



Original Article

Influencing Factors of Cross-border E-commerce Consumer Purchase Intention in Hanoi

Tran Le Ngan, Tran Thi Diem Quynh, Pham Phuong Chau,
Ly Truc Quynh, Vu Thi Thuy Hang*

Thuongmai University, No. 79 Ho Tung Mau Street, Cau Giay District, Hanoi, Vietnam

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Abstract: The study was conducted to determine factors in product reliability that could influence cross-border e-commerce consumer purchase intention in Hanoi, approached by the level of trust with a view to improving the efficiency of these vendors. The article builds a research model based on an empirical one for purchase intention on foreign websites, surveying consumers living and working in Hanoi. Data is processed by Smart PLS 4.0 software. Research results show that cross-border online shopping intention of consumers in Hanoi is influenced by the level trust of the vendors. A few solutions are recommended including improving platform design, platform policy, vendor reputation, and building an effective cross-border e-commerce business model. The findings of this study will provide useful insights into cross-border online shopping and a good resource for those interested in the topic.

Keywords: Cross-border e-commerce, reliability, consumer purchase intention, Hanoi.

1. Introduction

According to a report by Bain & Company (2022), 81% of consumers said they had changed their online shopping habits since the onset of the pandemic; 92% of them affirmed that they would continue this new behavior in the long future, whether there would be an epidemic or not. According to a report of Vecom (2022), the number of new online consumers continued to grow and a large number of buyers had become smart consumers and were more proficient in

online shopping skills, and a significant number of consumers had even prioritized online shopping over traditional purchases. Internet users participating in online shopping increased from 62% in 2019 to 74.8% in 2022 (iDEA, 2022). According to the report, the items of most interest included clothing, shoes, cosmetics, appliances and household appliances, technology and electronics, books, flowers, gifts, food, and services such as flight bookings, tour bookings, etc. According to the We Are Social and Meltwater (2022), the percentage of internet

* Corresponding author

E-mail address: hangtmdt@tmu.edu.vn
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users shopping weekly in Vietnam ranked 11th (58.2%), on par with the global average and higher than the US, Australia, France, Japan, and Germany but lower than Thailand, Malaysia, South Korea, China, Singapore, Philippines, India, Indonesia, and the UK.

In recent years, the business model globally has continued to change significantly with the introduction and strong development of e-commerce. E-commerce has made commercial activities of businesses go beyond the country and become a global activity, developing into cross-border e-commerce (CBEC). The development of e-commerce proves inevitable in the context of global integration and is in line with the transformation of the digital economy in Vietnam today. The percentage of consumers who shop online on international websites in 2020 reached 49% and up to 56% in 2021, which may be due to changes in shopping habits, infrastructure, and the development of information technology with support from the Free Trade Agreements (FTAs), etc. Based on consumers' changing shopping habits, convenient banking infrastructure, and cooperation between many companies in the region coming to Southeast Asia, e-commerce industry in Vietnam will continue to develop and grow strongly, becoming a potential channel to help Vietnamese businesses successfully bring Vietnamese goods to the international market.

Hanoi is one of the two economic centers of Vietnam with a consumer market of more than 8 million people. It is considered one of the most attractive markets for investors and businesses in the field of commerce in general and e-commerce in particular. In the area of Hanoi city, there are many forms of online buying and selling; such as group buying, C2C, B2B, B2C, and social networks like Facebook, Instagram, or Zalo. According to the e-Government Portal, 70% of all consumers in Hanoi use e-commerce. According to many surveys, many Hanoian consumers choose domestic online shopping or cross-border online shopping because of convenience, like lowered costs, product designs, or product diversity. Hanoi targets about 45% of the population to participate in online shopping and B2C e-commerce sales account for 8% of the total retail sales of consumer goods and services in the area (Plan 72/KH-UBND on E-commerce Development in

2021, 2021). The city's central tasks include building management policies and developing e-commerce activities.

Based on the Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM), the authors studied the factors affecting the degree of reliability, and in turn consumers' intention to purchase e-commerce in Hanoi, thereby enriching the literature on GBM. From there, the research topic aims to recommend some solutions to improve the efficiency of attracting Hanoi users to CBEC.

2. Literature review

2.1. Theoretical foundations

CBEC is international e-commerce in which international commerce is transacted between different countries and delivered through cross-border planning and management arrangements. It is the exchange of goods and services through an e-commerce channel where buyers and sellers are located in two different countries (Deng & Wang, 2016). In essence, e-commerce in general, or TMTC in particular, are similar because both are transactions of buying and selling of goods and services completely through electronic means and telecommunications networks. Business activities include sales, marketing, payment to procurement, production, training, and coordination of activities with suppliers, partners, customers, etc. CBEC refers to shopping transactions when users buy goods internationally through the Internet.

CBEC has five main characteristics: borderless, diversified, useful, quick, and convenient. First, being borderless, BCG is the worldwide procurement of goods without restricting the consumer's shopping area. Second, diversity means that many factors motivate consumers to participate in CBEC activities because they can search for products with a larger range of prices and can purchase directly from the country of manufacture, where the quality of the product is guaranteed (Lin et al., 2018). Third, usefulness helps customers choose the amount to spend. With the publication of prices on trading floors, customers can easily compare and contrast prices between stores. Finally, with the speed and convenience

of shopping, consumers can save time and effort and shop anytime and anywhere with a wide choice of items and models.

Although there are many opportunities with commercial activities, CBG still has some limitations. The limitations of cross-border online shopping mainly come from incomplete legal policies, such as: (1) Limitation on payment - fraud is the biggest obstacle in carrying out the operation of multinational e-commerce. Credit card fraud and other illegal acts take advantage of the many loopholes in controlling payments on the internet; (2) Logistics - Logistics and reverse logistics are big challenges for many businesses due to high transportation costs, complicated import and export taxes and rules, and risks due to external factors like natural disasters or epidemics that could lead to time delays; (3) Regulations and laws - Taxes, permits, and customs clearance are documents that every cross-border business must be familiar with. Lack of understanding of the regulations and laws related to goods standards, delivery methods, and payment will inevitably lead to risks when transporting goods to another country. Furthermore, there are also certain issues with delivery, security, web interface, and exchange rate, etc. (Lin & et al., 2018).

CBEC has 5 main forms, including official brand, official brand authorization, unofficial brand authorization (not authorized), indirect shipping, and seller skip shipping (Drop-shipping). (1) The official brand is both a manufacturer and supplier of products on a CBEC platform and directly conducts commercial transactions with customers; (2) Official trademark authorization allows a business or an individual to sell and be officially franchised by that brand. With this form, the official brand is still responsible for the goods and the franchisee only performs the function of an intermediary to distribute the product. With the official brand or official brand authorization, the seller must build a new product and obtain the product's ASIN code; (3) Unofficial Trademark Authorization (not authorized) allows a business or individual to purchase products from a manufacturer or supplier and sell them below retail price. Unlike the official brand (Private Label), when conducting this form (Hijack), the seller can use an existing ASIN code without having to build a new

product; (4) Indirect shipping allows merchants to manufacture or purchase products and send them to the platform provider for storage and delivery to the customer. Some advantages of this form include: optimizing costs, ensuring understanding of product requirements, accessing a large potential customer file, and completing orders for multi-channel e-commerce. However, there are still some disadvantages, such as the lack of management rights, strict regulations, difficulties, high costs, and competition; (5) Drop-shipping is a business model where businesses do not stock goods in their warehouse. Instead, they buy products from third-party vendors and then ship them directly to consumers.

2.2. Research framework

Based on the signaling theory and the model based on the perceived value of consumers, Huang and Chang (2019) proposed a new theory called attachment theory. By comparing and analyzing the factors and scales of factors in the theoretical model of research as a theoretical foundation for analyzing purchase intention on foreign websites, Huang and Chang (2019) built the attachment theory and proved that this model would be optimal in explaining purchase intention on foreign websites.

The scale model of factors affecting purchase intention on foreign websites includes 2 factors: perceived value and perceived reliability, along with impact variables such as legal framework and international compliance.

Huang and Chang (2019) proposed that trust is a key success factor for e-commerce and is considered a decisive factor when formulating an e-commerce strategy. It affects one's attitude, which in turn affects behavioral intentions. The scale model of Perceived Reliability and Perceived Value helps managers understand the determinants of consumer buying behavior on foreign websites. From there, they make adjustments to meet consumer expectations. Huang and Chang (2019) proved this model to be optimal in explaining purchase intention on foreign websites. Therefore, the research team used this model as the background theory for cross-border online shopping intention.

Perceived reliability is understood as consumers' trust in suppliers and perceived

benefits about products. In the study results, Huang and Chang (2019) asserted that the legal framework, website design quality, seller reputation, website terms, country compliance, avoidance, and anxiety of individuals and customers have an impact on the degree of trustworthiness that influences purchase intention on international websites. In this study, the legal framework and national compliance were affected by the regulatory variable of past transactions. Consumer confidence was derived from the rigor of the platform provider's regulatory framework, the reputation or assurances that came from the product providers, and the ease of use of the platform also created. Because of the limited time of the study, the perceived value factored together with the past transaction moderator variables and the influencing variables, such as website terms, country compliance, avoidance, anxiety,

expense communication costs, waiting costs, return costs, price competition, or product uniqueness in the original model, which have not been included in the hypothetical model. Therefore, the authors decided to come up with a hypothetical model (Figure 1).

From the consumer research, based on the trustworthiness of the mediating influence of product supplier reputation, product vendor assurance, platform design, platform vendor reputation, platform supplier policy, and cross-border online shopping intention, results showed that trustworthiness had an important mediating role that positively affected cross-border online shopping intention. Research results showed that all scales in the research model were reliable and could be used as criteria to evaluate cross-border procurement activities. From the previous theories and models, the authors proposed a research hypothesis model as shown in Figure 1.

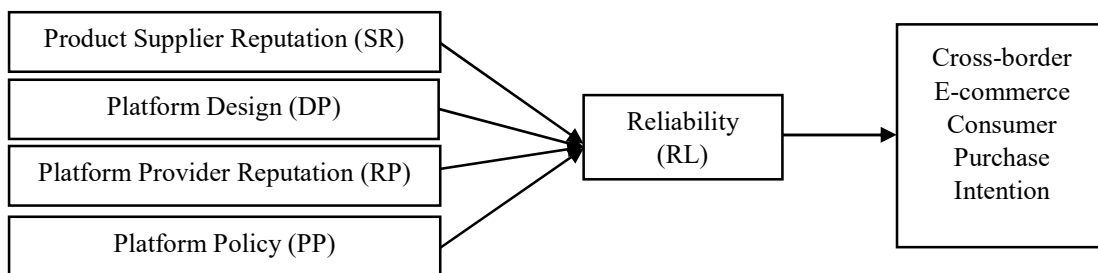


Figure 1: A research framework

Source: Research team.

Intention is a key element in the theory of planned behavior (Ajzen, 1991), determined by attitudes toward the behavior, subjective norms, and perceptions toward that behavior. Online shopping intent is an online shopper's intention to purchase products and services on the Internet or to use a virtual shopping cart during an online session (Close & Kukar-Kinney, 2010). To predict consumer behavior, one would need to understand the attitudes, judgments, and internal factors that ultimately generate purchase intention (Ajzen & Fishbein, 1977).

Trust is recognized as a key success factor for e-commerce (Gefen, 2003; Harrison McKnight et al., 2002; Jarvenpaa & Staples, 2000). Trust affects one's attitude, which in turn affects behavioral intentions (Ajzen, 1985). Based on the Theory of Reasoned Action

(Fishbein & Ajzen, 1975), trust directly affects attitudes, and the higher the level of trust, the more favorable the attitude (Jarvenpaa & Staples, 2000).

H1: Reliability has a positive impact on cross-border e-commerce consumer purchase intention in Hanoi.

Jarvenpaa and Staples (2000) suggested that the reputation of an online store is the main determinant of consumer confidence in the store. Much empirical evidence can be found for a positive association between supplier reputation and consumer trust (Kabadayi & Lerman, 2011; Jarvenpaa & Staples, 2000; Teo & Liu, 2007). When it comes to winning the trust of consumers, a supplier with an excellent reputation is in a particularly favorable position (Jin et al., 2008). Power et al. (2008) suggested

that trust in supplier reputation increased the attractiveness and connectivity and value, thereby affecting the purchase intention of consumers.

H2: Product supplier reputation positively affects consumers' trust when shopping online across borders.

According to Feng et al. (2004), platform design is one of the issues to be concerned about because it affects how consumers evaluate platforms and whether they trust e-commerce activities or not. Kuo (2003) pointed out that the quality of a website is a key factor to predict the intention of consumers to trust the website. In addition, Harrison McKnight et al. (2002) found confirming evidence that website quality has a positive effect on customer trust in the website (Everard & Galletta, 2005). Therefore, the quality of website information and good interface design is one of the factors that strengthen consumer trust (Fung & Lee, 1999; Al-Debei et al., 2015).

H3: Platform design has a positive effect on consumer trust when shopping online across borders.

Reputation is an important trust-building factor for online suppliers (Fung & Lee, 1999). A platform provider's reputation is significantly related to the trust its partners have in that provider, where an impressive reputation indicates a provider's ability and honesty. Platform provider reputation refers to consumers' belief that the platform provider is professional and honest (Doney & Cannon, 1997; Teo & Liu, 2007).

H4: The reputation of the platform provider has a positive effect on the trust of consumers when shopping online across borders.

Platform policy refers to public text, which states to consumers and visitors how the operator uses will protect their privacy and also ensures safe shopping, including order confirmation notice, clear return policy, the security level of online transactions, and appropriate personal information (Hor-Meyll et al., 2012; Kim & Biocca, 2006). Chen and Dibb (2010) suggest that background policies are needed to remove consumer concerns and enhance online shopping intention.

H5: Platform vendor policy has a positive effect on consumer trust when shopping cross-border online.

3. Research methods and results

In this study, the research team used two research steps: preliminary research and formal research. For the preliminary research, the study used a qualitative method by referring to reputable domestic and foreign documents to select the hypothetical model and the scale. For the formal research, the method used was a quantitative method through surveying by questionnaire with a sample of consumers who had participated in cross-border online shopping online in the 30 districts of Hanoi. Survey questionnaires were sent through social networking sites, such as Facebook, Instagram, Google Docs, etc. from October 15, 2022, to November 30, 2022.

Because it is impossible to survey all consumers in Hanoi, the study is expected to investigate about 400 consumers. The sample size was calculated according to the following formula (Joskow & Yamane, 1965):

$$n = \frac{N}{1 + Ne^2}$$

Where n is the sample size, N is the total number of surveys, and e^2 is the allowable error. According to the World Population Review website, by January 2023, Hanoi's population was 8,053,663. Therefore, $n = 8,053,663 / (1 + 8,053,663 \times 0.05^2) = 399.98$ consumers, $e = 5\%$ (95% correct). Thus, the expected sample size for the survey was 400 consumers.

More than 400 questionnaires were issued. However, during the investigation, the author team only collected 309 questionnaires from consumers in Hanoi and only 254 of them were valid. Therefore, the research team conducted a survey, tested, and evaluated the current situation of 254 questionnaires. In the research sample, 78.8% of them were female while 20.7% of them were male. The group mainly consisted of young people from 18 to 25 years old, accounting for 85.4% of the participants; 36.4% of them had a monthly income below 4 million. Consumers mostly chose cross-border online shopping for fashion and cosmetics through e-commerce platforms (37.2%) and online social channels (32.3%). The price range that consumers often chose was from about 200,000 VND - 500,000 VND.

To process data, the study used SPSS 20 software and SMARTPLS 4.0 software.

3.1. Evaluate the reliability of the scale

* Cronbach's Alpha coefficient test method (CA)

According to Hair et al. (2009), a scale that ensures unidirectionality and reliability should reach a Cronbach's Alpha threshold of 0.7 or higher. Another important indicator to test the reliability of the scale is the Corrected Item - Total Correlation. Cristobal et al. (2007) said that a good scale is when the observed variables have the Corrected Item - Total Correlation value of 0.3 or more. Thus, when performing Cronbach's

Alpha reliability test, if the observed variable has the coefficient of a correlation coefficient of variable-sum less than 0.3, it is necessary to consider removing that observed variable.

The results of the reliability test by Cronbach's Alpha coefficient showed that all had Cronbach's Alpha > 0.7 and no measurement variables had the Corrected Item - Total Correlation value of less than 0.3. Thus, 32 observed variables continued to be included in the EFA exploratory factor analysis.

Table 1: EFA factor analysis results

Observed variables	Factor group					
	1	2	3	4	5	6
PP5	0.896					
PP4	0.763					
PP7	0.742					
PP2	0.729					
PP1	0.723					
PP6	0.722					
PP3	0.698					
PI3		0.920				
PI4		0.859				
PI2		0.725				
PI1		0.705				
PI5		0.678				
DP7			0.720			
DP5			0.709			
DP6			0.696			
DP1			0.669			
DP3			0.647			
DP2			0.610			
DP4			0.540			
SR5				0.822		
SR2				0.751		
SR1				0.748		
SR4				0.723		
SR3				0.708		
RP3					0.824	
RP4					0.755	
RP2					0.718	
RP1					0.658	
RL1						0.857
RL2						0.810
RL3						0.705
Eigenvalue	11.078	2.201	2.078	1.649	1.466	1.242
Extracted variance	35.735	7.100	6.703	5.321	4.729	4.007
KMO = 0.892 Sig. = 0.000						
Total variance extracted = 63.593%						

Source: Result of processing survey data using SPSS 20.0.

** Exploratory factor analysis (EFA)*

To analyze the EFA discovery factor, it is necessary to test the conditions for performing EFA analysis. According to Tho (2011), the KMO coefficient ≥ 0.5 and the significance level of the Bartlett test $< 5\%$ are acceptable. In addition, the type of observed variable has a factor loading coefficient of less than 0.5 (Nunnally, 1994). The scale is accepted when the total variance extracted (Total Variance Explained) is $\geq 50\%$ and the Eigenvalue value is ≥ 1 (Tho, 2011).

The EFA exploratory factor analysis showed that the results of the EFA analysis stopped at the second rotation with the KMO index of $0.892 > 0.5$. Bartlett's test had the coefficient Sig. = $0.000 < 0.05$, showing that the observed variables are all correlated with each other over the total number of observations. However, the variable RP5 first uploaded in both factors as Component 5 and Component 7 was 0.560 and 0.589 respectively, with a difference of $0.029 < 0.2$, so the research team eliminated the variable from the model.

The Eigenvalues of the factors were all high and were all greater than 1, and the sixth factor had the smallest Eigenvalues coefficient of $1.242 > 1$. The total value of variance extracted $63.593\% > 50\%$ met the criteria. Conclusion:

63.593% of the change of factors was explained by observed variables. Thus, after analyzing EFA exploratory factors, 6 scales with 31 satisfactory observed variables were extracted.

3.2. The results of the analysis of the linear structural model PLS-SEM

The research model was evaluated through two steps: the measurement model and the structural model (Henseler & Chin, 2010).

** Evaluation of the measurement model*

When evaluating the resulting measurement model on SMARTPLS 4.0, the research focused on the following main issues: quality of observed variables (indicators), reliability, convergence, and the discriminability of the scales.

** Quality of observed variables (indicators)*

This is an index showing the degree of association between the observed variable and the parent latent variable. According to Hair et al., (2014), the outer loading coefficient must be greater than 0.4 to be reliable in exploratory research. Some studies with external factor loading > 0.6 are accepted (Moore & Chang, 2006). The results showed that all observed variables had a high outer loading coefficient and were greater than 0.6 (from 0.645 to 0.868). Thus, the quality of the observed variable was guaranteed.

Table 2: Outer loadings coefficient results

The scale	Outer loadings	The scale	Outer loadings
1. Product Supplier Reputation (SR)	SR1	4. Platform Policy (PP)	PP1
	SR2		PP2
	SR3		PP3
	SR4		PP4
	SR5		PP5
2. Platform Design (DP)	DP1		PP6
	DP2		PP7
	DP3	RL1	
	DP4	RL2	
	DP5	RL3	
	DP6	PI1	
	DP7	PI2	
3. Platform Provider Reputation (RP)	RP1	6. Online Shopping Intent (PI)	PI3
	RP2		PI4
	RP3		PI5
	RP4		

Source: Results of processing results by SMART-PLS.

** Reliability scale of reliability*

In addition to Cronbach's Alpha coefficient, which must reach the threshold of 0.7 or higher, the Composite Reliability (CR) must be from 0.7 or higher (Bagozzi & Yi, 1988) for the scale to be reliable. The measurement results showed that the Cronbach's Alpha coefficient and CR of the scales in the research model were reliable.

Table 3: Reliability and convergence assessment table

	Cronbach's Alpha	CR	AVE
DP	0.840	0.880	0.511
PI	0.880	0.912	0.676
PP	0.891	0.914	0.605
RL	0.821	0.893	0.736
RP	0.831	0.887	0.664
SR	0.829	0.877	0.590

Source: Data processing results by SMART-PLS.

** Calculate convergence*

To evaluate the convergence on SMART-PLS, it must be based on the average variance extracted index (AVE). According to Hock et al., (2010), a scale achieves a convergence value if the AVE is 0.5 or higher. This level of 0.5 (50%) means that the average parent latent variable will explain at least 50% of the variation of each observed child variable. The AVE of the scales DP, PI, PP, RL, RP, and SR was 0.511, 0.676, 0.605, 0.736, 0.664, and 0.590, respectively.

** Discriminant validity*

The discriminant value indicates the distinctiveness of a structure when compared with another structure in the model. To assess the discriminant validity, Henseler et al. (2015) demonstrated that discriminant validity is better evaluated by the Heterotrait-monotrait ratio (HTMT). Henseler et al. (2015) also suggest that if the HTMT index is below 0.9, discriminant validity is guaranteed. The discriminant of all scales was less than 0.9. Thus, the factors all met the requirements of discriminant value.

** Evaluation of SEM structural model on SMART-PLS*

Before evaluating the structural model, to generalize the research results to the whole, the model needed to be tested for reliability. The authors used the bootstrapping technique with a repeated sample size of 5,000 observations ($n =$

5000). Estimation results from 5,000 observations showed that the original weights were significant with the mean weights of bootstrapping. The estimates in the model could be concluded to be reliable because all the weights were within the 95% confidence interval. To evaluate the structural model, it is necessary to consider: the multicollinearity evaluation VIF coefficient, the impact coefficient and the significance of the impact levels, and the coefficient R Square, f Square.

** Multicollinear evaluation*

According to Hair et al. (2019), if the VIF is from 5 onwards, the model has a very high probability of showing multicollinearity. The VIF coefficients of the structures ranged from 1.000 to 1.799, all less than 2. Thus, multicollinearity did not occur.

** Level of explanation of the independent variable for the dependent variable (R Square adjusted)*

R Square adjusted reflects the explanatory level of the independent variables for the dependent variable in the research model. The results of the data processing of the study showed that the R Square adjusted of PI was 0.303. Thus, the independent variables explained 30.3% of the variation (variance) of the dependent variable. The remaining 69.7% was explained by out-of-model variables and random error.

** f-Square affects the value*

The coefficient f-Square evaluates the strong and weak impact of the independent variable on the dependent variable. Cohen (1988) proposed the f Square index to assess the importance of the independent variables as follows: f Square < 0.02 level of impact is extremely small or no effect; $0.02 \leq$ f Square < 0.15 is small impact; $0.15 \leq$ f Square < 0.35 average impact; f Square \geq 0.35 is a high impact level. The impact of variable RL on PI was high with an f Square value of 0.441; The impact levels of DP, PP, RP, and SR on RL were all small with values of 0.033, 0.023, 0.026, 0.029, respectively.

** Assess the impact relationship*

The Path Coefficient is the regression coefficient of the path model representing the relationship between latent variables in the SEM model. At this step, no impact path had been concluded with statistical significance or no statistical significance. To be able to show p-

value, the data need to undergo Bootstrap analysis on SMARTPLS.

Path Coefficient results after Bootstrap analysis are shown in Table 4. The results showed that all effects had P-values < 0.05, so these effects are statistically significant. The Original Sample column (O) shows the specific relationship between the variables in the SEM model, in which the PI variable was dependent,

under the influence of the variable RL with a standardized regression coefficient of 0.553. Variable RL was affected by four variables DP, RP, SR, and PP with four standardized regression coefficients respectively 0.201; 0.175; 0.169; 0.166. Thus, the impact level of the four variables DP, PP, RP, and SR on RL in order from strong to weak was DP, RP, SR, and PP.

Table 4: Table of values of the coefficients of impact relationship

	Original sample (O)	Sample mean (M)	Standard deviation (STEV)	T Statistics (O/STDEV)	P Values
DP →RL	0.201	0.201	0.082	2.434	0.015
PP →RL	0.166	0.173	0.081	2.065	0.039
RL →PI	0.553	0.558	0.060	9.157	0.000
RP →RL	0.175	0.173	0.082	2.140	0.032
SR →RL	0.169	0.170	0.072	2.356	0.019

Source: Results of data processing by SMART - PLS.

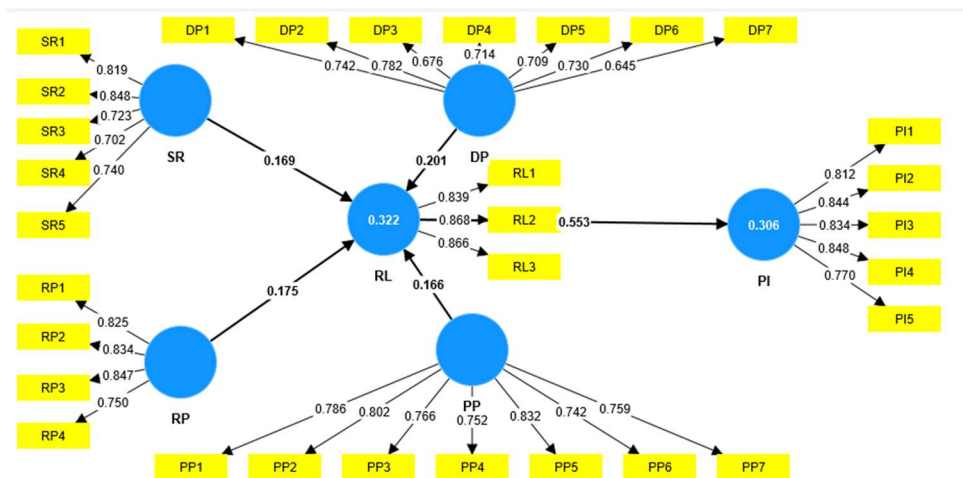


Figure 2: Analysis results of the linear structural model PLS-SEM

Source: SMART data processing results – PLS.

The results of the analysis of the PLS-SEM linear structure model are presented in Figure 2.

Comparing the previous studies, such as the study of Wiyata et al. (2022), the study of Hamed and Mitra (2021) and the study of Shiu-Li Huang, Ya-Chu Chang (2019), etc., the research results of Wiyata et al. (2022) demonstrate that product perception is used to predict 30% of consumers' purchase intention. Consumer trust can be transferred from friends and platforms to a brand, and the transfer effect depends on the popularity of the brand. Research results by Hamed and Mitra (2021) have shown that

performance, reliability, usability, user-friendliness, design, training, security, and quality are important characteristics. In the study of Huang and Chang (2019), the results provide insight into the behavior of overseas online customers through the policies and strategies of the commercial sales platforms in CBEC.

4. Conclusion

This paper also provides several implications for practice. First, the current study recommends

that enterprises need to improve the quality of platform design. It is necessary to design interfaces with functions that are easy to understand, clear, and convenient to use, even for non-tech-savvy users. Full user information for users, such as instructions for building registration procedures, buying and selling processes, and transactions should also be provided. Second, enterprises should improve the fundamental policy by focusing on research, development to improve the quality of products and services; focus on convenience and ease of use, but still ensure safety and security; avoid risks, and ensure the interests of the parties involved in CBEC transactions. Third, suppliers of products and services need to build and protect their reputations before consumers and partners. To do so, businesses should boost investment in technology, product, and service delivery processes to optimize their business operations and CBEC shopping experiences, but still ensure strictness, safety, and quality, to protect the reputation and prestige in the e-commerce market and maintain a competitive advantage in business. Finally, safety and security should be guaranteed for transactions and e-commerce application systems, bringing trust to customers and changing the lifestyle, working, and shopping habits of consumers. Retailers should be encouraged to transition to online platforms so as to reach more customers while taking new growth opportunities.

The analysis results show that there is a difference between the different segments in terms of reliability. The high-reliability segment has a higher consumption intention than the medium-reliability segment. The results of this study will provide business administrators as well as regulators related to CBEC to make rational decisions. Reliability is an important factor in explaining intent to purchase regardless of concerns or non-concerns, so it is important to increase positive consumer attitudes. When concern occurs, reliability becomes meaningful to increase consumption intention. Trust in information provided by product suppliers and CBEC platforms contributes to increased purchase intention. In addition to the recommendations for businesses, the research team recommends state management agencies to complete a separate legal framework for CBEC to build a playing field in the future for service

providers and thus encourage cooperation and competition for mutual benefits between entities, while also completing infrastructure on investment in resource development of the CBEC workforce.

Besides the obtained results, the study still has some limitations. The study only investigates the factors affecting the intention to use CBEC based on the influencing factors from suppliers. The research sample is not very large, and aforementioned solutions are only suitable for the current demand to develop CBEC of consumers in Hanoi, etc. Future studies are needed in e-commerce areas; the study scope needs expanding and some of the issues that have been raised in the current research should be examined in more detail.

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