

# The Impact of Logistics Service Quality of Cross Border E-Commerce Business on Customer Satisfaction

Zhiheng Li\*

East Asia Institute of Management, Singapore, Singapore.

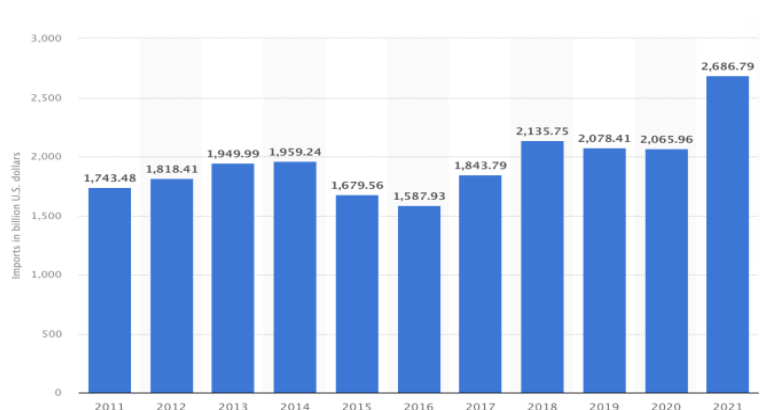
\*Corresponding author Email: lzhhvmetal@gmail.com

**Abstract.** Nowadays, people have a high requirement for daily necessities. Many consumers buy daily necessities overseas. In recent years, cross-border e-commerce is becoming one of the mainstream people's shopping modes. With the increasing popularity of network applications, the e-commerce is changing the business models of traditional shopping. Cross-border logistics accounts for an increasing proportion of logistics business. Compared with traditional domestic logistics business, cross-border e-commerce logistics may have many problems such as payment and customs clearance, resulting in its service quality significantly affecting customer satisfaction. This paper analyzes the current problems of cross-border e-commerce logistics services. Meanwhile, it summarizes the research status of the relationship between cross-border logistics service quality and customer satisfaction. Last but not the least, potential solutions of improvement for cross-border e-commerce logistics service quality were also proposed.

**Keywords:** Cross-border e-commerce; Logistics Service; Customer satisfaction; Logistics service quality.

## 1. Introduction

According to the Boao Forum for Asia, China's B2C cross-border e-commerce sales exceeded \$200 billion in 2020 [1]. In recent years, the purchasing power of the Chinese residents has continued to rise. The import volume was 2065.96 billion USD in 2020 [2]. Figure 1 shows the value of import of goods in China from 2011 to 2021. At the same time, electronic transaction and logistics services can help consumers complete cross-border transactions. Nowadays, traditional transaction has rapidly developed, and electronic transactions can complete consumer behaviors across time and space.



**Fig. 1** Value of import of goods in China from 2011 to 2021 in billion U.S. dollars.

E-commerce is different from traditional transactions. The customers only need to conduct transactions on the trading platform. The rest of the product transmission process is handed over to logistics. Merchants deliver products to consumers intact through logistics. Cross-border logistics is different from traditional domestic business. It usually involves the handover of logistics companies between multiple countries, customs inspections, and conversion of payment methods [3]. Consumers are often required to provide specific personal information to ensure the operation of logistics. Therefore, cross-border logistics business is more difficult compared with domestic logistics business, and the process is more complicated.

The major issue of cross-border logistics is that the delivery time is too long. The general business delivery time is between one week to one month. Delivery times are much longer than other traditional businesses. The cross-border commodity logistics involves more transaction links, and the commodities is carried out in multiple countries as compared with the traditional business [4]. Since the logistics systems in different countries are not the same, problems may occur in the process of docking goods, resulting in problems such as product retention. In addition, another most important process involved in cross-border logistics is customs clearance. It often takes a relatively long time for the goods to arrive at the customs. As a result, the goods usually stay in the customs for a relatively long time. When the customers check the logistics information, it is often displayed when their goods in customs clearance. The specific customs clearance time cannot be provided to the customers. Only a rough time range can be given. Therefore, many problems are caused by the long delivery time of cross-border logistics products.

Moreover, another important process is transmission of goods. Because it involves the flow of goods between countries and customs inspections, the entire logistics transmission process is complicated [5]. In the past, cross-border logistics mainly used postal services, because the size of most of the cross-border goods purchased by consumers were small. However, the logistics cost is high. In addition, the postal service time is long and customer satisfaction is not high. The international express delivery business has become more popular in recent years, and the transportation and distribution of goods are carried out by powerful international logistics companies. Compared with postal services, international express delivery is more efficient with a higher security. It saves logistics costs to a certain extent by reducing the time of the domestic distribution. At the same time, it integrates different technologies which can allow the customers and sellers to check logistics information in real time.

Research on cross-border e-commerce logistics shows that the service quality is one of important factors that restrict its development. Research on the relationship between cross-border e-commerce logistics service quality and customer satisfaction can help the relevant companies to improve their customer satisfaction. Therefore, it is necessary to analyze the service quality according to the characteristics of cross-border e-commerce logistics, and to find out the reasons that really affect the service quality. The aim of this paper is to 1) to analyzes the current problems of cross-border e-commerce logistics services; 2) to summarize the research status of the relationship between cross-border logistics service quality and customer satisfaction.; 3) discuss the potential solutions of improvement for cross-border e-commerce logistics service quality were also proposed.

## **2. Problems in cross-border e-commerce logistics**

### **2.1 High logistics cost**

At present, there are two types of logistics for the cross-border e-commerce companies. Figure 2 shows two forms of cross-border e-commerce logistics [6]. One is to build a self-built logistics system to complete the goods delivery, and the other is to cooperate with third-party logistics company. Both of these two ways of logistic need a large amount of money to create a perfect shopping environment to ensure user satisfaction, which increases the total logistics costs. At the same time, due to the different requirements and preferences of users in different country, regulations and systems of each country are also different. In order to meet the requirements of users in different countries, international logistics companies need to adopt a localization strategy according to the characteristics of users, which undoubtedly further increases the logistics cost. In addition, overseas warehouses also have some disadvantages. The procedures for building overseas warehouses are complicated and it requires a lot of manpower and financial resources. Last but not the least, the logistics of overseas warehouses are also relatively cumbersome, requiring inventory management. Meanwhile, inventory backlog and daily processing work also require a lot of resources.

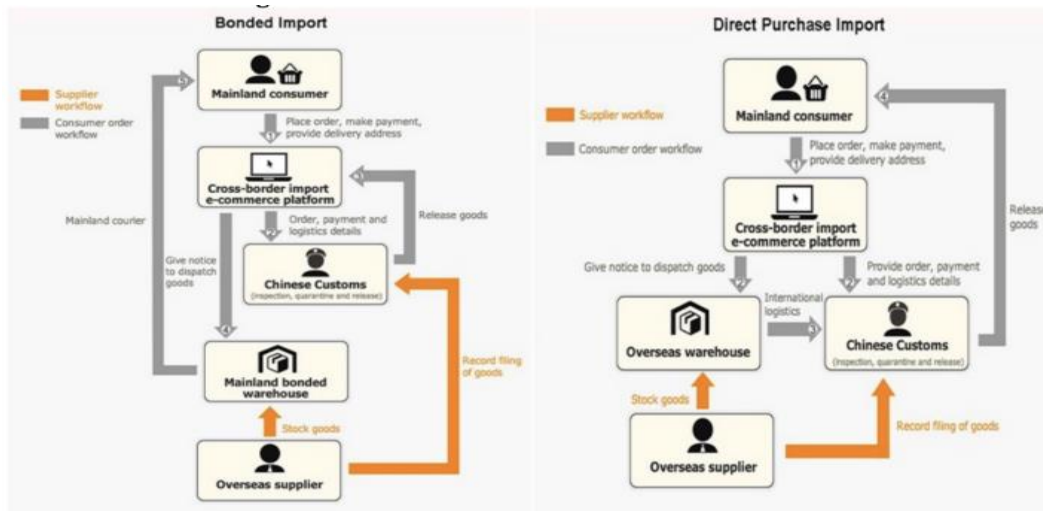


Fig. 2 Two forms of cross-border e-commerce logistics

## 2.2 After-sales problems

Cross-border e-commerce is significantly different from traditional e-commerce transactions, such as payment, settlement, logistics and customs clearance [7]. However, the current system in this field is not perfect, which obstructs the development of cross-border e-commerce in China. Cross-border logistics also has more instability in the process of transportation due to its complex transaction links, and there are factors that may cause customer dissatisfaction. In addition, the complicated transportation process causes a long transportation time. In the process of transportation, there may be insufficient supervision, which leads to the problem of lost and damaged parts. Such problems involve communication and handling in different countries, and the follow-up after-sales problems are more troublesome to solve. As a result, there are many customer complaints. There are also many uncertain factors in cross-border e-commerce logistics. At present, the main problems of cross-border logistics are high cost, weak logistics infrastructure, and difficulty in reverse logistics. There is a significant gap between consumers' expectations and actual service quality perceptions. The satisfaction level is generally not high. The quality of logistics services has become the main factor affecting the consumption decisions of cross-border e-commerce users. Both merchants and cross-border logistics companies need to work together to improve the quality of logistics services.

## 3. Potential solutions of improvement for cross-border e-commerce logistics service quality

The service quality of cross-border e-commerce logistics is including four parts: timeliness, safety, economy, and empathy [8]. Cross-border e-commerce logistics involves many procedures in the entire transmission process, resulting in the complexity and uncertainty of services. The biggest complaint from consumers about the cross-border logistics is the long transit time. After consumers finish the shopping, the goods are still in the status of customs clearance for several days. As a result, the logistics information is in a static state. Therefore, timeliness is very important for the customers. In addition, goods are transported from overseas to China, the goods are easily broken or lost over such a long distance resulting in property damage. At the same time, due to customs inspections and personal information requirement, the redundant procedures of cross-border e-commerce logistics will reduce the willingness to consume of individual consumers. Although most of the goods are shipping free, these costs are usually derived from merchants and commodity, and merchants and some consumers cannot afford excessive logistics costs. Therefore, the shipping fees of logistics services is very important for customers' choice. Especially as the new generation of "post-90s" has become the main force of consumption, the main characteristics of this generation are the pursuit of individuality, advocating fashion, and preferring to buy overseas goods. According to the current

consumption habits of customers, these new generation consumers are also included in the dimension of logistics service quality.

The volume of cross-border business has increased year by year, and the huge volume of goods has brought pressure to logistics companies. According to the current development situation, the future cross-border logistics transactions will further increase. The development of cross-border logistics cannot catch up with the development of cross-border e-commerce, and there are problems such as asymmetry between e-commerce platforms and logistics companies, which makes logistics companies unable to undertake huge business volumes [9]. Therefore, how to simplify the logistics service and improve the overall service level is the priority. Whether it is picking up or delivering goods, the quality of logistics services has become an important issue that plagues the logistics service industry. Logistics service quality is a typical service industry. The entire supply chain serves consumers and businesses from the production of goods to delivery to customers. The service quality of each process determines whether customers are satisfied with the logistics service quality of cross border e-commerce business.

#### 4. Conclusion

According to the classification of product categories, there are two common product categories, i.e., fast-moving consumer goods and luxury goods. Different commodities have different values, and customers pay different costs for different commodities. As a result, they have different expectations and service quality requirements for commodities. Nowadays, consumers can buy expensive commodities through cross-border e-commerce. The price of fast-moving consumables is relatively low, and consumers use them frequently in their lives, so the requirements for the quality of cross-border logistics services may be lower. The luxury is more expensive, and customers pay more attention to the entire transportation process to avoid damage or loss, and the requirements are relatively high. The consumer of these two products is different, and the costs they pay are also different. Naturally, the perception of the quality of logistics services is also different. The potential solutions of improvement for cross-border e-commerce logistics service quality could be simplify the logistics service and improve the overall service level. Whether it is picking up or delivering goods, the quality of logistics services has become an important issue that plagues the logistics service industry, because logistics service quality is a typical service industry. In the future research, we can explore the influence of different dimensions of cross-border logistics service quality on customer satisfaction under the adjustment of product categories. Therefore, it can provide more accurate strategy for cross-border logistics enterprises to improve their service quality and meet different needs of customer expectations.

#### References

- [1] Writer, S. (2022). Diving into the stellar growth of China's luxury cross border e-commerce and duty-free sales. Retail in Asia. Retrieved June 1, 2022, from [https://retailinasia.com/in-telligence/diving-into-the-stellar-growth-of-chinas-luxury-cross-border-e-commerce-and-duty-free-sales/#:~:text=Based%20on%20a%20forecast%20report,US%2447.1%20billion\)%20this%20year.](https://retailinasia.com/in-telligence/diving-into-the-stellar-growth-of-chinas-luxury-cross-border-e-commerce-and-duty-free-sales/#:~:text=Based%20on%20a%20forecast%20report,US%2447.1%20billion)%20this%20year.)
- [2] Ma, Y. (2022). Import of goods to China 2011-2021. <https://www.statista.com/statistics/263646/import-of-goods-to-china/>.
- [3] Liang, Y., Guo, L., Li, J., Zhang, S., & Fei, X. (2021). The Impact of Trade Facilitation on Cross-Border E-Commerce Transactions: Analysis Based on the Marine and Land Cross-Border Logistical Practices between China and Countries along the “Belt and Road”. *Water*, 13(24), 3567.
- [4] Sun, P., & Gu, L. (2021). Optimization of Cross Border E-Commerce Logistics Supervision System Based on Internet of Things Technology. *Complexity*, 2021.
- [5] Veenstra, A. W. (2019). International trade, global supply chains and compliance. In *Operations, Logistics and Supply Chain Management* (pp. 131-161). Springer, Cham.

- [6] Zhou, L., Liu, J., & Lu, Y. (2016). The Main Influencing Factors of Customer Trust in China's Import Cross-Border E-commerce Business Model.
- [7] Zhenhua, Y., & Qiang, S. (2015, September). Problems in cross-border e-commerce export trade in China & countermeasure analysis. In International Conference on Informatization in Education, Management and Business (IEMB 2015).
- [8] Gulc, A. (2020). Determinants of Courier Service Quality in e-Commerce from Customers' Perspective. *Quality Innovation Prosperity*, 24(2), 137-152.
- [9] Mou, J., Cohen, J., Dou, Y., & Zhang, B. (2019). International buyers repurchase intentions in a Chinese cross-border e-commerce platform: a valence framework perspective. *Internet Research*.