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

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 interesting 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 (Parasuraman 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 model diagram]

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: Personnel 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:

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

Where \( n \) = Number of samples, \( N \) = Total population and \( e \) = Error tolerance

At the 95% confidence level¹ (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:

\[ n = \frac{4250}{1 + 4250 \times (0.05)^2} = 365.6 \]

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 ≥ 0.6 then the measurement scale is reliable (Nunnally and Bernstein, 1994).

<table>
<thead>
<tr>
<th>Item</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
<th>Cronbach’s Alpha</th>
<th>Item</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH1</td>
<td>0.076</td>
<td>0.824</td>
<td>0.792</td>
<td>HH2</td>
<td>0.698</td>
<td>0.867</td>
<td>0.886</td>
</tr>
<tr>
<td>HH2</td>
<td>0.663</td>
<td>0.741</td>
<td>HH3</td>
<td>0.719</td>
<td>0.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH3</td>
<td>0.668</td>
<td>0.741</td>
<td>HH4</td>
<td>0.675</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH4</td>
<td>0.642</td>
<td>0.745</td>
<td>HH5</td>
<td>0.671</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ (\( \alpha = 0.05 \), also with e)

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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;

The author’s analysis results based on SPSS software
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h. **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;
- Bartlet 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

<table>
<thead>
<tr>
<th>Component Matrix</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MD1</td>
<td>0.75</td>
</tr>
<tr>
<td>MD3</td>
<td>0.745</td>
</tr>
<tr>
<td>MD4</td>
<td>0.743</td>
</tr>
<tr>
<td>MD2</td>
<td>0.693</td>
</tr>
<tr>
<td>MD5</td>
<td>0.693</td>
</tr>
<tr>
<td>KMO = 0.790</td>
<td>Sig = 0.000</td>
</tr>
<tr>
<td>Eigenvalues = 2.630</td>
<td>Cumulative of Variance Extracted = 52.591</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Regression model</th>
<th>R</th>
<th>R Square</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Squared</td>
<td>.775</td>
<td>0.6</td>
<td>0.6</td>
<td>1.615</td>
</tr>
<tr>
<td>ANOVA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of Squares</td>
<td>59.938</td>
<td>5</td>
<td>11.988</td>
<td>159.209</td>
</tr>
<tr>
<td>F</td>
<td>159.209</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>39.981</td>
<td>531</td>
<td>0.075</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>99.919</td>
<td>536</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repressors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficients</td>
<td>Unstandardized</td>
<td>Standardized</td>
<td>Sig.</td>
<td>Collinearity Statistics</td>
</tr>
<tr>
<td></td>
<td>Coefficients</td>
<td>Coefficients</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.686</td>
<td>0.000</td>
<td>0.977</td>
<td>1.023</td>
</tr>
<tr>
<td>HH</td>
<td>0.186</td>
<td>0.384</td>
<td>0.000</td>
<td>0.992</td>
</tr>
<tr>
<td>TC</td>
<td>0.154</td>
<td>0.266</td>
<td>0.000</td>
<td>0.96</td>
</tr>
<tr>
<td>NV</td>
<td>0.103</td>
<td>0.195</td>
<td>0.000</td>
<td>1.008</td>
</tr>
<tr>
<td>CS</td>
<td>0.180</td>
<td>0.289</td>
<td>0.000</td>
<td>0.947</td>
</tr>
</tbody>
</table>

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-sales 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.

References