

# **Research on the Relationship between Service Quality and Customer Loyalty - The Case of Electronic Shopping Centers in Thai Nguyen Province**

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**Abstract:** *This study focuses on the relationship between service quality and loyalty of customers at the electronics shopping centers located in Thai Nguyen province. A model of five independent factors, including: Tangibles, Reliability, Skills, Policies and Personnel were examined to identify their influences towards customer loyalty. The research findings showed that independent factors all have significant influence on customer loyalty.*

**Keywords:** *customer loyalty, service quality, electronics shopping centers*

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## **I. Introduction**

In Vietnam, the current trend of increase in GDP per capita creates more opportunities for domestic and foreign retail enterprises (GDP per capita of Vietnam in 2013 reached 1.960\$, in 2014 reached 2.028\$ and reached 2.300\$ in 2015). To the end of 2013, there was existence of 724 supermarkets (and retailers) in Viet Nam, of which 97 supermarkets located in Ha Noi (as GSO, 2013). In addition, Viet Nam is often rated as one of the most active economies in Asean area that builds in an advantage in attracting international retailers. The development of scientific and technology also contributes to the enhancement of the material and spiritual life of humans. In Viet Nam, a lot of electronic supermarket chains and shopping centers have been established to meet the increasing demand of population such as: Tran Anh, Home Center, Media Mart... Consequently, this fact causes high pressure of competition in the electronic retail market. Enhancing the customer loyalty is one of the factors that contribute to improving the competitiveness of enterprises. Therefore, the author conducted a research to examine the relationship between service quality and loyalty of customers at the electronics shopping centers in Thai Nguyen province.

## **II. Theoretical Framework And Research Model**

### **2.1 Concepts and definition**

**Service quality** is one of the most interested concepts that have been much discussed in the model of service marketing. However, there is no unique concept about this subject which is widely accepted (Wisniewski, 2001). Parasuraman stated that, service quality is the “gap” between the customer expectation and perceived values of service when customers actual use that service (Parasuaraman et al, 1985).

Cronin and Taylor proposed a different argument of service quality. They stated that service quality is a multi-dimensional structure that is often considered to be customers’ judgment about service supply and customer interaction (Cronin and Taylor, 1992). Weitz & Wessley (2002) noted that, “service quality results from customers’ expectations of what should the service provider offer, how the provider actually performs to meet those expectations”. The best way to describe a retail enterprise is that “it should be considered to be a continuous chain of visible input products and invisible output services” (Varley and Rafiq, 2004).

**Customer loyalty** is defined as the commitment to continue buying or customer’s first priority in repurchasing product and service in the future. A loyal customer is seen as always be ready to frequently purchase a product or service, ready to try new product of the company, suggest and introduce that product or service to others, proposes suggestion for the company (Reichheld & Sasser, 1990).

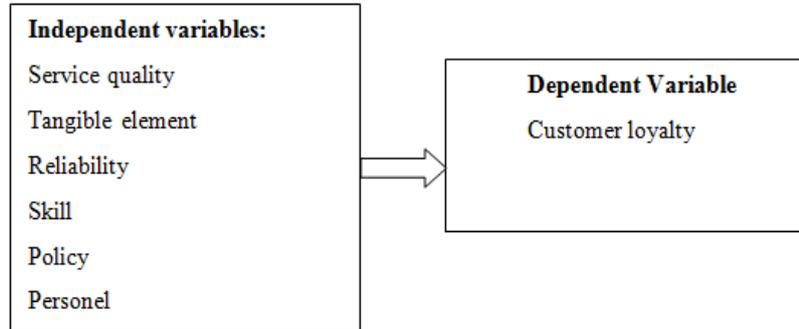
### **Relationship between service quality and customer loyalty**

Many researches show that, service quality has a positive significant impact on customer loyalty (Wong, 2005). Fullerton (2005) confirmed that, service quality has a strong impact on customer advocacy only through the intend of customers to tell some good things about the company, introduce it to their friends, suggest them to buy it. Many recent researchers assert a tight relation between service quality and customer loyalty. Wicks and Roethlein (2009) showed that, an increase in customer satisfaction would enhance customer loyalty and customer loyalty would lead to increase in re-purchase times, retaining customers (customer does not move to other providers). However, Al-Wugayan et al (2008) conversely confirmed that, there are a lot of

researchers suggesting that customer satisfaction is not a good estimator of customer loyalty. Customers may satisfy with the product or service of one provider; they may not be loyal customers (Luck & Rubin, 1987). Therefore, loyalty is essential for organizations to keep their existing customers, and more effective (lower cost) than attracting new customers. In addition, maintaining the customer is strictly related to the profit of companies.

**2.2 Research model**

Based on the previous research of Parasuraman, Zeithaml & Berry (1988), Dabholkar et al (1996), in combination with expert interviews, the author proposed the following research model:



Research hypotheses:

- H1: Service quality has a positive impact on customer loyalty
- H2: Tangible element has a positive impact on customer loyalty
- H3: Reliability has a positive impact on customer loyalty
- H4: Skill has a positive impact on customer loyalty
- H5: Policy has a positive impact on customer loyalty
- H6: Personel has a positive impact on customer loyalty

**III. Research Methodology**

**3.1. Sample**

The primary data will be collected via a survey at electronic shopping centers (and stores) in Thai Nguyen province. According to Slovin (1984, cited by Vo Thi Thanh Loc, 2010), the sample size is allocated as follows:  
 $n = N / (1 + N * e^2)$

Where *n* = Number of samples, *N* = Total population and *e* = Error tolerance

At the 95% confidence level<sup>1</sup> (most researchers apply this confidence level, see Saunders et al, 2010; Luck and Rubin, 2005), numbers of customer consume electronic products in Thai Nguyen (2015) is 4.250, thus the sample size is:

$$n = 4250 / (1 + 4250 * (0,05)^2) = 365,6$$

As the above calculation, the minimum required sample size is about 366 observations. However, according to Hai (2006), the larger sample size, the higher representativeness of the sample. Therefore, the author decided to choose a sample size of 550 observations.

**IV. Research Results**

**4.1. Reliability level of scales**

In the experimental studies, if one variable that has a correlation coefficient less than 0.3, that variable will be eliminated out of the research. When the Cronbach Alpha coefficient  $\geq 0.6$  then the measurement scale is reliable (Nunnally and Bernstein, 1994).

**Results of reliability of scales**

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
<b>Tangible elements (the draft scale)</b>				<b>Tangible elements (the official scale)</b>			
HH1	0.076	0.824	0.792	HH2	0.696	0.867	0.886
HH2	0.663	0.741		HH3	0.719	0.863	
HH3	0.668	0.741		HH4	0.675	0.87	
HH4	0.642	0.745		HH5	0.671	0.871	

<sup>1</sup> ( $\alpha = 0.05$ , also with *e*)

HH5	0.65	0.744		HH6	0.72	0.863	
HH6	0.687	0.736		HH7	0.715	0.864	
HH7	0.682	0.737					
HH8	-0.038	0.842					
<b>Policies (the draft scale)</b>				<b>Policies (the official scale)</b>			
CS1	0.641	0.817	0.843	CS1	0.669	0.861	0.879
CS2	0.654	0.815		CS2	0.651	0.863	
CS3	0.668	0.813		CS3	0.694	0.858	
CS4	0.618	0.819		CS4	0.617	0.867	
CS5	0.723	0.806		CS5	0.745	0.851	
CS6	0.645	0.815		CS6	0.652	0.863	
CS7	0.608	0.82		CS7	0.617	0.868	
CS8	0.119	0.879					
<b>Skills</b>				<b>Reliabilities</b>			
KN1	0.535	0.743	0.762	TC1	0.749	0.758	0.848
KN2	0.612	0.659		TC2	0.715	0.789	
KN3	0.635	0.632		TC3	0.686	0.817	
<b>Personnel</b>				<b>Satisfaction</b>			
NV1	0.652	0.892	0.899	MD1	0.572	0.723	0.774
NV2	0.714	0.882		MD2	0.512	0.744	
NV3	0.67	0.889		MD3	0.569	0.724	
NV4	0.743	0.878		MD4	0.567	0.726	
NV5	0.774	0.873		MD5	0.511	0.744	
NV6	0.801	0.869					

The author's analysis results based on SPSS software

From the above result tables, it can be seen that with the Tangible element criterions, HH1 and HH8 must be eliminated out of the measurement scale, and CS8 must be eliminated out of the measurement scale of Policies. Others criterion of independent variables are acceptable.

#### 4.2. Factors affecting the customer loyalty

##### Exploratory factor analysis (EFA)

##### a. Exploratory factor analysis (EFA) for independent variables

The main results in EFA of independent variables show that:

- KMO coefficient = 0.858 > 0.5; this implies that the survey data that be used in EFA is consistent and suitable;
- Bartlet test give out the Sig = 0,000 < 0.05 implies that at level of significant, the analysis results are reliable;
- Cumulative of Variance Extracted = 65.359 (%) > 50 (%) thus, 65.359% the variety of initial data will be explained by the variability of the selected factors
- Eigenvalues of factors all are > 1, and the fourth factor has minimum Eigen values of 1.999 > 1;

##### Factor analysis results

Rotated Component Matrix <sup>a</sup>					
	Component				
	1	2	3	4	5
CS5	0.832				
CS3	0.78				
CS1	0.761				
CS2	0.752				
CS6	0.743				
CS7	0.727				
CS4	0.71				
NV6		0.872			
NV5		0.851			
NV4		0.828			
NV2		0.803			
NV3		0.771			
NV1		0.759			
HH7			0.813		
HH6			0.812		
HH3			0.811		
HH2			0.796		
HH4			0.772		
HH5			0.768		
TC1				0.887	
TC2				0.871	

TC3				0.846	
KN3					0.848
KN2					0.828
KN1					0.784
KMO = 0.858			Sig = 0		
Eigenvalues = 1.999			Cumulative of Variance Extracted = 65.359		

*The author's analysis results based on SPSS software*

**b. Exploratory factor analysis (EFA) for dependent variable**

The main results in EFA of independent variables show that:

- KMO coefficient = 0.790 > 0.5; this implies that the EFA is consistent and suitable with data;
- Bartlett test give out the Sig = 0,000 < 0.05 implying that at level of significant, the analysis results are reliable;

Results showed that 05 initial observation variables are convergence into one group;

- Cumulative of Variance Extracted = 52.591 (%) > 50 (%) thus, 52.591% the variety of initial data will be explained by the variability of the dependent factor;
- Eigenvalues of factor are 2.630 > 1

**Results in dependent factor analysis**

Component Matrix <sup>a</sup>	
	Component
	1
MD1	0.75
MD3	0.745
MD4	0.743
MD2	0.693
MD5	0.693
KMO = 0.790	
Sig = 0.000	
Eigenvalues = 2.630	
Cumulative of Variance Extracted = 52.591	

*The author's analysis results based on SPSS software*

**c. Results in CFA analysis**

These above EFA results confirm the existence of 5 different observation factors that convergence into one variable. Thus, this is consistency with the initial research model.

**Regression analysis**

**Regression analysis results**

Regression model					
R	R Square	Change Statistics			Durbin-Watson
		R Square Change	F Change	Sig. F Change	
.775 <sup>a</sup>	0.6	0.6	159.21	0	1.615
ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	59.938	5	11.988	159.209	.000 <sup>a</sup>
Residual	39.981	531	0.075		
Total	99.919	536			
Repressors coefficients					
	Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics	
	B	Beta		Tolerance	VIF
(Constant)	0.686		0.000		
HH	0.186	0.384	0.000	0.977	1.023
TC	0.134	0.266	0.000	0.96	1.041
NV	0.103	0.195	0.000	0.992	1.008
KN	0.195	0.381	0.000	0.989	1.011
CS	0.180	0.289	0.000	0.947	1.056

*The author's analysis results based on SPSS software*

The regression results show that:

- The R Squared = 0.6 implying that, 60% the variation of customer loyalty is explained by 5 independent variables in the regression model. This result is rather high and confirms the consistency of research model with the theory;
- Durbin-Watson test = 1.615 suggests that, there is no the auto-correlation in regression model;
- F coefficient = 159.209 and Sig = 0.000 in ANOVA analysis show that the results of the regression analysis is reliable;

- All the coefficients (beta) are significantly at  $\alpha = 0.05$ , thus independent variables have positive influence on customer loyalty.

In summary, the regression model is following:

**Customer loyalty = 0.384\*(Tangible elements) + 0.381\*(Skills) + 0.289\*(Policies) + 0.266\*(Reliability) + 0.195\* (Personnel)**

The standardized coefficients (beta standardized) show that, factor that has the most influence on Customer loyalty is Tangible elements (0.384), then followed by Skills (0.381), Policies (0.289), Reliability (0.266) and Personnel (0.195), respectively.

## V. Conclusion

This research confirms the impact of 5 factors (Tangible elements, Skills, Policies, Reliability and Personnel) on the loyalty of customers who consume electronic products in shopping centers (and stores) in Thai Nguyen province. The research results suggest that, a better convenience of Tangible elements (modern equipment infrastructure, beauty and impressive layout...) would help more comfortable for customers and thus, they will commit the next purchase. In addition, skills (communication, negotiation, sales skills...) of staffs (sale, security, cashier, leader...) have positive impact on Customer satisfaction and thus enhance their loyalty. Customer care and after-sale services have significant contribution in improving the customer satisfaction and thus keeping customers. Other factors of reliability and ability of solving product troubles have low impact on customer loyalty because most of the electronic products are supplied by official brands.

Based on these above results, electronic shopping centers and stores could refer to build business strategy in order to enhance the competitiveness and keeping loyal customers. Although confirming the relationship between the 5 factors to customer loyalty, this research model still contain some limitations. The first is that, this research model does not fully cover some other influential factors. The second is that, the criterions applied in measurement scales may not fully representative for observation variables. And thus, more advanced researches need to be implemented in the upcoming future in order to propose more effective solutions for electronic shopping centers in enhancing the customer loyalty.

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