



PROBLEMS IN CROSS-BORDER E-COMMERCE AND DEVELOPMENT OF CROSS-BORDER E-COMMERCE PERFORMANCE SCALE

Safiye Gizem SAYDAM

Istanbul Commerce University, Turkey

Mustafa Emre CİVELEK

Istanbul Commerce University, Turkey

Received: April 07, 2022

Accepted: May 25, 2022

Published: June 01, 2022

Abstract:

Digitalization has brought some changes in the commercial field as well as in every field. It has removed the international borders and introduced the concept of electronic commerce, which enables easy trade in the electronic environment. In this study, it is aimed to determine the problems experienced by cross border e-commerce companies and to develop the cross border e-commerce performance scale. In this context, as a first step, the most important problems were determined by interviewing the executive of the companies operating in the sector in order to create the survey questions. In the second stage, a questionnaire was applied to a group of 55 people consisting of middle and senior e-commerce experts. The validity and reliability analyse of the questions forming the questionnaire were made. As a result of the analyses, a scale was developed that measures the performance of cross border e-commerce companies. This scale developed in the field of cross border e-commerce is a first in the world. In the study, cross border e-commerce is examined in general terms and as the main problems in the sector; Problems arising from marketing, logistics, taxation and customs, payment, support and incentives have been identified. The problems arising in the field of cross border e-commerce were examined in detail, and solutions and suggestions were developed to these problems, contributing to the sector.

Keywords:

Cross Border E-commerce, Electronic Commerce, International Trade

1. Introduction

The developing technology, commerce has also started to digitalize. Digitalization in commerce has rapidly developed and become widespread, adding a global dimension to e-commerce. The fact that the borders are removed in international trade, it is less costly than traditional trade, and most importantly, it is easier to compete with competitors in world markets, has revealed a new concept called cross border e-commerce. Cross border e-commerce has enabled businesses, especially SMEs, to access and create a wider market presence by providing cheaper and more efficient distribution channels for their products or services. Especially with the existence of Electronic Trade Customs Declaration provided within the scope of micro export, it has strengthened the competitiveness of enterprises in international markets.

With the widespread use of the Internet and technological developments, electronic commerce emerged and continued to grow rapidly. Thanks to this rapid growth, it has become a competitor of traditional trade today. Electronic commerce provides consumers with opportunities such as speed, time, unlimited space, and geographical location compared to traditional commerce. In addition, it provides users with the opportunity to compare many products and reach affordable products. On the other hand, with e-commerce, there has been an increase in the existing product variety and competition on the basis of price. This situation has made e-commerce attractive for consumers and sellers. On the other hand, cross border e-commerce has become a geographically unlimited trade thanks to the widespread use of the internet, the increase in the use of social media and cultural sharing.

2. Definition Of Cross-Border E-Commerce

Cross border e-commerce is the online shopping of consumers from vendors in different regions or countries and the transmission/receiving of products via cross-border logistics (Ding, 2018). According to Wang, cross border e-commerce is an international e-commerce in which international trade transacts between different countries and delivers goods through cross-border planning and management agreements (Wang, 2014).

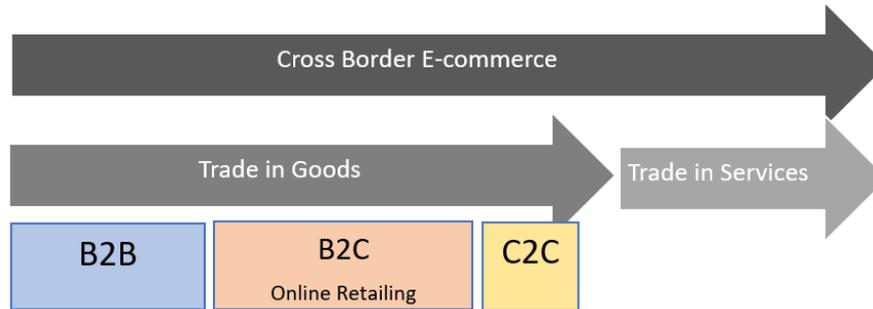


Figure 1: Scope of Cross Border E-commerce (Ding, 2018)

With cross-border e-commerce, businesses market their products or services to consumers or other companies in international markets. They catch important opportunities by using network technologies, especially when selling internationally. In classical export, businesses primarily aim to find business partners or distributors with whom they can work in target markets. After determining the companies with which they will cooperate, they need to go through many stages during the export process. They are exposed to difficult operational processes such as opening export declarations and preparing packing lists. They are responsible for covering the extra costs at every stage. However, it is possible to eliminate these additional costs incurred with micro-export, in other words e-export (Kalah, 2021).

3. Micro Export

Micro export is export transactions within the scope of Electronic Commerce Customs Declaration. The government has streamlined procedures to encourage entrepreneurs to micro-export. Within the scope of international trade activities, in order for the goods that will enter or exit Turkey to pass through the customs procedures, detailed information should be given to the customs administration about these goods and the foreign trade transaction right. This declaration is called customs declaration (Gümrükrehberi, 2018). Electronic Commerce Customs Declaration is the application that is applied in the customs procedures of the goods transported by air or road, postal and fast cargo transportation and that all transactions related to the customs declaration are carried out in electronic environment, without paper. Electronic Commerce Customs Declaration is done on behalf of legally authorized fast cargo operators, buyers and senders (Gümrükrehberi, 2018). Authorized operators create Electronic Commerce Customs Declaration on behalf of sellers through indirect representation over Computerized Customs Activities Systems (BİLGE System). Within the scope of Electronic Commerce Customs Declaration;

- Exportable goods not exceeding 300 kilograms and 15,000 Euros in incoming or outgoing goods,
- Books or similar printed publications for individual use, the value of which does not exceed 150 Euros,
- Goods whose value is up to 1,500 Euros, and whose amount does not exceed 30 kilograms in gross, excluding diplomatic goods and passenger belongings, subject to the free circulation entry regime, which does not constitute a commercial quantity and nature,
- Sample items and models,
- Passenger's personal belongings arriving one month before or three months after his entry into the country,

- It is appropriate to transport printed publications and books sent to or provided by public institutions, museums, libraries, organizations dealing with scientific research or education (Ministry of Trade, Circular No. 2020/25 - Postal and Express Cargo Transportation, 2020).

4. Scale Development Process

The scale development process consists of two phases. First, qualitative research was conducted. First of all, a qualitative study was conducted in order to determine the problems faced by the employees in cross border e-commerce. At this phase, the items of the survey were formed through face-to-face interviews. In the second phase, the formed survey was applied to 55 participants. Firstly, Kaiser-Meyer-Olkin-Measure of Sampling Adequacy and Barlett's Test of Sphericity tests were applied for purification. Then, factor analysis was performed. Cronbach's Alpha was used to determine reliability after factor analysis. As a result, the items in the scale were grouped under 5 dimensions. Sub-dimensions of micro export performance scale; (1) Problems Related to Logistics, (2) Problems Related to Marketing, (3) Problems Related to Taxation and Customs, (4) Problems Related to Support and Incentive, (5) Problems Related to Payment.

5. Construct Validity and Reliability

At the first stage, all the questions were entirely included in the principle component analysis. The Total Variance Explained values of the data are analyzed in Table 1. According to this result, the cross border e-commerce performance scale consists of 6 sub-dimensions and 70,970 percent of the total variance is explained by these sub-dimensions.

Table 1. Cross Border Performance Scale Item Standardized Factor Loads

Variables	Items	Standardized Factor Loads
Problems Related to Logistics	L2104	0.874
	L1801	0.836
	L2003	0.766
	L2205	0.669
	L2306	0.637
Problems Related to Marketing	P0505	0.863
	P0606	0.836
	P0404	0.773
Problems Related to Taxation and	V1004	0.902

Customs	V0802	0.774
	V1206	0.593
Problems Related to Support and Incentive	D2502	0.904
	D2401	0.796
Problems Related to Payment	O1401	0.762
	O1502	0.622

p<0.05 for all items

Table 1 shows that items L2104, L1801, L2003, L2205 and L2203 constitute the first factor. The first factor consists of 5 items with factor loads between ,874 and ,637. Items P0606, P0505 and P0404 constitute the second factor. The second factor consists of 3 items with factor loads between ,836 and ,773. Items V1004, V0802, V1206 seem to constitute the third factor. The third factor consists of 3 items with factor loads between .902 and .593. Items D2502 and D2401 constitute the fourth factor. The fourth factor has factor loadings of .904 and .796. Items O1401 and O1502 constitute the fifth factor. The fifth factor has factor loadings of .762 and .622.

Table 1: Statements in Cross Border E-commerce Performance Scale

Items		
L2104	The fact that the products do not reach the customer in accordance with the delivery time affects our cross-border e-commerce performance negatively.	
L1801	Long shipping processes negatively affect our cross-border e-commerce.	
L2205	The fact that the products do not reach the customer as a result of problems arising from the customer or the address system of the countries affects our cross-border e-commerce negatively.	Problems Related to Logistics
L2003	Incorrect or damaged products due to cargo affect our cross-border e-commerce negatively when they reach the customer.	
L2306	The high costs at airports affect our cross-border e-commerce negatively.	
P0505	The fact that the cultures of the countries to be marketed are different negatively affects the cross-border e-commerce	

Problems in Cross-Border E-Commerce And Development of Cross-Border E-Commerce Performance Scale

	performance.	
P0606	The different languages spoken in the countries to be marketed adversely affect our cross-border e-commerce performance.	Problems Related to Marketing
P0404	The costs of international marketing methods (social media ads, Google ads, etc.) affect our cross-border e-commerce negatively.	
V1004	Problems in customs taxation of the returned product after its delivery negatively affect our cross-border e-commerce.	
V0802	The problems experienced in the return of the Electronic Commerce Customs Declaration given as a result of product return affect our cross border e-commerce negatively.	Problems Related to Taxation and Customs
V1206	The fact that there is an additional withholding tax on internet advertisements affects our cross-border e-commerce negatively.	
D2502	The inadequacy of government support in the field of logistics affects our cross-border e-commerce negatively. (Freight support, warehousing support etc.)	Problems Related to Support and Incentive
D2401	Insufficient international advertising support affects our cross-border e-commerce negatively.	
O1401	Exchange rate fluctuations and non-use of local currency adversely affect our cross-border e-commerce sales.	Problems Related to Payment
O1502	The fact that PayPal is not used in Turkey affects our cross-border e-commerce negatively.	

Table 3 shows Statements in Cross Border E-commerce Performance Scale. Alpha model will be used while performing the reliability analysis in the study. After the factor analysis of the scale, the reliability of each sub-dimension (factor) should be determined numerically. Cronbach's Alpha is the fit value depending on the correlation between the questions. This value shows the total reliability level of the questions under the factor. If the Cronbach's Alpha value is 0.70 and above, the scale is considered reliable. However, when the number of questions is low, this limit can be accepted as 0.60 and above (Sipahi, Yurtkoru, & Çinko, 2008).

6. Discussions & Solutions Suggestions

6.1. Problems Related to Marketing

The fact that there are too many goods and competitors in the international market makes competition in cross border e-commerce difficult. In this competitive environment, the existence of businesses and the ability to promote themselves have become their top priority (Güler, 2010). First of all, before businesses enter a foreign market, they need to have extensive knowledge about that market. However, at this phase, consumers living in different countries have different consumption habits due to different cultures. Businesses state that their inability to access sufficient information about foreign markets negatively affects their cross border e-commerce performance. In addition, competing with brands that have entered the market before and reached a certain market share in the market has become one of the other challenges for businesses.

After conducting market research, businesses start advertising for the target country. In cross border e-commerce, online marketing techniques such as social media are used rather than classical advertisements. Especially, techniques such as social media ads, Google ads, e-mail marketing are frequently used for cross border e-commerce companies (Kumah, 2017). Many businesses face the problem of paying too many taxes and commissions for social media ads. Recently, there has been an increase in the consumption of environmentally friendly and sustainable products around the world. However, the marketing of sustainable products brings many problems for businesses. The use of recyclable packaging, clean energy and environmentally friendly logistics systems bring additional costs for companies (Chen L. F., 2019). Firms should make investments and marketing costs accordingly in order to bestow these additional costs.

6.2. Problems Related to Taxation and Customs

Among the taxes that micro-export companies have to pay are SCT, VAT, local taxes and taxes belonging to the customs of the countries they export to (TEPAV, 2014). Taxes paid in Turkey are refunded under certain conditions within the scope of ETGB. The emergence of different amounts of customs taxes in cross border e-commerce countries negatively affects the performance of cross border e-commerce enterprises.

One of the problems in cross border e-commerce is the lack of permanent personnel who are competent in customs processes. The e-export legislation is a difficult and detailed one, and there are operational problems for the personnel who do not have knowledge of this information. It is of great importance in terms of micro-exports to train well-equipped personnel who have knowledge of the legislation in this field.

6.3. Problems Related to Payment

There are many differences between the payment methods used in cross border e-commerce and traditional methods. Customers who want to shop across borders do not have a preferred payment system on the site where they will shop, which reduces trust in that site and customers prefer not to shop. Businesses that want to make cross-border sales must use international payment methods. However, the inability to use an internationally valid payment method such as PayPal in Turkey significantly affects the competition of businesses in the international market.

Various countries have enacted too many laws regarding payment methods. It is a problem for businesses that there are too many legislative differences for payment systems. For example, in Brazil, the use of credit cards is prohibited outside the countries they belong to, and the validity of electronic signatures is not recognized in China (TEPAV, 2014). For such reasons, electronic wallets are used in most countries. However, by using electronic wallets, they may incur losses in exchange rate fluctuations. In addition, using the currency of different countries instead of the local currency can cause problems for businesses.

6.4. Problems Related to Logistics

Logistics is considered as one of the important and difficult stages in e-export. According to the study conducted with online shoppers in the USA, 90% of the participants stated that if their orders are delivered on time, they can shop from the same seller again and they can spend 50% more in their second shopping than in the first (Anbar, 2001).

In cross border e-commerce logistics, cargo processes can be long due to the fact that products are sent to cross-border regions. At the same time, logistics costs can be very high due to the long distances of the products. Today,

cross-border delivery times can take less than 24 hours by air. Among the expectations of e-export customers is that their orders arrive quickly, completely and undamaged.

The fact that the address systems of the countries are different, especially in the Middle East countries, increases the return rates due to the different address systems and difficult availability (Nart & Isayev, 2019). The increase in return rates causes an additional cost and time loss for businesses.

6.5. Problems Related to Support and Incentive

In cross border e-commerce, there are some deficiencies as well as supports and incentives by the state and other public institutions. Inadequate advertising support for companies that want to do cross border e-commerce in foreign markets causes problems for businesses.

Government incentives are needed for the high costs in logistics operations and additional costs at airports and in the country where the product is shipped.

The fact that the call center costs are not supported by the state, which is one of the important stages of ensuring customer loyalty and brand awareness after the sale of the product, affects cross border e-commerce negatively..

7. Conclusion

The process of electronically purchasing the products or services they need from international markets by businesses or individuals is called cross border e-commerce. While electronic exports provide individuals with the opportunity to shop quickly and easily from international electronic sites or marketplaces, it also increases their competitiveness by providing businesses with the opportunity to reach new markets in a fast, less costly manner. However, since cross border e-commerce are not fully developed compared to traditional exports and most countries cannot adapt to cross border e-commerce yet, it causes some problems. In the study, the problems in the cross-border e-commerce activities of the companies were evaluated in detail. The data obtained from the answers of 55 people participating in the study were analyzed and it was aimed to develop a cross border e-commerce performance scale. According to the findings, it has been determined that companies face many problems in cross border e-commerce. If these problems are resolved, companies will be able to continue their cross border e-commerce operations more effectively and easily. It is necessary to solve the problems, to make various investments and to have incentives from the government. In this scale development study, Cross border e-commerce performance scale was gathered under 5 dimensions. Logistics related problems arise until the products leave the warehouse and reach the customer. Problems arising from payment such as the use of different payment methods by countries and different currencies cause problems arising from payment. Many factors such as the cost of marketing activities cause marketing problems. Tax and customs-related problems, which may cause additional costs and cause problems for customers, force companies. All things considered; this is a new scale development study that can be considered a limitation of the study. As this is a newly developed scale, it needs to be tested in different samples and industries. The more the scale is tested and verified, the more it will contribute to the literature.

References

- Ding, F. (2018). Developing E-commerce Logistics in Cross-border Relation. Berlin: Developing E-commerce Logistics in Cross-border Relation.
- Wang, J. (2014). Opportunities and Challenges of International e-Commerce in the Pilot Areas of China. *International Journal of Marketing Studies*, 6(6), 141-142.
- Kalah, G. (2021). Türkiye'de E-Ticaret ve İşletmelerin Uluslararası Rekabetçiliğini Geliştirmek için Kullandıkları İhracat Odaklı E-Ticaret Uygulamaları. Kayseri: Nuh Naci Yazgan Üniversitesi Social Science Institute.
- Gümrük Rehberi, g. (2018, 11 23). gümrükrehberi.gov.tr. 09 26, 2021 www.gumrukrehberi.gov.tr: <https://gumrukrehberi.gov.tr/sayfa/etgb-elektronik-ticaret-g%C3%BCmr%C3%BCk-beyannamesi-nedir> from received.
- Turkey Trade Minister. (2020, 10 22). 2020/25 Sayılı Genelge - Posta ve Hızlı Kargo Taşımacılığı. 09 26, 2021 Gümrük Müşavirleri Derneği: https://www.igmd.org.tr/202025-sayili-genelge-posta-ve-hizli-kargo-tasimaciligi_haberi from received.
- Sipahi, B., Yurtkoru, E., & Çinko, M. (2008). Sosyal Bilimlerde SPSS'le Veri Analizi (2nd edition.). İstanbul: Beta.

- Güler, E. (2010). İşletmelerin Yabancı Pazarlara Girişinde Elektronik Ticaret ve Endüstriyel Pazar (B2B) Uygulamaları. İzmir: Dokuz Eylül University Social Science Institute
- Kumah, M. K. (2017). The Role of Social Media as a Platform for Ecommerce, How Social Media is Gradually Becoming a Major Role in E-commerce. Vaasan Ammattikorkeakoulu University of Applied Sciences International Business.
- Chen, L. F. (2019). Green Certification, E-commerce, and Low-carbon Economy. Environmental Science and Pollution Research, 26(18), 17965–17973.
- TEPAV. (2014). Türkiye'de E-ihracat Fırsatlar ve Sorunlar. İstanbul: Türkiye Ekonomi Politikaları Araştırma Vakfı.
- Anbar, A. (2001). E-Ticarette Karşılaşılan Sorunlar ve Çözüm Önerileri. Akdeniz İ.İ.B.F. Journal, 18-32.
- Nart, Ö., & Isayev, O. (2019). A'dan Z'ye E-İhracat (1st edition b.). İstanbul: Ceres Publications.