An Examination Of The Effects Of Service Quality And Satisfaction On Customers Behavior Intentions In E-Shopping: An Empirical Study With Comparison Of Taiwan And Vietnam

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Abstract

The purpose of this paper to examine the relationship among e-service quality and e-satisfaction and behavioral intention, to reveal any difference across Taiwan and Vietnam. Data from a survey of 891 online consumers, 409 respondents in Taiwan and 482 respondents in Vietnam were used to test the research model. Confirmatory factor analysis was conducted to examine the reliability and validity of the measurement model, and the structural equation modeling technique was used to test the research model. Data analysis involved the comparison of two models using structural equations modeling. The prevailed model reveals that e-service quality has a positive effect on e-satisfaction in both Taiwan and Vietnam, explored the influence of customer e-satisfaction on behavioral intention in Vietnam and Taiwan. E-service quality played a stronger positive role for online shoppers in Taiwan as compared to their counterparts in Vietnam. Such differences in determinants of customer satisfaction may due to the market contexts in different parts of the world.

Keywords: Customer services quality; Customer satisfaction; Consumer behavior; Electronic commerce; Retailing.

1. Introduction

There are currently 35.4 million e-Commerce users in Vietnam, with an additional 6.6 million users to be shopping online by 2021. The average user spends 62 USD online, which will grow to 96 USD by 2021 (WorldBank). These statistics are significant signs, informing that Vietnam is a hotspot for e-businesses to prospect. Indeed, recently, there is a trend that foreign companies come and buy companies in Vietnam, in order to expand their business operation and also set foot in the Vietnam market, which is emerging as a potential market of the area.

In addition, electronic service quality has positively influenced the success of online businesses [1]. This success also often includes the contribution in service of the following factors: electronic service quality of the businesses ; electronic satisfaction of the customers [2], and behavioral intentions of customers [2]. Moreover, Chauhan and Rambabu, 2017 found that economic and cultural factors affect consumer behavior in e-commerce. However, a systematic comparison of regions of emerging markets regarding online shopping is lacking. Therefore, this study addresses this gap in the literature.

The objective of this research is to contribute to the marketing literature in comparing Vietnam with Taiwan. We investigate how these online shopping activities in these vibrant economies are different in relation to customer behavior. The rest of this paper is organized as follows. First, we develop our conceptual model that addresses the relationships among e-service quality, e-satisfaction, and behavioral intentions. Then, we then describe the sample

and measures employed in the study. Finally, we conclude by discussing managerial implications, study limitations and future research directions.

2. Literature Review

2.1. E Service Quality

Electronic service quality (e-SQ) is increasingly important in influencing customer evaluations and judgments regarding the quality of e-service delivery in the virtual marketplace. Egala et al. [2] defined e-service quality as the extent to which a web site facilitates efficient and effective shopping, purchasing and delivery of product and services. According to Ahmed et al. [3] service quality measures have been applied to assess the quality of virtual community web sites and satisfaction with e-commerce channels [4]. More specifically, Padma et al. [5] defined E-service as overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace. In addition, Yang and Fang [6] using in-depth interviews identified five dimensions of e-service quality: performance, access, security, sensation and information. Zhu et al. [7] confirmed three quality dimensions: customer care and risk reduction , information and converging with and completing the findings of WEBQUAL. In addition, several instruments have been developed to assess the e-service quality, such as SiteQUAL [8], and QES [9].

Finally, King et al. [10] suggested a multiple-item scale consisting of four perceived e-service quality dimensions, web design, customer service, assurance and order management. In general, the common thrust of these emerging research efforts remains disparate, heterogeneous in both methodology and results, with no definite conclusions.

2.2. E-Satisfaction

The agenda of the traditional service quality research was further enhanced through work in the domain of customer satisfaction. Xie and Sun [11] defined customer satisfaction as the customers' post-purchase comparison between pre-purchase expectation and performance received. Lin et al. [12], customer satisfaction was based on the balance between customers' expectations and customers' experiences with the products and services. Moreover, Gajewska et al. [13] argued that customer satisfaction is the key to companies' competitiveness and can be considered the essence of success in today's highly competitive world of business. Chen et al. [14], in their study of developing an electronic commerce user-consumer satisfaction index, included factors that were relating to both service encounters and service processes. Moreover, Naeem [15] showed that on-line stores must provide adequate post-sales services to support the customers' needs in the entire buying process.

2.3. Behavior Intention

Date back in the late 80s and early 90s of the twentieth century, during the emergence of service industry and findings related to service quality, researchers began to examine marketing strategies and distinguish them as defensive and offensive tactics. Besides, a large number of classical research has substantiated the relationship between service quality, satisfaction and service switching. Jong et al. [16] found that convenience, good value for money, and availability might enhance customer satisfaction and subsequently reduce switching behavior. In addition, Fojt et al. [17] concluded that service quality is associated negatively with propensity to leave.

Chakraborty and Sengupta [18] showed that the research on the topic in the e-context suggests that an internet consumer has a greater tendency to switch that does a non-internet shopper. Khamis and Abrashid [19] results indicated that Internet switchers had significantly lower online usage of a particular service. Munnuka et al. [20]

found that the factors that drive a consumer to return to an internet site are content, enjoyment, layout, and uniqueness. In addition, behavioral intentions are important indicators for management to understand whether customers would remain with or defect from the company. Behavioral intentions in traditional setting and virtual setting are quite similar, which normally include repurchase intentions, positive word-of-mouth. Gajewska et al. [13] presented a more specific group of behavioral intentions in a deeper study, including five factors: loyalty, switch, pay more, external response, and internal response.

2.4.   Hypothesis

Saleh et al. [21] found that e-service quality is a prominent variable in literature dedicated to trust. According to Al-Hawari [22], examined the effects of service quality and satisfaction on three consumer behavioral intentions, namely word of mouth, site revisit, and purchase intentions in the context of internet shopping. The result revealed that e-service quality has a positive effect on e-satisfaction, while it also influences, both directly and indirectly through e-satisfaction, the consumer's behavioral intentions, namely site revisit, word of mouth communication and repeat purchase.

Ramanathan [23] through a survey by collecting data from 382 online buyers. A linear regression model was performed, the result indicated that e-service quality determined consumer trust and satisfaction, thereby directly influencing e-loyalty in the virtual concept. From these results, the second hypothesis about e-service quality and e-customer satisfaction is formed as below:

H1: E-Service Quality has a positive effect on E-Customer Satisfaction

Ganguli and Roy [24] synthesizes and builds on the efforts to conceptualize the effects of quality, satisfaction, and value on consumers' behavioral intentions. Ozretic et al. [25] also pointed out that service quality affects behavioral intentions through customer satisfaction in his study in Taiwanese leisure industry. Some studies examined the relationships among e-service quality, perceived value, satisfaction, and behavioral intentions for Taiwanese online shoppers. Ramanathan et al. [23] found that switchers of online services were relying on word-of-mouth sources when making their subscription decisions. Previous studies have indicated that service quality have an indirect effect on consumers' behavioral intentions (i.e. service quality through customer satisfaction). its also pointed out that service quality affects behavioral intentions through customer satisfaction in his study in Taiwanese leisure industry. Thus, this study hypothesizes that:

H2: E-satisfaction has a positive effect on behavior intention

Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments, Ganguli and Roy [24] synthesizes and builds on the efforts to conceptualize the effects of quality, satisfaction, and value on consumers' behavioral intentions. Ozretic et al. [25] also pointed out that service quality affects behavioral intentions through customer satisfaction in his study in Taiwanese leisure industry. Roy and Balaji [26] examined the relationships among e-service quality, perceived value, satisfaction, and behavioral intentions for Taiwanese online shoppers. The testing results show that, for the direct path, electronic service quality has a significant, positive influence on perceived value, satisfaction, and behavioral intentions. Also, perceived value directly influences customer satisfaction and behavioral intentions and satisfaction is an antecedent of behavioral intentions. Indirectly, electronic service quality has a significant, positive influence on behavioral intentions through satisfaction and perceived value.

Another key issue for online service companies is a consumer's decision to return or not to an internet site. The decision to revisit a site resembles customer service switching behavior, where a customer keeps on using the online service category but switches from one service provider to another. In addition, Alsaadi [27] proposed several factors for switching services, some of them (e.g. core service failures, failed service encounters, poor service recoveries) associated with feelings of dissatisfaction. Moreover, the empirical evidence reporting on consumer's decision to buy more from an online retail store comes from the Boston Consulting Group's study, which showed that satisfied customers intend to make more on line purchases. Thus, this study hypothesizes that:

H3: E- service quality has a positive effect to behavior intention

3. Research Model

3.1. Data collection

The sampling of this study limits to any individuals, who are citizens of Vietnam or Taiwan at the time of the survey and have shopped online domestically in their respective countries. An online methodology was preferred rather than traditional administration methods for several reasons that the authors explicitly and thoroughly discuss in their study. The survey was updated based on their feedback in order to establish its face and content validity. This process generated a sample of 1,040 online shoppers who were qualified to participate in the survey. A total of 891 fully completed questionnaires were received, a response rate of around 85.6 percent, which is very close to similar online research efforts.

Table. 1. Survey Items, Respective Constructs, and Relevant References

Dimension of E-service quality	Dimension of e-satisfaction
Information	Satisfaction with encounter
Accurate information	Satisfaction from user friendliness of the site Satisfaction from the information provided by the sire
Timely information	Satisfaction from the ability to customize the site
Right level of detail information Information in appropriate format	Satisfaction with the excitement of the site
Believable information	Satisfaction with process
Interesting information	Satisfaction with delivery time
User friendliness	Satisfaction with delivery date
Easy to operate	Satisfaction with payment process
Easy to use	Satisfaction with product's function
Clear and understandable transaction	Behavioral intentions
Feel capable of using the site	Word-of-mouth

Interaction – adaptation	Will recommend the e-shop to kith
Services adjust to my needs	Will encourage friends to use the e-shop
Prices fit to my needs	Will tell friends about complaints from the e-shop
Way of payment adjusts to my needs	Purchase intentions
The site adjusts to my needs	Will do more purchases through the e-shop in the future
Positive experience with encounter	Will increase purchases through the e-shop
Aesthetics	Will intensify purchases through the e-shop
Appropriate design	Site revisit
Attractive design	Intention not to shop again from this e-shop
Sense of competency in design	Intention to make next purchase from this e-shop
	Intention to revisit this e-shop in the future

3.2.   Confirmatory Factor Analysis Results

According to [12], Composite reliabilities (CR) must be larger than 0.7, which should be more reliable. In this study, Convergent validity was assessed in terms of factor loadings and average variance extracted. Definitely, AVE is a strict measure of convergent validity. Another important task is to test Discriminant validity by comparing the average variance extracted (AVE) with the square correlation between constructs. The AVE were greater than the squared inter-construct correlation between any pair of constructs, which supports the discriminant validity of the constructs.

This study showed that these values are acceptable and demonstrate that the instrument is reliable. Further evidence of the reliability of the scale is provided in Table 3, which shows the composite reliability and average variance extracted scores of the different factors obtained. Composite reliability (CR) of all the latent variables is greater than the acceptable limit of 0.70. The average variance extracted for all the factors is greater than or equal to 0.5, which is acceptable. In addition, the average variance extracted (AVE) for each construct is greater than or equal to 0.50, which further supports the convergent validity of the constructs, suggesting adequate convergent validity.

Another important task is to test Discriminant validity by comparing the average variance extracted (AVE) with the square correlation between constructs. The AVE were greater than the squared inter-construct correlation between any pair of constructs, which supports the discriminant validity of the constructs. Thus, the measurement model demonstrated discriminant validity. Thus, the measurement model demonstrated discriminant validity.

Table. 2. Results of Model Comparisons

FIT／PATH	The research model Vietnam	The research model Vietnam
x^2/df	1.50	1.48
GFI	0.90	0.896

CFI	0.97	0.96
NFI	0.92	0.90
RMSEMA	0.032	0.35

Note: The model comparisons were performed by calculating the difference in chi-square (x^2) values between the research model and the three nested models. These values were tested for significance using the difference in estimated parameters as the appropriate degrees of freedom.

Table. 3. Outer Model Loading

Vietnam				Taiwan		
	Cronbach	CR	AVE	Cronbach	CR	AVE
E-Service Quality						
Information	0.932	0.925	0.671	0.916	0.916	0.644
Usability-user friendliness	0.894	0.899	0.691	0.901	0.899	0.640
Interationadaptation	0.911	0.914	0.681	0.883	0.884	0.604
Aesthetics	0.862	0.870	0.690	0.852	0.858	0.668
E-Satisfaction						
Encounter satisfaction	0.877	0.879	0.644	0.876	0.876	0.638
Process satisfaction	0.896	0.895	0.682	0.872	0.875	0.636
Behavior Intention						
Word of mouth	0.880	0.878	0.706	0.846	0.851	0.656
Purchase intentions	0.866	0.868	0.686	0.843	0.844	0.643
Site revisit	0.881	0.883	0.716	0.883	0.879	0.707

3.3.   Model Comparison Of Vietnam With Taiwan

In comparing the SEM models, we followed the procedures outlined by Anderson and Gerbing [14]. According to [15], the comparison of the models is determined by calculating the difference in x 2 values. Anderson and Gerbing [14] state that the x 2 differences can then be tested for statistical significance with the appropriate degrees of

freedom being the difference in the number of estimated coefficients for the tested models. This study showed that the comparison results of x2 values are different in Taiwan 587 and in Vietnam 554.

The comparison results of the antecedents and outcomes for behavior intention of online shoppers show that the major differences exist between online shoppers in Vietnam and in Taiwan. First, the analysis suggests that behavior intention of online shoppers can be partially predicted by online shopping activities such as customer satisfaction with the encounter and with the process is directly and positively influenced by e-service quality 0.71 for Vietnam and 0.81 for Taiwan , supporting thus H1.This study showed that the direct path coefficients for e-service quality and e-satisfaction differs significantly between the two models for shoppers in Vietnam and in Taiwan. E-service quality effect on customer satisfaction is considerably stronger for shoppers in Taiwan (0.81) than for those in Vietnam (0.71). In addition, the effect of e-satisfaction to behavior intentions is found to be significantly different between online shoppers in Vietnam and Taiwan. The relationship is much stronger in Vietnam (0.52) than in Taiwan (0.51), thus supporting H2. Finally, the direct path coefficients for e-service quality and behavior intention in the two models are also significantly different. The relationship is much stronger in Taiwan 0.41, than in Vietnam 0.31, supporting thus H1.

4. Discussion and Conclusion

The aim of this research from the beginning is to investigate and clarify the relationship between e-service quality, e-satisfaction and behavioral intentions in Vietnam and Taiwan so as to propose managerial implications and recommendation for future studies and practice. Research shows that improved customer service plays an important role in explaining such an increase (Jain et al., 2017). This study confirmed that e-service quality in online shopping increases customer satisfaction, which in turn leads to increased future online shopping intention. Yoon and Park [17] have found that accurate delivery increases e-shopping satisfaction and concerns about delivery or non-delivery are part of the reasons that many people hesitate to shop online. Cao et al. [20] investigated how post-purchase activities contributed to customer satisfaction in online shopping and explored the influence of customer satisfaction on future purchase intentions in China and Taiwan. The results show that such service is significantly related to customer satisfaction for online shoppers in Taiwan, which is in turn highly associated with their future purchase intention. In addition, the relationship between customer satisfaction and future purchase intention is significantly stronger in Taiwan than in Vietnam, which further demonstrates the importance of e-services quality for e-commerce expansion now and in the future. From the result of this study, it can be determined that the objectives are achieved. There are positive and significant relationships between e-service quality, e-satisfaction and behavior intention. The scale constructing this model has appropriate reliability since all construct measures are kept and the result is statistically significant, proposing valuable findings that contribute greatly in the field of marketing and human behavior

This study finds that e-service quality activities have a significantly positive influence on customer behavior and intention of online shoppers, which in turn have an impact on their repeated online shopping and recommending their shopping site to friends or relatives. The study can provide directions for managers regarding building customer behavior for continuous online shopping. Thus, e-commerce companies should manage their service quality. They may try to understand their customer's opinions about their service quality first and then customer's satisfaction. Different online companies should manage their service quality in accord with their different local situations of the regions they serve. Responsiveness is also a key determinant. E-retailers should operate an effective customer service team, with inquiries answered immediately and carefully, also joyful, warm-voiced, friendly people should be used in contact center to take care of customers. This will elevate both service quality and customer satisfaction. The first limitation is associated with the sample of this study. It is a cross-sectional survey of a convenience sample, despite the fact that the authors tried to maximize the diversity and obtain respondents from different areas in Vietnam and Taiwan. The second limitation is related to the region comparison of Vietnam with Taiwan. Both are of Vietnam ethnicity and have not common cultural origins, the two regions are very different in market, demographic and behavioral characteristics. Finally, the author did not investigate the direct relationship between E-Service Quality

and Behavioral Intentions as the main point of the study is to examine whether there is a relationship between them through mediators E-Customer Satisfaction. Future research should examine both direct and indirect as well.

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