Factors affecting to the decision to use shopee's online shopping service: A research in Ho Chi Minh City

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Abstract

The results of this scientific study are intended to identify factors which affect the decision to use Shopee's online shopping service. The research results showed that there were 5 factors which affected the decision of customers' usage of the service's products: price, reliability, risk level, responsiveness and website design. The study was conducted with a survey of 219 people and 24 observed variables in order to identify the factors affecting the decision to use online shopping services at the Shopee system. The results of this study had achieved 03 objectives: First, identified factors affecting the decision to use Shopee's online shopping services; Secondly, determined the priority order of the impact level of factors affecting the decision to use Shopee's online shopping service; Thirdly, proposed solutions to improve the need to use Shopee's online shopping's products in particular and e-commerce businesses in Vietnam in general in the future.

Key words: customers' service, customers' behavior, decision to buy, satisfaction, e-commerce

INTRODUCTION

E-commerce (e-commerce) is known as an effective way of doing business since the internet was created and developed. Vietnam E-commerce market is getting more and more active. Google's research and Temasek investment fund had announced in November that Vietnam's e-commerce industry from now to 2025 would reach a 43% growth rate, the highest among Southeast Asian countries (Dang Truong , Doanh Nhan Sai Gon Online, 2019). According to Sapo's survey of over 5,000 online stores, more than 73% of online stores admitted that doing business on electronic trading platforms such as Lazada, Shopee, Adayroi... was really effective. According to the latest data of Iprice Insight (2019), Shopee was becoming the largest e-commerce platforms in Vietnam with more than 41 million visits / month, far exceeding Tiki's nearly 36 million visits / month. This e-commerce platform started in 2018 at the 3rd position in website traffic but within 7 months, Shopee had taken the leading position in attracting visitors to visit and buy goods.

In recent years, many e-commerce enterprises in Vietnam have been established alongside the brands which have succeeded and made a name for themselves in the market such as Lazada, Shopee etc. making competition between online retailers more and more intense (Yang et al., 2003). What makes Shopee successful is one of the things that online business enterprises, especially young start-up businesses in Vietnam, need to study.

THEORETICAL BASIS & RESEARCH HYPOTHESES

There are many studies on the decision to use online shopping services. Chen and Hitt (2000) argued that with more and more online retailers with advertising campaigns to attract customers, price strategy or low prices, low service fees were one of the competitive advantages of businesses (Zeithaml and Bitner, 1996). Research by

Wilson et al. (2008) had reinforced the argument of Zeithaml and Bitner (2000) when proving that service quality was the core factor in directing customers to satisfaction, and the factor of price (service fee) was also one of the factors which have an important impact on customer satisfaction. In fact, many online buyers often pondered on the price. (Yang et al, 2004).

Taylor and Croin (1995) in the Servperl model concluded that there were 05 main factors affecting customer satisfaction when using service's products including: reliability, responsiveness, access, service capabilities and tangible evidence. These factors would help businesses to retain customers. Taylor and Croin had inherited the theory of Servqual service quality from Parasuraman et al (1985). The five elements in the Servperl model of Taylor and Croin (1995) had also changed some factors in the ten factors in the Servqual model of Parasuraman et al (1985), depending on the research object.

According to Dwyer et al (2000), the quality of services in the online retail sector needed to focus on the "responsiveness" for customers such as creating a good online shopping environment, providing many options , screening information, creating product comparisons, increasing reliability for customer etc. to enable consumers to reduce effort when make a decision on purchasing.

Website was an online store so website design is very important because it affects the quality of online services (Loiacono et al., 2000). Wolfinbarger & Gilly (2001) commented that the information available on the website was one of the important features for businesses to easily sell goods online. Customers who bought goods online would be aware of the benefits of receiving information directly from the website without needing to consult sellers (Zeithaml et al., 2002). Therefore, customers would be able to reduce the cost of finding information, especially information related to the product. If an online shopping site was informative and well-organized, it was easy to attract customers to buy goods (Wolfinbarger & Gilly, 2001). This also meant reducing the customers's fear of risk involved when buying goods online (Mangion et al, 2005; Hassan, 2000).

Ajzen and Fishbein (1975) in their model of TRA (Theory of Reasoned Action) also emphasized the factor of customer attitude

affecting consumer trends of customers. Positive customer's attitudes about the attributes of the service's products will affect their decisions. In addition, these authors also noted the impact from people related to consumers (such as family, friends, colleagues, relatives, social networking community) subjective (standard subjective) also had a great impact, even creating consumer trends. According to experts, online shopping businesses needed to connect their online sales space (website design) to websites, where many customers were interacting, to attract customers.

Based on the theories, doctrines, relevant research results and assay's results experts' opinions during the research process, it was possible to conclude the factors affecting the decision to use online shopping service at Shopee system (variable Y) include: price, reliability, risk level, responsiveness and website design (variable X). These factors were scales in the formal research model.

The relationship between pricing and the decision to use the service

Price is the exchange value of the goods expressed in money; is the amount of money to pay for a certain goods, service, or property; is the quantity that changes around values. Price represents the supply and demand relationship of one or a kind of goods. The price is expected to reflect and match the value of the product with the quality of the product (Arnould, 2003).

Hypothesis H1: price affects the decision to use Shopee's online shopping service

The relationship between the trust and the decision to use the service

Reliability is represented by characteristics such as quality products, the ability to perform services on time right away, the ability to ensure services are delivered as promised correctly (Cronin and Taylor, 1995).

Hypothesis H2: Customer confidence affects the decision to use Shopee's online shopping service.

The relationship between the level of risk and the decision to use the service

The level of risk is the amount of unfortunate circumstances, unpredictable possibilities, when and where they happen, as well as theirs severity and consequences (Chann, 2001). The higher the level of risk of an enterprise has, the lower the fewer customers decide to use the service of that business, and vice versa.

Hypothesis H3: Customer's risk level affects the decision to use Shopee's online shopping service.

The relationship between the responsiveness and the decision to use the service

Responsiveness is the readiness to provide services to customers, the assurance of quality, quantity of goods, delivery time, warranty mode, etc. Responsiveness also manifests itself through workflows and the steps taken to check the process which show the service provider's professionalism (Cronin and Taylor, 1995).

Hypothesis H4: Shopee's responsiveness and sales intermediaries influence the decision to use Shopee's online shopping service.

The relationship between website design and the decision to use the service

Website is a collection of sub-web, including text, images, video, flash etc. The website is only in a domain or a subdomain hosted on servers running online on the World Wide line of the Internet (British Academy, 1990). The impact of websites on promotional activities is huge because website design is able to create a series of activities integrated with many online search engines, helping to increase the amount of communication methods and techniques in order to interact two-way with network users for the purpose of introducing products, convincing viewers, attracting consumers's attention and purchasing decisions (Keller, 2000)

Hypothesis H5: Shopee's website design affects the decision to use Shopee's online shopping service.

RESEARCH METHODS

This study was carried out through three steps: First, the authors group conducted a qualitative research method to initiate group discussions, consult with experts to select variables and observed variables group. Next, based on the group of factors affecting the decision to use online shopping service at Shopee system, the authors group started to design a questionnaire to get opinions from 219 Shopee's online shopping service users.. Research model included: 05 scales, 26 observed variables. Used a 5-point Likert scale. Survey results were imported and run on SPSS version 20.0. After verifying the reliability with Cronbach's Alpha coefficient, the authors analyzed the exploratory factor to minimize and summarize the data of the scale (Dinh Phi Ho, 2010). This method is based on the Variance Extracted Ratio(Eigenvalue), whereby only factors with a Variance Extracted Ratio (Eigenvalue) greater than 1 would be retained, and less than 1 wouldn't have summarized information better than an original variable, because after standardizing each original variable had a variance of 1. The method of extracting principal components and the Varimax Procedure used to minimize the number of variables with a large coefficient in the same factor, increasing the ability to explain factors. Used the above results to analyze multiples linear regression to test the model's assumptions, thereby considering the impact of these factors on the decision to use online shopping services in the Shopee system.

RESEARCH RESULTS AND DISCUSSION

Table 1: Descriptive statistics

Code	Observed variables	N	Mean
G1	Price on Shopee is competitive	219	3.25
G2	Customers have the opportunity to compare prices	219	3.52
G3	Listed prices are clear and transparent	219	3.45
G4	Shopee has a reasonable price	219	3.63
G5	I like to buy goods with virtual coins	219	3.40
DTC1	The information is provided accurately	219	3.70
DTC2	Customers receive goods as shown on the system	219	3.54
DTC3	Is a prestigious brand	219	3.61
DTC4	Representative brand ambassador has a great	219	3.60

	influence		
DTC5	Associated with prestigious businesses	219	3.64
MDRR1	Personal information is absolutely secured	219	3.64
MDRR2	Confirm information as soon as ordering	219	3.69
MDRR3	There is a clear return policy	219	3.74
MDRR4	Feel safe when making transactions	219	3.59
MDRR5	Always solve problem for customers quickly and promptly	219	3.48
KNDU1	Always provide a rich and diverse source of goods	219	3.48
KNDU2	Always respond to customers 24/24	219	3.55
KNDU3	Allow customers to choose from a variety of transporters	219	3.56
KNDU4	Faster delivery than other units	219	3.52
KNDU5	Allow customers to choose from a variety of forms of payment	219	3.59
TKTM1	Could easily perform all purchases and payments	219	3.58
TKTM2	Recommend products that you may need	219	3.51
TKTM3	Could easily find the products you need at Shopee	219	3.56
TKTM4	Online display of goods is beautiful and professional	219	3.63
SHL1	I am very satisfied with the quality of Shopee's service	219	3.53
SHL2	I will continue to use the Shopee homepage	219	3.54
SHL3	I will recommend Shopee to those in need	219	3.61

The results of Table 1 show that most scales had mean value ranging from 3.25 to 3.74. Customer rated the "Price" scale the lowest with mean value ranging from 3.25 to 3.63. "G4: Shopee has a reasonable price" criteria was especially rated high by the users (mean 3.63). The lowest rating was "G1: The price on Shopee is competitive" (mean 3.25). Research results showed that customers were not satisfied with the price on Shopee system. However, in fact, Shopee's price was more competitive than other businesses in the market. This result showed that the consumers's low price expectation was not reduced. It posed a problem for businesses to reduce costs to the lowest level possible.

Table 2: Scale measurement reliability test's result (Cronbach's Alpha)

Variable	Code	Factors	Cronbach's Alpha
Independent variable	PR	Price/Fee	0.801
	RE	Reliability	0.845
	RL	Risk level	0.777
	RS	Responsiveness	0.853
	WD	Website design	0.837
Dependent variable	GS	Satisfaction	0.816

The results of table 2 showed that the scale had quite high accuracy with Cronbach's Alpha coefficient> 0.7 and the corrected item-total correlation of variables measuring this factor met the standard (> 0.3), only the variable "KNDU5_ Allowing customers to choose multiple forms of payment" belonged to the scale of " Responsiveness" with the correlation coefficient of 0.163 <0.3 should be eliminated. After eliminating this variable, all scales were accepted.

Table 3. Exploratory Factor Analysis

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	8.425	36.629	36.629
2	1.988	8.641	45.270
3	1.527	6.641	51.911
4	1.377	5.988	57.899
5	1.191	5.177	63.076

The result of Exploratory Factor Analysis (EFA) in Table 3 showed that the total variance extracted was 63.076%, greater than 50%, this meant that the extracted factors could explain 63.706% of the model. The remaining 36,924% would be explained by other factors. The extracted factor (Eigenvalue) greater than 1 should be retained.

Table 4 - Exploratory factor analysis

Code	Component				
	1	2	3	4	5
G1	.790				
G2	.747				
G3	.734				
G4	.693				
G5	.653				
DTC1		.876			

DTC2		.752			
DTC3		.701			
DTC4		.672			
DTC5			.754		
MDRR1			.733		
MDRR2			.727		
MDRR3			.723		
MDRR4				.830	
MDRR5				.756	
KNDU1				.637	
KNDU2				.561	
KNDU3				.554	
KNDU4					.745
TKTM1					.647
TKTM2					.637
TKTM3					.622
TKTM4					.790

Through the Exploratory Factor Analysis (EFA), after reruning the factor analysis, the model had completely been consistent with the data, were calculated into 5 groups of factors and this result could be used for multiple regression analysis.

Table 5: Summary model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.767a	.588	.579	.543	.588	60.867	5	213	.000	1.933

Research results in Table 5 showed that the correlation coefficients were adjusted: $R^2 = 0,588$ (test F, sig. <0.05); meant that 58.8% of the variation of variable F was explained by five independent variables (Fi). Durbin – Watson coefficient (d) = 1.933; observation number n = 219, parameter k = 5, significance level 0.01 (99%), in the Durbin - Watson statistics table, d_L (lower statistical values) = 1,623 and d_U (upper statistical values) = 1,725. So we have: (d_L = 1,623) <(d = 1,923) <[4 - (d_U = 1,725) = 2,275] showed that the model didn't have autocorrelation.

Table 6: ANOVA

ANOVAª					
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1 Regression	89.626	5	17.925	60.867	.000ᵇ
Residual	62.728	213	.294		
Total	152.354	218			

The test results had the value F = 60,867 and Sig. = 0,000 <0,05 showed that the construction model was suitable for the data set and the variables included in the model were related to the dependent variable. In general, regression analysis with reliability selected as 99%, corresponding to the selected variables with a statistical significance of p <0.01; The result showed that all variables met the demand. Testing the suitability of the model showed that there was no violation of multicollinearity (VIF <10).

**Table 7. Factors affecting the decision of customers to use products and services**

Nhân tố	Beta chưa chuẩn hóa		Beta chuẩn hóa	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	T	VIF
(Constant)	.090	.168		.538	.591	-.241	.422		
F1	.198	.038	*.253*	5.217	.000	.123	.274	.730	1.370
F2	.204	.037	*.262*	5.538	.000	.131	.277	.768	1.303
1 F3	.131	.039	*.165*	3.333	.001	.053	.208	.702	1.424
F4	.111	.039	*.139*	2.857	.005	.035	.188	.722	1.385
F5	.264	.038	*.336*	6.971	.000	.189	.339	.739	1.354

The results of the regression analysis showed that all factors affected the decision to use the shopping service on Shopee system, with the order of impact level as follows: (1) "F5" (web design): ß = +0.336; (2) "F2" (Reliability), ß = +0.262; (3) "F1" (Price), ß = +0.253; (4) "F3" (Risk level): ß = +0.165 and (5) "F4" (Responsiveness), ß = +0.139. Thus, when the perceived factor of "Website design" increased by 1 point, the satisfaction level increased by 0.336 points. When the perceived factor of "trust" increased by 1 point, the satisfaction level increased by 0.262 points. When the perceived factor of "Price" increased by 1 point, the satisfaction level increased by 0.253 points. When the perceived factor of "Risk level" increased by 1 point, the satisfaction level increased by 0.165 points. When the perceived factor of "

Responsiveness " increased by 1 point, the satisfaction level increased by 0.139 points.

This result also reflected the true status of online shopping business in Vietnam: poor web design, many online shoppers had not trusted the online shopping system and the responsiveness for Vietnamese consumers was still low. This result also had many similarities with recent research by many authors.

Figure 1: The influence of website design on customers
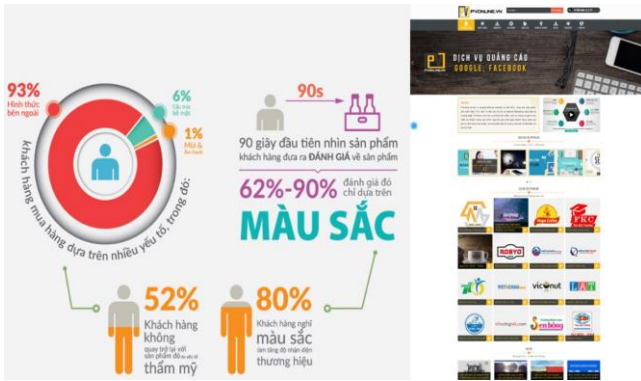
Source: Lam Phuong, PVonline.vn, 2018

Statistics in Figure 1 show that Vietnamese online buyers were affected by the attractive appearance of advertising websites (93%). Customers were often attracted by eye-catching, clear, modern and stylish designs. In addition, online shoppers were still afraid of risks, while many online shopping businesses had yet to create trust and responsiveness for Vietnamese consumers.

Table 8. Feedback of online shoppers on social networks
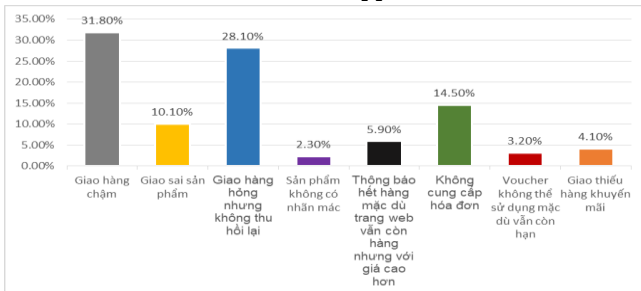
Source:: Phụ Nữ Việt Nam online, 2017

According to community feedback on social networks, the biggest risk that online shoppers in Vietnam often faced was the slow delivery, accounting for 31.8% and delivery of damaged goods but did not recover, accounted for 28.1%. Other factors also reduced customers' confidence and reflected the poor supply ability of businesses such as: Delivery but didn't provide invoices (14.5%), wrong delivery (10.1%), announced goods was out of stock even though it was still in stock on the website at a higher price (5.9%), promotional items lacking in the delivery parcel (4.1%), vouchers couldn't be used despite still valid (3.2%), the product had no labels marks (2.3%) etc. In the forecasts of many experts, Vietnam e-commerce sales would reach 10 billion USD in 2020. Of which, about 30% of the population would buy online. This forecast might be too optimistic but showed great potential in this area. From here, there opened up opportunities for businesses that had been and would start their businesses in online shopping in Vietnam.

CONCLUSIONS AND ADMINISTRATIVE IMPLICATIONS

The results of this study show that all factors affect the decision to use shopping services on Shopee. Thus, it is concluded that there is a close relationship between groups of factors belong these variables: risk level, website design, reliability, price, responsiveness and the decision to use shopping services on Shopee. Research results are the basis for proposing Shopee in particular and enterprises which do connecting service businesses like Shopee to come up with their strategies in the coming time. Based on the above research results, an administrative implication is proposed to Shopee as follows.

Firstly, on "website design" and "responsiveness" for online shoppers, Shopee and businesses which connect online shopping businesses such as Shopee need to focus on these following important factors: satisfactory service, providing adequate product information, good pricing strategies, updating consumer trends, identifying shopping habits, creating fun in shopping (shopping experience), applying technology in store, incentives, promotions. Today's customers have a wide variety of ways to purchase and interact online. Therefore, the company's website design must also interact

with devices and communication channels in the internet, digital, and social networks age: smartphones, laptops, Ipad, Facebook, Instagram, Zalo, Youtube. com, Google ... Businesses want to meet the need of customers need to sell on different channels to create a seamless experience between sales channels.

Second, in order to limit "risk level" and to maximize the "trust" for online shoppers, Shopee and businesses which connect online shopping businesses such as Shopee need to strengthen their guarantees of absolute safety for users of online purchase services such as enhancing network security, confidentiality and the safety of electronic payment information, strengthening product quality control processes of distribution centers, taking measures to prevent, to compensate contracts for distribution intermediaries, even initiating lawsuits against enterprises selling counterfeit, fake and poor quality goods. In addition, it is necessary for Shopee and other businesses to propose amendments to the legal regulations that are no longer suitable for e-commerce development in order for online shopping business and electronic payments to become familiar to Vietnamese people.

Thirdly, price is always a concern of buyers however price is not the only factor that determines the choice of customers. Therefore, it is common for researchers to suggest solutions which often focus on discounting, but because the research object is the intermediary for online sales, this research wants to guide Shopee to solutions that are "Tactics and strategies" in marketing such as: diversified product's price in price strategy so that customers could have more options; Using a product acting as a "lure" which in marketing is called "Hot trend": choose a product that is extremely "hot" in the market and with many people hunt for to become the focus of the advertisement effort to attract customers. Not only that, selling "hot" products gives customers the impression that this store always updates the social trend, thereby deciding follow the update and build up trust to buy later products; Focus on selling, advertising an expensive product to increase store reach. According to conventional customer psychology, stores which sell expensive products are often more professional, can be trusted more with product quality. Applying competitive prices is also a good way to get customers interested in the store. Choose a

product that is being bought a lot, reduce the price strongly to give customers the feeling that your store always sells cheaper than the market; and freeshipping, selling related product package (or combo) is also one of the tools to support price strategies in marketing./.

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