the traditional trading platform for export. Based on the above understanding, many scholars put forward that with the increasingly close connection between e-commerce and international trade, the international trade platform mechanism will gradually decline and eventually realize the "de-platform" of international trade. Malone and other scholars (1987) believe that once e-commerce is applied, the traditional platform market will be threatened, because online trading reduces the costs for buyers and sellers to search for matching, thus new trading methods will replace the traditional trading methods. Hoffman and other scholars (1995) also believe that the development of e-commerce has reduced the transaction costs for buyers and sellers, improved the trade efficiency, and created a more efficient frictionless market.

1.3 The forms and functions of new trade platforms

Based on the view that e-commerce will give birth to new trade platforms, many scholars began to discuss the forms and functions of new trade platforms under the background of e-commerce. Anderson and Anderson (2002) believes that the functions of providing information on buyers and sellers, and providing information on goods and services are no longer important among the nine

functions of the trading platform in the era of e-commerce. However, some functions of the trading platform, such as economies of scale, economies of scope and reasonable arrangements of time and place, will have new significance with the development of e-commerce. The functions of reducing the uncertainty of product quality, protecting enterprise privacy and screening promote the development of specialized companies and suppliers. Cho and Tansuhaj (2011) believe that compared with the traditional platforms, the new electronic platforms have the following new features: higher market entry possibility, higher efficiency and lower cost. The new electronic platforms can quickly and flexibly meet the needs of consumers, overcome cross-border trade barriers caused by time, geography and social and cultural differences. They are efficient platforms for multi-product sales, transaction data monitoring and promotion of new technologies and products. They relax and accelerate the exchange of real-time information, thus promoting more exports. All in all, the traditional functions of the new trade platforms will be gradually weakened and replaced by a new functional trend of continuously reducing platform costs and providing trade details services.

2. Cross-border electronic commerce platform

2.1 Concept and profit model

E-commerce platform refers to the online platform with circulation elements such as information flow, capital flow and logistics, which is set by e-commerce enterprises based on internet information technology in order to realize the communication between parties with trading intention; While cross-border electronic commerce Platform refers to the e-commerce platform involving cross-border business. Because e-commerce has different models, such as B2B, C2C and O2O, the corresponding e-commerce platforms also have subtle differences. The e-commerce platforms studied in this paper are mainly mode-based e-commerce platforms, namely Business to Customer, which are electronic business between enterprises and consumers. Typical representatives of the above-mentioned types of e-commerce platforms include Tmall Mall, Suning Tesco and Amazon China, among which Tmall International and Amazon China have cross-border businesses.

E-commerce platforms are interactive trading platforms built by e-commerce enterprises to realize commodity sales, including both enterprises and consumers. Their profit model can be divided into two categories: one is the platform mainly based on the income from price difference between sales and import, that is self-operated platform, such as JD Mall, Amazon China, etc. The other is the platform whose income is mainly based on commission fees, i.e. platform-based platforms, such as Tmall and Ison (Ji Zhongjia, 2014).

2.2 Functional analysis of e-commerce platform - based on profit model

The combination of e-commerce and international trade will inevitably have an impact on the traditional trade platform institutions, but the inherent characteristics of international trade determine that trade platform mechanism must exist in the process of international trade. Therefore, from the perspective of functionalism, I believe that international trade cannot achieve de-platform in essence. Even if the institutions that originally assume the functions of trade platforms gradually weaken and eventually die out under the impact of e-commerce, the functions of the trade platform will still be undertaken by the new carrier and will continue to play a role. In short, the impact of e-commerce on international trade will only lead to the transfer of the function of the trading platform, but cannot make it fundamentally disappear.

According to the analysis of the profit models of the e-commerce platforms, I hold the view that the e-commerce platforms have in essence taken over the functions of the trading platform. As

mentioned earlier, e-commerce platforms mainly have two profit models: self-operated and platform-based. As far as the self-operated platform is concerned, it is mainly based on the income difference between purchase and sale. In other words, the self-operated platform is similar to the online middlemen who buy at a lower price and sell at a higher price, and its profit model is essentially a kind of goods transfer, which happens to be one of the main functions of the trading platform. As for the platform-based platform, it does not participate in trade and benefits from it, but it gets fees through platform services. The most important function of platform service is to exchange information between merchants and consumers through e-commerce platform. Merchants can open up the channels of online sales through platform advertising, online marketing and other modes, while consumers can also use the platform to select suitable merchants to meet their own consumption requirements. To some extent, this is a self-service information matching method, and the basis of this function lies in the e-commerce platform. Moreover, the profit model of e-commerce platforms is divided based on the main source of their income. Generally, e-commerce platforms do not operate on a single profit model. Most of them have both but also have some emphasis. For example, Amazon China has both a self-operated model and provides platform services for other businesses at the same time, but the self-operated model is the emphasis of its operation and development. Therefore, in fact, most e-commerce platforms have two functions: goods transfer and information matching, which is also the core function of trade platforms.

3. The functions of trade platform of cross-border e-commerce platform

According to the previous analysis, the cross-border electronic commerce platform does have the functions of an international trade platform. These functions are mainly reflected in the following aspects:

First, the cross-border e-commerce platform provides the exchange of information between merchants and overseas markets, and its cost is lower than that of traditional trading platforms. On the one hand, the marketing promotion based on the platform can get market feedback quickly for the merchants, which is of great significance for the product market positioning and consumer preference survey. On the other hand, with the increasing operation time of cross-border e-commerce platforms, it is no longer difficult for the platforms to reasonably forecast the market with big data, which is undoubtedly a huge information wealth for overseas merchants. For example, Alibaba used big data analysis to innovate the bonded storage mode for hot-selling overseas goods in the “double 11 shopping carnival” in 2014, and the result was a great success.

Second, the cross-border e-commerce platform has the function of product screening to ensure the quality of products sold on the platform, thus reducing the uncertainty of product quality. Traditional trading platforms filter and screen product quality for information resources and reputation, while cross-border e-commerce platforms also have similar functions and requirements.

Third, cross-border e-commerce platforms can provide diversified channels for enterprises to enter foreign markets. Just as traditional trading platforms can not only have the function of transferring goods like middlemen, but also provide platform services for merchants, the diversified profit models of cross-border e-commerce platforms can also provide merchants with a variety of trading channel choices.

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References

- [1] Ji Zhongjia. *Research on the evaluation of the development level of e-commerce platform in China* [J] *Liaoning University of Technology*, 2014: 3.
- [2] Yan Wei. *Research on the development of electronic commerce in small and medium-sized enterprises* [J] *Science and Technology Management Research*, 2008(10).
- [3] Jin Jiangjun. *Research on development trend and strategies of e-commerce in China* [J] *China Management Informationization* 2016(02).
- [4] Sun Yinan, Sun Qingsong. *Research on integration of e-commerce based on region* [J] *Market Modernization*, 2009(04).