

# Cross-border E-commerce Mode Based on Internet +

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**Abstract.** To better use the efficient and low-cost trade mode of cross-border e-commerce, it was a major issue for scholars in various countries to study it in the context of "Internet +". Based on the theoretical knowledge of value chain and transaction cost, the influence of B2C cross-border e-commerce on transaction cost in international trade was discussed. Secondly, the current problems of the current development of B2C cross-border e-commerce were analyzed. The concrete performance was the bad credit environment, the incomplete cross-border logistics system and the poor cross-border payment system. Finally, the problems pointed out in the previous article were confirmed, and the experience and lessons were summarized. At the same time, some suggestions were proposed to promote the development of cross-border e-commerce model based on Internet +. It is concluded that cross-border e-commerce is of great strategic significance to promote the reform and upgrade of the traditional foreign trade industry and maintain the stable economic growth.

## 1. Introduction

Entering the twenty-first century, the development of Internet in China has made great achievements, which not only has a profound impact on social life in China, but also has an important impact on economic development. Internet + is a new power in China for a new round of industrial revolution and technological change. It is an important starting point to create an innovative country. Meanwhile, it is an important force to improve China's competitive advantage [1]. While the development of the Internet has made great achievements, there are also many problems that deserve our deep thought. Under the background of Internet +, the development trend of our country's foreign trade enterprises and the influence of Internet + on our foreign trade enterprises need to be further studied and explored.

## 2. Related theory

### 2.1. Concept and content of Internet +

The so-called Internet + refers to the modern Internet information technology, containing different information technology (big data, cloud computing, networking and mobile information technology) process and application in all aspects of social life and economy. The online process can be achieved by moving the transaction process of the commodity to the Internet. Only transaction online can



realize the information data. Online data has a strong liquidity. It is no longer just the data enclosed in the enterprise data. Online data can communicate efficiently and cheaply between upstream and downstream suppliers and transaction participants. As a result, the data flow can play its greatest value [2].

### 2.2. Meaning of cross-border E-commerce

Cross border e-commerce refers to a new type of international business activity, which is a transaction entity that belongs to different countries. It can deal through e-commerce platform, and use cross border logistics to distribute commodities. From the meaning of cross-border e-commerce, it is concluded that cross-border e-commerce is similar to the traditional international trade, but also has its own unique place. It has the characteristics of global, anonymity, immediacy, paperless and rapid evolution. In short, cross-border e-commerce is the international application of e-commerce, that is, the implementation of network transactions in foreign trade. Based on the modern Internet information technology, the cross-border e-commerce carries out paperless transactions, breaks through the barriers of time and space, and broadens the development channels of enterprises [3].

### 2.3. Classification of B2C cross-border E-commerce

According to the classification of B2C e-commerce, the B2C cross-border e-commerce mode can be divided into three types: department store type, comprehensive portal type and vertical store type. The B2C cross-border e-commerce mode in China mainly uses the first two types [4].

Department store style: The Company has its own cross-border e-commerce platform, which manages the purchase and storage of goods uniformly. The service meets customer's consumption needs, and achieves efficient logistics distribution and high-quality customer service, such as the Lanting Pavilion, Milan network and other B2C cross-border e-commerce platform.

The other is the comprehensive portal type. This mode mainly provides platform for businesses and consumers to trade, and generally has relatively stable network platform, unified payment system and good credit system, such as China's B2C cross-border e-commerce platform aliexpress and Dhgate. Similar to Tmall, Taobao and other shopping websites, websites only provide platform for transactions and corresponding protection and services, but do not participate in purchasing and warehousing.

There is also a vertical store. This B2C cross-border e-commerce model is mainly to meet certain specific needs of overseas consumers. As far as China's current foreign trade is concerned, there is no similar cross-border e-commerce platform, but there are a lot of cross-border e-commerce in B2B.

**Table 1.** The main B2C transboundary business enterprises at home and abroad

	Enterprise	Main business	Time (Year)
Domestic enterprise	Dhgate	Comprehensive foreign trade wholesale and retail platform	2004
	DealeXtreme(DX)	Based on electronic products	2006
	Milano	Based on foreign trade clothing	2007
	Lightinthebox	wedding dresses and 3C products	2007
	Incandescent technology	Small wholesale and retail	2008
	Dalong	Comprehensive foreign trade B2C website	2008
	Aliexpress	Comprehensive wholesale and retail platform	2009
Foreign enterprise	eBay	Comprehensive shopping platform	1995
	Amazon	Developed from the first book to the present comprehensive shopping site	1995

#### 2.4. Theoretical basis of B2C cross-border e-commerce applications

Value chain theory: Michael Potter first proposed the value chain theory. In his *Competitive Advantage*, he points out that the value chain includes all aspects of enterprise procurement, production, storage, sales and logistics and distribution. The meaning shows that the value chain is not only between the enterprise and the upstream and downstream suppliers, but through the whole business activities.

In traditional foreign trade, before entering the international market, the commodities usually start from domestic producers to domestic exporters, and then from domestic exporters to overseas importers. Finally, foreign importers are paid to foreign consumers. It shows that there are many middle-men in this process. However, each transaction chain will produce transaction costs. When the commodity eventually reaches the consumer's hands, it will inevitably increase the cost of consumption. However, B2C cross-border e-commerce has many advantages over traditional international trade, and domestic goods can be directly sent to overseas consumers through producers or exporters. This not only simplifies the transaction process and reduces the transaction link, but also reduces the enterprise's channel cost and transaction cost and enlarges the profit level of the enterprise [5].

Transaction cost theory: The British economist Ronald Coase first made the transaction cost. In the *Nature of Business*, he pointed out that transaction cost is the other party who wants to trade with others in order to carry out a trading activity and puts forward the conditions for developing the exchange. The price is negotiated and finalized. The contract is signed, and the necessary inspection is carried out to determine the party's compliance with the contract regulations and so on. In international trade, the transaction cost mainly includes the following five aspects: Search cost (it refers to the cost when the subject information is searching the related commodity information); Protocol cost (the agreement cost refers to the cost of the transaction subject to reach the final exchange through negotiation); Contracting Cost (it refers to the cost that the transaction subject is paid when there is no objection to the outcome of the negotiation); Supervision cost (it means the cost in order to ensure the strict fulfilment of the contract content of each transaction subject to the conclusion of the contractual contract); Penalty cost(it refers to the cost produced by the other party in order to protect its legitimate rights and interests when one party does not perform the contract during the transaction). Williamson analyzed the causes of the transaction cost and concluded it into six aspects: limited rationality, opportunism, uncertainty and complexity, a few transactions, information asymmetry and atmosphere. In 1985, he attributed the cause of the transaction cost to three features, namely, the specificity of the trading goods, the uncertainty of the transaction and the frequency of the transaction [6].

### 3. Problems of cross-border e-commerce model based on Internet +

#### 3.1. Bad credit environment

The market economy in China started late. Compared with western developed countries, China still lacks a perfect credit system and credit standards, and has not yet formed a more mature market economy system. Both the real economy and the virtual economy need a good business credit environment as a guarantee [7]. Although China has established a market economy for some time, China's commercial credit environment and the construction of social credit system are still relatively backward. With the rapid development of cross-border e-commerce, a good business credit environment is urgently needed as a guarantee. On the one hand, enterprises or businesses can be effectively bound to ensure that they can be strict and honest transactions. At the same time, it can also prevent extortion from bad buyers and protect the interests of the business. On the other hand, for consumers, there is a perfect credit system, and the consumer's purchase goods have been guaranteed. Therefore, the system effectively protects the rights and interests of consumers [8].

### 3.2. Incomplete cross-border logistics system

The logistics system, the credit environment and the payment system are the three most important factors that constitute the cross-border e-commerce. While the credit environment and payment system are gradually perfected, the construction of the logistics system is the most important part of the cross-border e-commerce.

**Table 2.** Cross-border logistics mode in China's cross-border E-commerce

Logistics mode	Advantages	Disadvantages
Postal packet	Full coverage of the postal network and low price	Slow speed, high packet loss rate, unnormal export tax rebate
International express service(UPS, Fedex, DHL, TNT)	Fast speed, good service, low packet loss rate	The price is expensive and the price tariff has changed greatly
Special line logistics	Price is lower than industry express, speed is faster than postal packet, loss rate is lower	The scope of domestic collection is limited and the coverage area is small
Overseas warehouse	Low logistics cost, flexible return, high market recognition, short delivery cycle	Strict requirements for supply chain management, inventory control, and dynamic sales management
Transnational business of domestic express	Fast speed, low cost	Less experience, small coverage

### 3.3. Imperfect cross-border payment system

In the process of cross-border payment, online payment and settlement can generally be carried out through bank cards, electronic cash, electronic checks and other ways. Among them, bank card payment is still the main form of online transactions.

The market access mechanism is not standard: In the cross-border e-commerce trade, the third-party payment institution plays the role of the foreign exchange revenue and expenditure management, and is the executors of the national foreign exchange management policy. At the same time, it also plays the role of third party guarantee payment, and is the supervisor of the market transaction behavior. Thus, it shows that the third-party payment institution plays an important role in the cross-border payment system. Therefore, it is imminent to standardize the construction of the market access mechanism of the third-party cross-border payment institution. At present, China has not yet issued a third-party payment agencies market qualification management regulation. Once the payment institutions appear dangerous situation such as illegal operation, system failure, information disclosure, it will affect the security of foreign exchange funds and increase the risk of business operation.

The risk control mechanism is not sound: The cross-border e-commerce enterprises carry out international trade activities through the Internet platform, which have the characteristics of network, virtualization and globalization. The funds in the trade are transferred through the third-party payment institutions. However, this transfer channel is very easy to develop into a circulation channel for illegal funds, which brings great challenges to the risk control work of the country. On the one hand, in the third-party payment business, the money paid by the consumer is the short-term precipitation fund due to the periodic effect of the transaction completion time. However, the short-term control of these precipitated funds is in the hands of the third-party payment institutions. If these funds are not managed effectively, it will lead to the security of funds and the risk of payment. On the other hand, some third-party payment institutions have irregularities in the process of business operation, which provide convenience for international credit card malicious overdraft and cash in, illegal access to funds, cross border fraudulent transactions and other illegal activities. At the same time, the risk control mechanism is not sound to increase the control of this kind of illegal behavior.

**Table 3.** Third party payment enterprises at the cross-border payment market

Enterprise	Service / product	Cooperation / acquisition of overseas institutions	Coverage area	Time (Year)
Alipay	Overseas purchase payment card	Japan's Softbank, PSP, OnCard Payment, VISA, MasterCard	Hong Kong, Macao, Taiwan, Japan, South Korea, Europe and the United States	2007
Tenpay	Cross-border online shopping	American Express	The US and UK	2008
Quick money	International exchange	Western Union	190 countries and regions	2011
Unionpay	Cross-border online shopping	PayPal, Bank card collecting agency for Bank of East Asia	The major regions of the world, such as Hongkong, Japan, the United States and so on	2011

#### 4. Proposals for the development of cross-border e-commerce model based on Internet +

##### 4.1. Construction of cross-border e-commerce credit platform

The improvement of the credit environment needs the active participation of the market participants. However, the construction of cross-border e-commerce credit system requires the active participation of cross-border e-commerce enterprises. The government or cross-border electric business association should establish the public credit service platform. The qualification information, credit status and business commodity information in cross-border e-commerce will be published on the service platform, and the corresponding legal advisory services will be provided. The cross-border e-commerce platform must strictly screen the information when users register, and strictly certify the credit of businesses and consumers to ensure honest transactions between the two sides and create a good credit environment. This can not only improve the shopping experience of overseas consumers, but also provide a good trading environment for domestic businesses.

##### 4.2. Implementation of credit information disclosure system

The credit rating standards should be set up to define the credit rating for the transaction subject and to show the credit rating of the subject to the public. As China's cross-border e-commerce business is dominated by small and medium-sized enterprises, it focuses on the main body certification of domestic SMEs or businesses, and the corresponding level is classified according to the level standard. At the same time, blacklist system should be implemented. For those businesses or enterprises with low credit and low credit rating, they should be included in the credit blacklist, prohibiting transactions or penalties to purify the trading environment of cross-border e-commerce.

##### 4.3. Improvement of the construction of cross-border e-commerce credit laws and regulations

Improving the credit system of cross-border e-commerce requires not only the economic participation and trade associations of cross-border e-commerce providers, but also the protection of national laws. The establishment of credit system under the legal framework can be more effective and successful. The state related departments and legislatures should focus on the healthy and long-term development of cross-border e-commerce, accelerate the construction of credit laws and regulations in related fields, and provide solid legal protection for the development of cross-border e-commerce.

#### 5. Conclusion

At present, with the improvement of the level of mobile commerce in the world and the continuous progress of Internet information technology, the new changes have emerged in the Internet shopping. The mobile shopping consumption is becoming more and more popular, and will become a new

direction for the development of B2C cross-border e-commerce. At the same time, it is of great strategic significance to promote the reform and upgrade of the traditional foreign trade industry and maintain the stable economic growth.

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