

A Study of the Effects of Marketing Competency Factors on the Export Performance of Korean SMEs on Global e-Commerce Platforms

Dong-Su Kim¹, **Yen-Yoo You**^{* 2, 1, 2} Dept. of Smart Convergence Consulting,
Hansung University, ks013, Korea, **Email:** 1passdskim@naver.com
***Corresponding Author Email:** orthreey0818@hansung.ac.kr*, mobile Phone:
+82-010-4697-3931

Many marketing performance studies have focused on e-commerce exports, which have been growing rapidly in recent years, but there are few studies on marketing competency factors based on the type of online shopping malls. The purpose of this study is to study the effect of marketing capability factors on export performance. The research subjects are power sellers who are subscribed to Go-global, KTNET's e-commerce export customs clearance service. The survey consisted of marketing competencies and exportability-related items, and was measured using the Likert five-point scale. For the descriptive statistical analysis, exploratory factor analysis, reliability analysis, correlation analysis, and regression analysis were performed using the SPSS 22 statistical package. Looking at the results of this study, the p values of measured independent variables, such as product factors, logistics factors and customer factors, were measured at the .000, .008 and .000 levels respectively, and the significance was verified. Second, marketing capabilities are found to have a positive impact on export performance. Using the beta value of the standardization factor, the relative effect of the three independent variables on the dependent variables of export performance was shown to be the product (.376), followed by the customer (.294) and logistics (.183). Unlike other studies, logistics competence is of low importance, which is not due to the importance of logistics factors, but rather related to the use of advanced logistics services by the open market. Third, marketing capabilities have been shown to affect the financial and non-financial performance of open market operators. For the open market entry shopping malls in this study, it was found that marketing capabilities were the most influential in terms of non-financial performance among export performance on increased purchases by existing customers. Although generalization of the results of this study is limited, as it only targets analysis of marketing performance factors in open-market shopping malls, it provides a basis for the necessary marketing mix to power sellers and the policy direction for e-commerce development.

Key words: *business-to-consumer (B2C); online export; open market; Korean Wave; online marketing; marketing factors; customer satisfaction*

Introduction

The recent global economic recession strengthened levels of protectionism and sharp trade disputes between the United States and China have exacerbated Korea's trade environment, which is highly dependent on imports and exports. Under these circumstances, e-commerce reverse fastball is in the spotlight as a new export method. In March 2019, according to a government official announcement, Korea's e-commerce exports in 2018 amounted to about \$3.2 billion, surpassing the amount of e-commerce imports (about \$2.7 billion), and the number of cases in general trade was increased due to the increase in business-to-consumer (B2C) transactions. However, while various studies exist on traditional trade methods in Korea, there is a lack of systematic research on reverse e-commerce. Therefore, this study attempts to empirically analyse the effect of marketing competency factors on export performance in major overseas open markets, such as Amazon, ebay, Rakuten and Taobao.

Materials and Methods

B2C Online Export

While e-commerce is becoming more common, B2C transactions are falling short of B2B in size, but are growing faster. With the advent of global open markets such as Amazon and ebay, online B2C transactions between countries have begun to be recognized as a new type of import and export, and governments are also pushing B2C exports as a core trading strategy. Korea's interest in B2C overseas direct sales is increasing thanks to the world's best IT infrastructure, proximity to China, and the improvement of the image of the Korean Wave (Chang, Park and Nam, 2016). Cross-border e-commerce, which accounts for 14 per cent of all trade in 2013, is expected to account for 40 per cent by 2020 (Kwak & Kim, 2016).

Open market

The different studies suggest that the internet open market is a virtual market where many sellers and buyers can conduct transactions online. The internet-based open market minimizes the inefficiency of market transactions and maximizes the efficiency of resource allocation. Claimed to have a stimulating effect (Kim, 2016), the explosive growth of cross-border e-commerce since 2010 has led to the rapid growth of China's e-commerce platform and policy support, the development of online search technology centres on developed markets such as the United States and Europe, the efficiency of international logistics systems and the international market for safe use by foreign consumers. This is due to the emergence of payment systems and the international e-commerce platform (Kim & Kim, 2017). As shown in Figure 1, the open-market entry type has the advantage of being easy to commence and manage

the site, and take advantage of the open market's high brand awareness. On the other hand, there is always the risk of needing to contact consumers through the open market, and having to ship, refund and so on. In addition, entry costs and sales fees are incurred. Therefore, the company's profitability should be comprehensively considered to determine whether or not to get into this virtual mall (Lim & Hong, 2017).

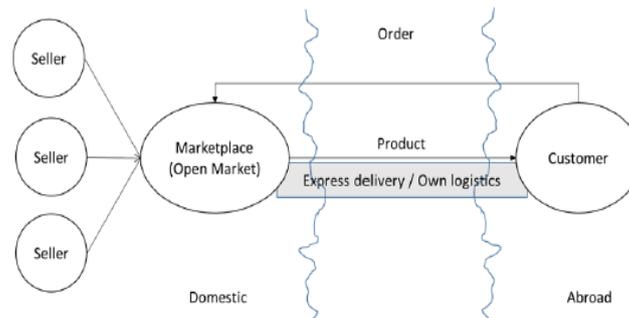


Figure 1. Open market model

Korean Wave

As the Korean Wave spreads, foreigners' interest in and demand for domestic brands and products are increasing. In particular, South-East Asian consumers, such as those in China and Indonesia, are interested in Korean products (Kim, 2017). China has the leading share of South Korea's e-commerce exports, mainly concentrated on consumer goods, clothing (94.7%) and beauty fashion products (70%). This means that China is an essential element of Korea's e-commerce exports, and its importance is expected to continue to increase in the future, which will push Korea's narrow domestic market size even further (Kim, 2016).

Online Marketing

Online overseas marketing refers to a series of processes, such as trading goods and services in overseas markets using the internet. For example, marketing activities include building electronic catalogues or home pages on the internet, providing sellers with opportunities to promote products and consult with buyers, and providing buyers with opportunities to buy products. For small and medium-sized exporters, social networking service (SNS) marketing, which enables two-way communication, real-time diverse information, instant customer response and effective customer relationship management (CRM) at relatively low operating costs, is becoming increasingly important as an overseas marketing tool (Ha & Shim, 2017). Logistics is becoming more important in e-commerce marketing, and various partnerships are needed for more efficient logistics. In fact, strategic alliances are being developed with Korean logistics companies to facilitate e-commerce between Korea and ASEAN, and utilisation of integrated electronic logistics platform between Korea and ASEAN is being proposed (Hong, Han & Shim, 2018).

Customer Satisfaction

Consumers make a purchase decision and satisfaction as the price and brand value are met at the same time. This satisfaction has the same positive effect on foreign direct purchase (Lee & Park, 2015). In addition, the low price is more important than the purchase of innovative products, and the quality of the product and the anxiety about delivery due to the overseas delivery act as a deterrent to the foreign direct purchase (Koo, Kim & Kim, 2016) The product to be sold is in a local state – that is, localization is required – and for this it is necessary to understand the exact characteristics of the product to be exported overseas. If the product is not well suited for online sales, it is difficult to achieve its results (Lee & Park, 2015). The ultimate goal of marketing competence is customer satisfaction, and Howard and Sheth (1969) note that customer satisfaction is perceived as being adequately or improperly compensated for by consumer sacrifice as a result of consumption experience (Liu, Jeong & Jeong, 2015).

2.6. The Research Model and Hypothesis

2.6.1. Research Model

The purpose of this study is to investigate the effect of marketing ability factors of overseas reverse shopping malls on export performance by reviewing previous studies and interviewing experts. As factors of marketing competency, three factors – product factors, logistics factors, and customer factors – presented in research models such as those of Chang and Nam (2016) were selected as independent variables. First, for product related sub-items, we used quality, price, seller's trust, product brand and localization. For logistics-related items, we set shipping cost, delivery period, return processing and packing method, and for customer-related items, we set promotion/marketing, convenience of payment, product description, activation and customer response. On the other hand, financial and non-financial performances are indicators of the influence factors of these independent variables on export performance. For financial indicators, we used net profit growth (Khadafi, Heikal, & Ummah, 2014), sales growth rate (Lages, Jap, & Griffith, 2008), and for non-financial indicators, we used increase in new customers and repurchase by existing customers (Morgan, Katsikeas, & Vorhies, 2012). The research model for this study is shown in Figure 2.

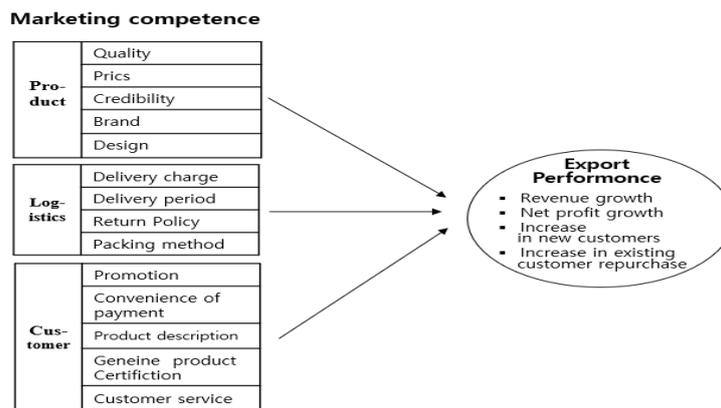


Figure 2. Research model

Research Hypothesis

As a result of the previous study, the more competitive the marketing competency of the shopping mall, the product-related competency factor, the more the logistics-related competency factor and the customer-related competency factor have a positive effect on the export performance. The analysis was found also that these factors have a significant impact on revenue growth, net profit growth, new customer growth and repurchase by existing customers. Therefore, based on these results, the following hypotheses were established:

- H1 Higher product-related capabilities will have a positive impact on export performance.
- H2 Higher logistics-related capabilities will have a positive impact on export performance.
- H3 Higher customer-related competencies will have a positive impact on export performance.

Operational Definition of Variables

So the measurement items for each evaluation item correspond to the research objectives, the operational definitions of each variable are summarized in Table 1.

Table 1. Operational Definition of Variables

Evaluation items	Measurement variables	Operational definition
Product competence	Quality	The degree of product characteristics and performance that can satisfy consumers
	Price	Economic value paid by consumers for goods purchased
	Credibility	The degree of trust the consumer has with the seller
	Brand	Overall impressions and characteristics that come to mind when consumers think about a product
	Design	Product form, color, decoration and practicality and aesthetic expression
Logistics competence	Delivery charge	Any packaging costs, duties, and shipping costs before the product is delivered to the consumer
	Delivery period	Duration from consumer order date to final delivery date
	Return processing	Degree of process convenience such as return, exchange or refund due to defects, remorse, dissatisfaction
	Packing method	Process to prevent product damage and improve seller's trust
Customer competence	Promotion	Processes such as banners, buyer reviews, coupons, etc.
	Payment convenience	Confidence in introducing various simple payments and preventing personal information leakage
	Product description	Seller confidence level with accurate local language description
	Genuine Product certification	The degree to which the product, such as a genuine mark, is genuine in Korea
	Customer service	Customer satisfaction process through prompt Q&A process
Export performance	Revenue growth	Sum of amount sold over time as financial performance indicator
	Net profit growth	Sum of production and sales, administrative expenses, and taxes
	Increase in new customers	Increase in purchase of new customers
	Increase in existing customer repurchase	Increase in repurchase of existing customers

Results and Discussion

Empirical Analysis Results

Descriptive Statistical Analysis

The number of samples used in this study totaled 173, and a frequency analysis was conducted to identify the general characteristics of the samples. The results showed that 76.3 per cent (132)

were male and 23.4 per cent (41) were female. The highest age group was aged in their fifties (31.2 per cent, or 54), followed by 28.3 per cent (49) in their forties. The position of deputy general manager and general manager was the highest with 68.2 per cent (118), followed by assistant manager with 16.2 per cent (28).

Exploratory Factor Analysis and Reliability Analysis

This study performed exploratory factor analysis to test the validity of individual measurement variables. Principal component analysis was used, and the Varimax rotation method of orthogonal rotation was used to maintain the independence between factors. Eigen value, which represents the degree to which each factor can explain the total variance, was based on 1 or more. KMO measures were used to measure the fit of the measured variables, and Bartlett's spherical test was performed to determine the correlation significance between the variables. As a result, the KMO value for factor analysis of this study was 0.905, which is more than 0.7, which is a general level. Therefore, the measured variables were proved to be suitable for factor analysis. The correlation of factors was measured to be significant. Reliability analysis analyzed Cronbach's alpha coefficient for internal consistency reliability to secure homogeneity between measured variables obtained from the exploratory factor analysis. As a result of reliability analysis, Cronbach's alpha coefficient of all measurement variables is over 0.6, which is a general level. The summary of exploratory factor analysis and reliability analysis results are as shown in Table 2.

Table 2: Exploratory factor analysis and Reliability analysis

Measurement item	Exploratory factor analysis (Intensive validity & Discriminant validity)				Commonality	Reliability analysis
	Customer competence	Product competence	Export performance	Logistics competence		Cronbach's alpha
Customer service	.825	.207	.188	.141	.779	.891
Promotion	.800	.006	.135	.240	.715	
Payment convenience	.789	.197	.164	.135	.707	
Genuine product certification	.789	.150	.227	.148	.718	
Product description	.727	.218	.195	.058	.617	
Price	.267	.779	.227	.140	.749	.867
Quality	.164	.739	.246	.179	.665	
Design	.170	.736	.229	.090	.631	
Brand	.058	.733	.157	.282	.645	

Credibility	.142	.718	.213	.200	.620	
Increase in existing customer repurchase	.192	.337	.784	.139	.784	.868
Revenue growth	.341	.250	.740	.089	.733	
Net profit growth	.135	.180	.727	.217	.627	
Increase in new customers	.319	.324	.708	.165	.735	
Delivery charge	.102	.122	.169	.795	.686	.773
Return processing	.206	.283	-.035	.695	.607	
Delivery period	.245	.179	.355	.618	.600	
Packing method	.185	.370	.380	.589	.662	
Eigen-value	3.664	3.476	2.896	2.246		
% of Variance	20.357	19.310	16.090	12.479		
% of Accumulated	20.357	39.667	55.757	68.235		
Kaiser-Meyer-Olkin Sample Fit						.905
Bartlett's unit matrix test	Approximate Chi Square	1783.114	df	153.000	p-value	0.000

Correlation analysis

As a result of exploratory factor analysis in this study, correlation was obtained to find the degree of directionality and denseness among the variables of the calculated components through averaging the measured variables with homogeneity obtained through reliability analysis and homogeneity through reliability analysis. Relationship analysis was conducted. The correlation between variables showed that export performance was highly correlated with product factor of 0.617 **, followed by a Pearson correlation coefficient with a customer factor of 0.549 **. As a result of correlation analysis of all variables, all correlations were statistically significant ($r \geq .05$). The summary of correlation analysis results is as shown in Table 3.

Table 3. Summary of Correlation Analysis Results

Constructs	N	Mean	Standard Deviation	Product	Logistics	Customer	Export performance
Customer competence	173	4.0116	.63857	1	.581**	.450**	.617**
Logistics competence	173	3.7139	.68236	.581**	1	.485**	.549**
Customer competence	173	3.5642	.63235	.450**	.485**	1	.554**
Export performance	173	3.7673	.66559	.617**	.549**	.554**	1

** The correlation is significant at the .01 level (both sides).

Test of Hypothesis

In order to test the hypotheses, SPSS ver.22 statistical package was analyzed. There was no multicollinearity between them. Marketing competence has a positive effect on export performance. Hypotheses H1, H2, and H3 were adopted, and risk management had the greatest impact of .376 ***, followed by institutional improvements of .294 ***. The explanation of the effect of marketing capability on export performance is 49 per cent, explained by adjusted R² value. Table 4 provides a summary of the hypothesis results between marketing capability and export performance.

Table 4. Multiple regression analysis

Constructs	Nonstandard coefficient	Standard coefficient	t	p-value	Collinearity diagnostics	Result
	B	β			VIF	
(constant)	.414	---	1.581	.116	---	
Product competence	.392	.376	5.453	.000	1.598	Accept
Customer competence	.183	.188	2.669	.008	1.667	Accept
Logistics competence	.309	.294	4.575	.000	1.386	Accept

R²= .498, Adjusted R²= .489, F= 55.813(p<.001), Durbin-Watson = 2.125

Dependent variable: Export performance

Conclusion

The recent development of digital technology, represented by the Fourth Industrial Revolution, is spreading a new paradigm of e-commerce trade in addition to traditional trade methods. This study comprehensively examined the marketing competency factors of sellers that affect the performance improvement of export companies operating in open markets in the rapidly developing global e-commerce market. As evidenced by the research, it is necessary to reinforce various promotions and communication by utilizing SNS and YouTube for sales



promotion and securing competitive products for export performance. In addition, in order to satisfy customers, it is necessary to secure differentiation from competitors in the fields of accurate product description, payment convenience and genuine product certification. In addition, it was found that the logistics competence is more necessary for the open market, which has the characteristics of non-face-to-face transactions. Meanwhile, open market operators pointed out that the government should pursue customized export support policies, such as operating a product history system, improving the customs clearance system, and increasing financial support, in consideration of market characteristics. On the other hand, since this study was focused only on open market operators, it cannot be generalized to all online shopping mall companies. The government exempts formal export customs declarations if certain criteria are met to expand e-commerce exports; however, such an exemption is missing in many e-commerce statistics. If the statistics were more consistent in the future, more research would be possible.

Acknowledgment

This research was supported by the research fund of the Graduate School of Hansung University.

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