

The Relationship Between Website Quality and E-Satisfaction: A Case Study of Four- and Five-Starred Hotels in Hội An City of Quảng Nam Province

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ABSTRACT

E-commerce has become a familiar and indispensable part in a developing society, contributing substantially to changes in the customer behaviors and demand. In order to meet customer needs, tourism companies in general and enterprises of the hospitality industry in particular must establish their own websites at the service of their business and competition. In this paper, through aggregation of existing theories in the world and quantitative research, the authors conduct an empirical research for the case of four- and five-starred hotels in Hội An City and identify seven factors that affect the satisfaction of online customers (or e-satisfaction): (1) website design, (2) website information, (3) website security, (4) trust, (5) transaction convenience, (6) customer services, and (7) hotel services information. Those results allow authors to offer some suggestions for hospitality enterprises to enhance their customer satisfaction.

1. INTRODUCTION

The swift development of IT in general and the Internet in particular has generated a “flat playground” and fair competition for all enterprises. In the past decade, attempts to promote the e-commerce in Vietnam have produced positive results to some extent; online purchase and sale (e.g. air tickets, books, CDs, electronic equipment, or room booking, etc.) through websites has become more popular. Together with technological breakthroughs in the past, hotel enterprises in Vietnam in general and in Hội An City of Quảng Nam Province in particular has step by step applied e-commerce to their business strategies in the hope of publicizing information of destinations and providing customers with multiple choices of accommodation and excursions.

Like traditional business mode, in order to enhance the customer satisfaction, enterprises are supposed to better the service quality. For the hospitality industry, in order to enable customers to search for information or make a booking online, the website quality is the most decisive factor which profoundly affects the corporate image and customer satisfaction and loyalty. Therefore, studying the relationship between website quality and customer satisfaction in the hospitality industry is very practical in the attempt to improve the awareness of hospitality enterprises in Vietnam in general and in Hội An in particular and to extend some suggestions for the strategy planning and enhancement of customer satisfaction with hospitality service quality and website quality.

2. THEORETICAL BACKGROUND AND THE RELATIONSHIP BETWEEN WEBSITE QUALITY AND E-SATISFACTION

a. Website Quality (WEBQUAL):

Within three recent decades, many scholars have studied the relationship between service quality and customer satisfaction. Since the Internet came into existence and played an important role in the business operation, online services quality which is reflected by the website quality has become a hot topic among behavior researchers.

According to Carlson, Sinnapan and Voola (2003), WEBQUAL is not constrained to the quality of services available on the website; yet it is also affected by many other factors such as website systematic structure, online information quality, and the like. Zhong and Ying (2008) equated WEBQUAL with the quality of services offered by the website. Chaiprasit et al. (2011) indicated that a tourism website has three primary functions: (1) providing information of products and services, (2) facilitating online

transactions, and (3) establishing a relationship with customers via studying their expectations towards tourism websites. In the meantime, Yang (2008) extends an e-satisfaction model on the basis of: (1) system quality which measures the ease of use and interaction with the information processing system, (2) information quality which reflects the output information quality of the system, including the diversity and recreation of information, and (3) service quality which is measured by items of scales of the online services quality. By combining findings from existing researches with a qualitative research, the authors review and combine with qualitative researches to introduce concepts and measurement scales.

b. Studying Theoretically the Relationship Between WEBQUAL and E-Satisfaction:

Based on reviewing theories of online services quality and e-satisfaction, the authors set up concepts and a preliminary measurement scale. A qualitative research is conducted via in-depth interviews of tour guides with four groups comprising 15 tourists about the scale. An official measure scale with corresponding concepts is presented in Table 1:

Table 1: Concepts and Indicators

Concepts	Signs	Items	Authors
Website design	TKE1	The website has a clear layout.	Aladwani and Palvia (2002), Nusair and Kandampully (2007), Kim (2005)
	TKE2	The website color is harmonious and friendly.	
	TKE3	The downloading speed is high.	
	TKE4	It is easy to find the website through a search engine.	
Website security	ATO1	The website is always at a high security when information is updated.	Aladwani and Palvia (2002), Chaiprasit et al. (2011)
	ATO2	Website security modes are reliable.	
	ATO3	Personal information is kept secret and confidential.	
	ATO4	It is safe to do a transaction on the website.	

Trust	DTC1	The online information system of the hotel is reliable.	Kim (2005), Mohamed and Moradi (2011)
	DTC2	Prestige and reputation of the hotel are trustworthy.	
	DTC3	There is no worry about the online system during and after transactions.	
Log-in convenience	TDN1	It is easy to log in and visit the website.	Kim (2005), Mohamed and Moradi (2011)
	TDN2	It is easy to fix or update registered information.	
	TDN3	Guidelines on troubleshooting are always available.	
Transaction convenience	TGD1	It is easy to employ room-booking function.	Chaiprasit et al. (2011), Kim (2005)
	TGD2	It is convenient to make a booking online.	
	TGD3	The website supports multiple languages.	
	TGD4	The website is designed to save transaction duration.	
Customer services	HKH1	The website supplies basic services (e.g. booking, payment, etc.)	Schapp and Bélanger (2005), Nusair and Kandampully (2007), Kim (2005)
	HKH2	There are supportive services on the website (e.g. FAQ, Q&A).	
	HKH3	Queries and supports are (expected to be) timely settled.	
Website information	TTW1	Advertising information about Hội An is always available.	Aladwani and Palvia (2002), Chaiprasit et al. (2011), Kim (2005)
	TTW2	Services information is clearly organized.	
	TTW3	Information on the website is simple and comprehensible.	
	TKS1	Hotel introduction is manifest.	

Hotel services information	TKS2	Information about room rates and types is available.	Jeong and Lambert (2001), Chaiprasit et al. (2011), Kim (2005)
	TKS3	Information of value-added services is available.	
	TKS4	Service information is appropriate to customers.	

Website design plays an important role in attracting viewers who may visit and place an order on the website. Poorly-designed sites may lose 50% of potential revenues because users cannot find what they want, or 40% of potential site visitors due to unfavorable impressions after their first visiting the site. Therefore, website designers of hotels should pay attention to the attractive layout of the website, harmonious coloring, ease of finding the site via a search engine, and loading speed of the page, etc. Schaupp and Bélanger (2005) and Kim (2005) asserted that website design had positive impacts on the e-satisfaction.

Website security is considered as the enterprise's ability to control the presence of environmental factors during the execution of transactions; and it is a significant factor which can stimulate the e-commerce. As Chaiprasit et al. (2011) stated, customers or users are always interested in whether or not a website adopts any security mode which can make them feel safe and sound during and after the transaction process. With regard to a developing country like Vietnam, the web security modes for the e-commerce of many enterprises have not been properly attended to; the e-commerce law has not been formulated, and thus customers are reluctant to make an online transaction on the website of Vietnam's enterprises.

Trust is defined as online customers' belief in service providers (Kim, 2005). In order to have an online transaction, customers are often well aware of the prestige and good reputation of an enterprise and its online system without any fear during or after the transaction process. In fact, this factor has positive impacts on the customer satisfaction with online transactions which do not have any direct interactions in persons between involved parties.

Log-in convenience: According to Kim (2005) and Mohamed and Moradi (2011), for innovative technologies, the convenience is how comfortable an individual feels when he or she does something, or things which make them comfortable within a period of time. For

online interactions, the primary convenience is the ease of log-in, availability of guidelines on troubleshooting to save time, and cost for any transactions day and night.

Transaction convenience: According to Schaupp and Bélanger (2005), Chaiprasit et al. (2011) and Kim (2005), the transaction convenience is the state of being comfortable and time-saving when a customer makes a booking or payment online. The website which is well designed, easy to search for information, and multilingual will make customers feel comfortable in the transaction process.

Customer services: Schaupp and Bélanger (2005) and Kim (2005) believe that information of customer services plays an important role in stimulating the e-commerce, and making customers trust in provided services. These authors also indicate that customer services are measured by: (1) provision of basic services (e.g. booking, payment, etc.), (2) provision of supportive services (e.g. FAQ, Q&A), and (3) availability of appropriate supports for requirements at present or in the near future.

Website information and hotel services information: In order to make a buying decision, customers need sufficient information about the product or service. For tourist products or services, customers need to find out information before planning their trip and deciding on accommodation.

Chaiprasit et al. (2011) and Kim (2005) state that website information and hotel services information are two different concepts. While the former is measured by information about destination, its simplicity, comprehensibility, and customers' estimate of information arrangement, the latter is measured by specific information concerning the hotel such as hotel characteristics, room types, rates, and price of value-added services. In addition, awareness of products and services available on the website also plays an important role in predicting how a customer makes a decision (Kim, 2005). Chaiprasit et al. (2011) and Kim (2005) contend that there is a positive relationship between these two concepts and e-satisfaction.

E-satisfaction: There are various definitions of customer satisfaction. According to Kotler (1994), the satisfaction is based on a comprehensive evaluation or sensate perception. Oliver (1997) states that the satisfaction is the customer's response when their demand is satisfied. Hernon and Whitman (2001) indicate that e-satisfaction is the response of customers when they use an online service. Many other studies insist the relationship between components of the website quality (i.e. website design, website information, hotel services information, customer services, log-in convenience, website security, and trust) and e-satisfaction. By

combining related theories, existing findings, and in-depth interviews with 15 visitors using online services, the authors extend the following research model (Figure 1).

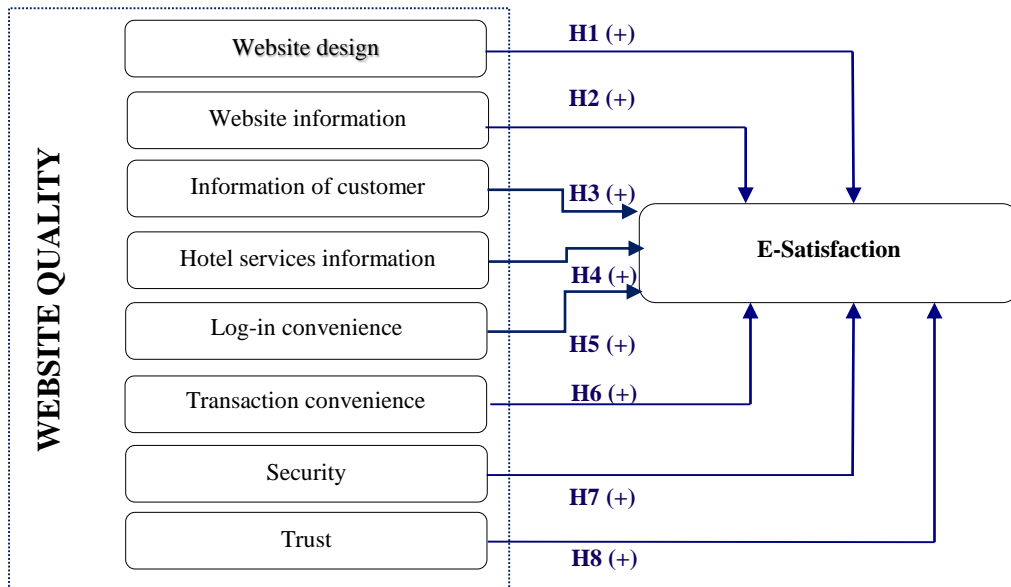


Figure 1: WEBQUAL's Factors Affecting the E-Satisfaction

3. RESEARCH METHODOLOGY

Given the determined research aims and purposes, with combined concepts and measurement scales, tour guides are instructed by the researchers to conduct in-depth interviews with 15 customers, including two Vietnamese, eight English speakers (American, British, and Australian), three Frenches, and two Japanese. The qualitative research is conducted through direct and online surveys; questionnaires are written in four languages (i.e. Vietnamese, English, French and Japanese) and sent to the address of those who booked room online. Based on information about customers filed in four- and five-starred hotels in Hoi An, 150 in-depth interviews and 1,500 online interviews are conducted. However, there are only 523 appropriate responses (including 127 ones from in-depth interviews and 396 ones from online ones). Data are analyzed by SPSS 16 and AMOS 18.

4. ANALYTICAL RESULTS

a. Sampling:

Of 523 respondents, there are 68.6% male and 31.3% female; and majority of them age between 18 and 45 (equaling 70%) and are Asian or European nationals who come to Vietnam for sightseeing (87%).

Table 2: Respondents' Characteristics

Sex	Male	359	68.6%	Nationality	Asian	202	38.7%
	Female	164	31.3%		European	183	34.9%
Age	18-35	201	38.4%		North American	124	23.8%
	36-45	146	28.0%	Purpose	South American	13	2.5%
	46-60	90	17.3%		Sight seeing, traveling	455	87.0%
	Over 60	85	16.3%		On business, for comfort	68	68.0%

b. EFA and Cronbach's Alpha Test:

With $KMO = 0.817 > 0.5$ and $Sig. (Barlett) = 0.000 < 0.05$, it is possible to conclude that the research data is suitable for EFA. After extracting 28 observed variables of the WEBQUAL measurement scale, only two items are omitted [i.e. HKH3 - Queries and supports are (expected to be) timely settled, and TDN2 - It is easy to fix or update registered information] due to their factor loading being smaller than 0.3. Then, the results of the total variance extracted indicate that there are eight factors with eigenvalues larger than 1 and the cumulative extracted variance equaling 67.515% ($> 50\%$) on the volatility of data. The Cronbach's Alpha of eight measurement scales is greater than 0.6, which implies that all scales ensure internal consistency.

Table 3: EFA and Cronbach's Alpha Test

Items	1	2	3	4	5	6	7	8
ATO2	0.932							
ATO4	0.924							
ATO3	0.920							
ATO1	0.889							
TKE3		0.921						
TKE2		0.915						
TKE1		0.878						
TKE4		0.876						

TGD3	0.885							
TGD3	0.856							
TGD4	0.824							
TGD1	0.820							
TKS2	0.844							
TKS4	0.836							
TKS3	0.831							
TKS1	0.801							
DTC1	0.887							
DTC3	0.886							
DTC2	0.880							
TTW2	0.883							
TTW3	0.844							
TTW1	0.838							
HKH1	0.834							
HKH2	0.775							
DN1	0.833							
DN3	0.819							
Eigenvalue	5.156	3.316	2.950	2.720	2.294	1.722	1.574	1.532
% of variance	18.413	11.844	10.537	9.715	8.193	6.152	5.623	5.472
Cumulative %	18.413	30.257	40.794	50.508	58.702	64.853	70.477	75.949
Cronbach's Alpha	0.876	0.761	0.882	0.867	0.820	0.812	0.761	0.771

For the measurement scale of e-satisfaction, since $KMO = 0.815$ and $Sig. (Barlett) = 0.000 < 0.05$, the data are suitable for EFA. Because the total variance extracted of a factor is 62.216% ($>50\%$), it implies that the e-satisfaction can explain 62.216% the data volatility. The Cronbach's Alpha equaling 0.812 guarantees the internal consistency of the measurement scale.

c. Findings Analysis:

The structural equation model (SEM) is employed to estimate the goodness of fit of the research model and test the correlations. With $df = 428$, Chi-square = 642.362 and $Chi-square/df = 1.501 < 2$, it is possible to conclude that the model fits the dataset ($TLI = 0.968$, $CFI = 0.974 > 0.9$, and $RMSEA = 0.03011 < 0.05$). Additionally, the analytical

results also indicate that seven components of WEBQUAL (i.e. website design, website information, website security, trust, transaction convenience, customer services, and hotel services information) are correlated with e-satisfaction. However, there is not enough evidence to conclude that the log-in convenience has impacts on e-satisfaction. The testing results are presented in Table 4.

Table 4: Testing the Correlation Among Concepts of the Research Model

	Relationship	Coefficient	Standard	Sig.
E-satisfaction	<-- Website design (TKE)	0.299	0.068	***
	<--- Website information (TTW)	0.363	0.143	0.011
	<--- Website security (ATO)	0.266	0.061	***
	<--- Trust (DTC)	0.254	0.061	***
	<--- Log-in convenience (TDN)	0.064	0.054	0.232
	<--- Transaction convenience (TGD)	0.217	0.068	0.002
	<--- Customer services (HKH)	0.154	0.052	0.003
	<--- Hotel services information (TKS)	0.214	0.067	0.001

The results that all seven factors are positively correlated with e-satisfaction support previous findings shown in Table 5. Of them, the factor “website information” has the greatest impact on e-satisfaction ($\beta = 0.363$). In fact, when visitors plan their excursion tour, they often search for information about their intended destination; thus website information should be simple, comprehensible and well-arranged in order to facilitate their search. The factor “customer services” has the least influence on e-satisfaction ($\beta = 0.154$); it can be explained that once the site is well designed and customers can count on provided information, supportive information seems insignificant to them. The positive relationship of this factor with e-satisfaction supports the finding by Aladwani and Palvia (2002), Nusair and Kandampully (2007), and Kim (2005).

Table 5: Comparing the Current Findings with Previous Ones

Items	Research findings	Jeong and Lambert (2001)	Aladwani and Palvia (2002)	Nusair and Kandampully (2007)	Kim (2005)	Chaiprasit et al. (2011)	Mohamed and Moradi (2011)
Website design (TKE)	+		+	+	+		
Website information (TTW)	+		+		+	+	
Website security (ATO)	+		+			+	
Trust (DTC)	+						+
Log-in convenience (TDN)	n.s				+		+
Transaction convenience (TGD)	+				+	+	
Customer services (HKH)	+			+	+		
Hotel services information (TKS)	+	+			+	+	

N.B.: (+): positive correlation; (n.s): without relationship

Regarding the log-in convenience, there is not sufficient evidence to conclude its impacts on e-satisfaction; and thus it does not support the finding by Kim (2005) and Mohamed & Moradi (2011). It can be explained that in the era of IT in general and the Internet in particular, most customers can master the Internet to some extent, thus technical assistance seems redundant and unimportant. Moreover, due to the fact that the website design often aims at providing users with the convenient use, problems are rather rare and customers hardly realize impacts of log-in convenience on e-satisfaction.

5. CONCLUSIONS AND LIMITATIONS

This paper sheds light on the relationship between website quality and the e-satisfaction of 523 customers using services of four- and five-starred hotels in Hội An City. The results show that website design, website information, website security, trust, transaction

convenience, customer services, and hotel services information have impacts on e-satisfaction.

The model of the relationship between e-satisfaction and hotel website quality can help managers and researchers gain insights into seven factors of WEBQUAL and their correlation with e-satisfaction, and then formulate appropriate policies to encourage individuals and organizations to use their online services. Simultaneously, the research findings enable managers to know more about customer needs and have solutions for enhancing their loyalty to the hotel services.

However, there are some limitations in the research. Firstly, convenient sampling (i.e. samples are chosen conveniently from the list of customers who had online transactions with hotels) and surveys in person and via emails have partly impinged on the homogeneity of samples. Secondly, the paper only focuses on eight factors of the service quality while there may be many other influential factors concerning website quality; thus if more observed variables are taken into account, the model quality will be more comprehensive. The third constraint is that only four- and five-starred hotels are surveyed; thus further researches can dig deeper into hotels of other star grades in different provinces or industries (e.g. banking, commercial websites, etc.) and step by step establish e-satisfaction indices.

6. SOME IMPLICATIONS

Through analytical results, the authors extend some policy implications for managers to enhance their customers' loyalty.

a. Enhancing the Quality of Website Design:

Technical specifications of website design have great impacts on the customer satisfaction. A website is considered attractive if it has good layout, is harmoniously colored, has a quick loading process, and is easy to be found through a search engine. Accordingly, it is advised that hotel managers should pay more attention to a simple and memorable meta name, meta tag, title or the like; and a catchy interface which may be interwoven with images, audio clips, and video clips to attract potential customers to the website. Particularly, for websites of hotels, since their customers are of various nationalities and languages, it is necessary to opt for appropriate colors, images and languages. A simple layout will be the best choice, which may avoid distracting viewers.

b. Improving Website Security and Boosting Customers' Trust:

The net security is one of the current difficulties of electronic businesses in Vietnam. Although the number of high-qualified and well-trained website graphic designers is very large, experts in web application security are still lacking. Additionally, the imperfect e-commercial legal corridor makes customers reluctant to do e-transactions. Albeit most of enterprises require a password or a safe code to log in and perform an e-transaction, tightening the net security has not been properly heeded by managers. Therefore, it is advised that hotel managers should test the accuracy of customer's information and save them in different places and forms. Customers should be instructed how to avoid risk of account loss or PIN skimming, etc.

According to a report by Vietnam's Ministry of Industry and Trade (2010), around 98% of e-commercial websites has not provided sufficient information about legal owners of website, along with other necessary information; especially, about 48% of websites do not publicize terms and conditions of e-transaction. Therefore, in order to enhance the customer's trust in hotel services, it is necessary to develop a manifest business regime, and good policies of e-sale and customer services, attend to and protect customers' benefits.

c. Promoting the Quality of Service Information and Customer Services on the Website:

In addition to necessary customer services, other supportive ones such as settlement of queries and complaints of customers concerning provided services will enhance the e-satisfaction. At present, most of e-commerce websites of Vietnam merely aims at providing information; and customers, in their turn, visit a website only to search for information. Therefore, it is necessary to improve the quality of website information. However, it is noticed that website information, besides being useful, must be arranged appropriately and conveniently on the website in order to attract viewers. The regular update of room rates or prices of other services is crucial so that customers can make good decisions on the timing of the tours.

According to respondents' expectations, hotels in Hội An should regularly update information concerning their promotion programs and pricing policies for high seasons so that visitors can individualize their tour■

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