
Abstract: With the development of the internet, internet shopping is taking its place as one of digitalization’s industries which transcends time and space beyond the scope of commercial activities as the means of goods sales and purchase. We studied the relations of customer value, the environment of internet shopping mall, customer satisfaction and loyalty. Customer value is customers’ subjective evaluation, which is formed after their purchasing and consuming. Customer satisfaction can be characterized as post-purchase evaluation of product quality given pre-purchase expectations. Customer loyalty is a potentiality or ensure of a durative relationship between customer and enterprises. Customer satisfaction functions as an antecedent of customer loyalty, while customer value does customer satisfaction. It prevents customer churn and consolidates retention, thereby constituting an important cause of customer loyalty. This study shows that customer value, the environment of internet shopping mall and customer satisfaction are each found to have a direct effect on customer loyalty. The results provide empirical support for a relation between customer satisfaction and loyalty. The primary purpose of this study is to increase customer satisfaction and customer loyalty in internet shopping malls. We believe that only high quality based customer programs accompanied by well designed loyalty programs can be effective in increasing customer retention.

1 INTRODUCTION

Numerous companies have been engaged in commercial activities through the internet, since internet commercialization was allowed in 1992. Internet shopping has diverse characteristics differentiated from general sales method in stores.

Internet shopping operators have contact with the selected target customers. Therefore, internet shopping pursues maximum effects with minimum cost and provides the greatest price satisfaction to customers through minimization of distribution channels like producers, wholesalers and retailers, which are the general distribution channels.

Moreover, initial stage investment cost is not large and internet shopping business can be launched with a small amount of capital, compared to the existing distribution business, which needs to open a store or secure proper site for the business operation. Also, internet shopping business is free from spatial and time restrictions.

And most internet shopping mall users are middle class people in their 20s–40s with a background of higher education, and they are opinion constituting leaders with purchasing power who tend to search for information. In view of this, accessibility to the target group’s feelings and the things which they need to purchase most is good, advertising expenses can be low and two-way communication is possible. In addition, there is no limit in the volume of advertising, and measurement of an advertising effect is feasible (Kim, 1999).

The primary purpose of this study is to increase customer satisfaction and customer loyalty in internet shopping mall.
2 THEORETICAL BACKGROUND

2.1 Characteristics of Internet Shopping

Customers’ acceptance of internet shopping is rapidly rising. The reason is that the conditions of mature internet shopping market including the establishment of society based on credibility, advent of digitalized society and improvement of consumption life and education level are in place. Internet shopping is taking its place as one of the digitalization’s industries which transcends time and space beyond the scope of commercial activities as the means of goods sales and purchase, as technological innovation like the internet, the PC, telecommunications satellite, cable TV and IPTV (Sun, 2007).

Internet shopping can be also defined as a type of information distribution. Almost all the sectors of human activities can be divided into tools and information, when it comes to the concept of information distribution. We can find such a phenomenon of separation in consumption activity, which is the foundation of our food, clothing and shelter activities. In other words, customers can select goods on the internet, rather than in a department store or a store, the goods are delivered to the customers after purchased on the internet and the customers pay for the goods by credit card or through a means of online settlement of accounts (Lee, 1997).

Internet shopping begins between firms and customers from the display of goods on the internet. Customers visit the web site of internet shopping mall from far distance through network and place orders on computer screen, when they find goods they want. Internet shopping is electronically supporting such a series of commercial processes (Lee, 2006).

Internet shopping that establishes direct relationships with customers through mutually exchanging communication has the following features: (Lee, 2004)

First, online shopping has immediacy of responses and effects.
Second, statistical projectability is vested in internet shopping.
Third, data base is constructed and maintained.
Fourth, precise targeting concentration
Fifth, personalization is possible in internet shopping.

Sixth, prior-tests and various sales methods can be carried out.
Seventh, adjustment in line with budget is possible.

2.2 Effect of Internet Shopping

There are some positive and negative sides of the internet shopping which can be summarized as follows. The seven positives are listed below (Choi, 2005).

First, it offers convenience. Customers can do the shopping at their internet including making payment, never having to leave their house to visit the physical markets. This helps customers save time and expense incurred in information searching and offers economic benefits.

Second, it will almost certainly bring about a perfectly competitive market in the long run, where the entry barrier is low and price competition is severe. As a result customers can purchase products at lower prices. In future when the online shopping market is mature, the operating expense for the shopping malls will be significantly lower than the physical stores. Consequently products will be offered at lower prices.

Thirds, customers can purchase products, anywhere at any time, thus, literally enjoying shopping around the clock, around the globe.

Fourth, customers can convey what they want to the business through the two-way communications and they can buy the products that fulfill their needs because their complaints will be immediately taken care of.

Fifth, a countless number of different kinds of products are displayed on the Internet and customers can conveniently make their choice, using the product search function in the shopping malls. This widens customers’ options.

Sixth, customers will be free from the problems like product hustling or inattentiveness seen at the traditional stores, (apart from high-class department stores and specialty stores) and enjoy shopping with more product information.

Seventh, search time and expense are relatively low on the internet and customers can collect information prior to the actual purchase. This helps customers keep themselves from the impulsive purchase while guiding them to a more rational purchase.

There are also some negative sides of the online shopping. They are as follows.

First, customers purchase products at virtual shopping malls without actually seeing them.
Accordingly they cannot see, touch, taste, hear, or smell the products, thus not being able to enjoy shopping to the full extent.

Second, because they do not actually see the products before they buy them, there may be dissatisfaction after the purchase. This will put a certain limit to the range of products dealt on the internet and customers will find some difficulties when purchasing perishable goods like fish or fashionable products like clothes.

Third, one of the characteristics of the Internet is such that it is difficult to return the goods or get a refund when purchased from small businesses with low credibility or overseas.

Fourth, payment on the internet is mostly made by credit cards and there is a risk to leakage of individual information unless fully secured with high technology.

3 RESEARCH MODEL AND HYPOTHESES

3.1 Research Model

Customer value
Internet Usage Level
Frequency of shopping
Cost of purchased goods
Quantity of purchased goods

Customer Satisfaction by using internet shopping malls

Customer Loyalty

Environment of internet shopping mall
Convenience of shopping
Shopping mall framework
Quality of products
Variety of products
Transaction Security

Figure 1: Research Model.

Developing an understanding of customer value, the environment of internet shopping mall, customer satisfaction and customer loyalty has preoccupied researches. Customer value is customers’ subjective evaluation, which is formed after their purchasing and consuming. Customer satisfaction can be characterized as post-purchase evaluation of product quality given pre-purchase expectations. Customer loyalty is a potentiality or ensure of durative relationship between customer and enterprises (Babin, 1994).

Generally, customer satisfaction functions as an antecedent of customer loyalty, while customer value provides customer satisfaction. It prevents customer churn and consolidates retention, thereby constituting an important cause of customer loyalty (Fornell, 1992). Cronin et al (2000) and Oh (1995) developed similar models to verify the same cause and effect relation. However, the relation between customer satisfaction and customer loyalty is not always a linear, although it constitutes a positive relationship (Fornell, 1992; Soderlund, 1998). In Liu et al. (2005) model, buyer’s perceived customer value of a supplier has positive impact on perceived switching costs. Based on the above theoretical discussion, we propose the research model shown in Figure 1.

3.2 Hypotheses

Based on a review of previous work that has looked at customer value, environment of internet shopping mall, customer satisfaction and customer loyalty, we have present formulated the research model and the following hypotheses.

Customer value can be defined as a customers’ overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithami, 1988). Customer value consists of utilitarian value and hedonic value. Utilitarian value is formed because of deliberately desiring for some certain exceptions, which has the characteristics of functionality, manner and cognition (Babin, 1994). Hedonic value is a kind of their spontaneous value evaluation during the purchasing, which has the characteristics of individuation, non-manner, experience, emotionality (Chaudhuri, 2001).

Customer satisfaction is based on their comments and positive feedback after purchasing and consuming. The viewpoint of Oliver (1999) has been dominating the subject of the driving factor of customer satisfaction, he proved that, customer satisfaction is determined by the customers’ perception value of the product or service and expectation. Loyal customers are the most important assets for any company, which have strong influences on company profitability via decreasing transaction costs and price sensitivity (YAO, 2007). Customer loyalty has two categories, the behavior and the attitude. As a behavior, customer loyalty has been measured as the long-term choice.
probability for a brand, including hard-core loyalty, repeat purchase probability. Attitudinal approaches focused mainly on brand recommendations, resistance to superior products, repurchase intention, and willingness to pay a price premium. We adopt the integrated customer loyalty that is understood as a combination of customers’ favorable attitude and the behaviour of repurchase. We use repurchase intention, recommend it to other consumers and pay price premiums items to measure this construct, which area also similar to those reported and used throughout the services marketing literature (Xu-Xiaoli, 2006).

The hypotheses are as follows,

1) The impact of customer value on customer satisfaction
H1-1 : Internet usage level has a positive effect on customer satisfaction.
H1-2 : Frequency of internet shopping has a positive effect on customer satisfaction.
H1-3 : Cost of purchased goods has a positive effect on customer satisfaction.
H1-4 : Quantity of purchased goods has a positive effect on customer satisfaction.

2) The impact of the environment of internet shopping malls on customer satisfaction
H2-1 : Convenience of internet shopping malls has a positive effect on customer satisfaction.
H2-2 : The framework of internet shopping malls has a positive effect on customer satisfaction.
H2-3 : Quality of products in shopping malls has a positive effect on customer satisfaction.
H2-4 : Variety of products in shopping malls has a positive effect on customer satisfaction.
H2-5 : Transaction security has a positive effect on customer satisfaction.

3) The impact of customer value on customer loyalty
H3-1 : Internet usage level has a positive effect on customer loyalty.
H3-2 : Frequency of internet shopping has a positive effect on customer loyalty.
H3-3 : Cost of purchased goods has a positive effect on customer loyalty.
H3-4 : Quantity of purchased goods has a positive effect on customer loyalty.

4) The impact of the environment of internet shopping malls on customer loyalty
H4-1 : Convenience of internet shopping malls has a positive effect on customer loyalty.
H4-2 : The framework of internet shopping malls has a positive effect on customer loyalty.
H4-3 : Quality of products in shopping malls has a positive effect on customer loyalty.
H4-4 : Variety of products in shopping malls has a positive effect on customer loyalty.
H4-5 : Transaction security has a positive effect on customer loyalty.

5) The impact of customer satisfaction on customer loyalty
H5 : Customer satisfaction has a positive effect on customer loyalty.

4 RESEARCH METHODOLOGY

4.1 Data Collection and Measurement

A structured questionnaire was modified based on a review of the literature, in-depth pretesting with two managers of internet shops, and three customers who have internet shopping experience. The survey was administered to those who had purchased from internet shops at least once within the last three months.

The questions were adapted to reflect circumstances in internet shopping mall. All of the measurement items are based on a 5-point Likert type scale.

Data collection procedure is managed by the authors. Of the 300 customers, 260 participated in the study, resulting in a response rate of 86.7%. The 260 respondents produced a total of 242 usable response sets.

1) Subjects:
   Total 300 people
   In their 20s-50s
   living in Korea
2) Method : Focus group interview with 38 survey questions by Likert scale measurement (based on 5-point scale)
3) Sampling Method (total 300 people):
   a. Sample 200 people:
   b. Booster sample 100 people:
      experienced online shopping
4) Number of Survey :
   Of the 300 people
   260 participated in the study
   The respondents produced 242 usable response
5) Statistical Method :
   Analysis of Reliability and Validity,
   Mean & SD, Regression Analysis
   with using SPSS 16.0 version for window

The demographic characteristics of the respondents to this survey are summarized as follows. Gender composition is roughly half and half, with 55.8% of men and 44.2% of women.
Table 1: Operational Definition of Variables (Cont.).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Operational Definition and list</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transaction security</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countermeasure about transaction security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRS1 : There is a policy of personal information security in this shopping mall.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRS2 : This shopping mall observe the policy of personal information security.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRS3 : This shopping mall cooperates with the special information security agencies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer loyalty about favorite internet shopping malls.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSM1 : I will visit this shopping mall when I buy products.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSM2 : I will recommend this shopping mall to other people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSM3 : I will visit this site when I need the information of product.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSM4 : If the same product is the equal price, I will definitely buy it in this shopping mall.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction about favorite internet shopping malls.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSM1 : I am satisfied with this shopping mall on the whole.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSM2 : It may take a short time to select and purchase a product.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSM3 : I am satisfied with the items bought through internet shopping malls.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSM4 : I am satisfied with the follow-up service of internet shopping malls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* : removed list for reliability

4.2 Reliability and Validity

Reliability was assessed using Cronbach’s alpha. First, we checked Cronbach’s alpha to find all of them were satisfactory (>0.6). We performed this test for the 36 measurement items for the eleven construct. Based on the Cronbach’s alpha results we eliminated a few items that are cross-loaded – one USL and one SPE item. After a careful examination of the eliminated items, we determine that content validity of the affected constructs is not seriously hurt. Results of the reliability analysis are shown in Table 2.

4.3 Statistical Analysis

For all statistical analyses, we used SPSS 16.0. To investigate the causal relationships among the constructs depicted by the Model I, we employed multiple regression. Multiple regression analysis of
survey data shows in Table 3.

5 RESULT AND FINDING

The analysis of this study shows that customer value, the environment of internet shopping mall and customer satisfaction are each found to have a direct effect on customer loyalty in Table 4.

In [H1-1 ~ H1-4] and [H3-1 ~ H3-4] of the hypotheses, the importance of customer value is emphasized. All lists of the impact customer value to customer satisfaction and loyalty are accepted by the research. Among factors establishing customer value, the factors with a significant impact on customer satisfaction appeared to be a responsive and safe pricing structure. This suggests that, while customers have improved buy products over the past several years through internet shopping mall, according to customers’ perceptions, still retain their importance. Therefore, internet shopping malls must concentrate their efforts on strengthening their employees’ ability and professional skills to increase customer contact and support.

In [H1-1 ~ H1-4] and [H3-1 ~ H3-4] of hypothesis, this emphasizes the environment of internet shopping malls. We notice that H2-2, H4-1 and H4-2 are rejected by research. This shows the interests of customers are more about service or operation than about the framework of shopping malls in internet shopping malls.

These days, most internet shopping malls are very well designed and luxurious. Therefore, this result shows the interests of customers have changed.

In the last hypothesis, we found customer satisfaction has had a positive effect on customer loyalty. The results provide empirical support for a relationship between customer satisfaction and loyalty.

Table 2: Results of the reliability analysis.

<table>
<thead>
<tr>
<th>Construct</th>
<th>N of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet usage level</td>
<td>3</td>
<td>0.615</td>
</tr>
<tr>
<td>Frequency of internet shopping</td>
<td>2</td>
<td>0.701</td>
</tr>
<tr>
<td>Cost of purchased goods</td>
<td>3</td>
<td>0.607</td>
</tr>
<tr>
<td>Quantity of purchased goods</td>
<td>2</td>
<td>0.709</td>
</tr>
<tr>
<td>Convenience of internet shopping</td>
<td>5</td>
<td>0.633</td>
</tr>
<tr>
<td>Internet shopping mall framework</td>
<td>3</td>
<td>0.676</td>
</tr>
<tr>
<td>Quality of Products in shopping</td>
<td>3</td>
<td>0.627</td>
</tr>
<tr>
<td>Variety of products in shopping</td>
<td>4</td>
<td>0.673</td>
</tr>
<tr>
<td>Transaction security</td>
<td>3</td>
<td>0.723</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>4</td>
<td>0.613</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>4</td>
<td>0.662</td>
</tr>
</tbody>
</table>

Table 4: The result of Hypotheses.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>R²</th>
<th>F value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1-1: Internet usage level has a positive effect on customer satisfaction.</td>
<td>.065</td>
<td>5.494</td>
<td>.001</td>
</tr>
<tr>
<td>H1-2: Frequency of internet shopping has a positive effect on customer satisfaction.</td>
<td>.075</td>
<td>6.475</td>
<td>.000</td>
</tr>
<tr>
<td>H1-3: Cost of purchased goods has a positive effect on customer satisfaction.</td>
<td>.064</td>
<td>5.339</td>
<td>.001</td>
</tr>
<tr>
<td>H1-4: Quantity of purchased goods has a positive effect on customer satisfaction.</td>
<td>.045</td>
<td>5.683</td>
<td>.004</td>
</tr>
<tr>
<td>H2-1: SSM has a positive effect on customer satisfaction.</td>
<td>.068</td>
<td>3.462</td>
<td>.005</td>
</tr>
<tr>
<td>H2-2: SSM has a positive effect on customer satisfaction.</td>
<td>.042</td>
<td>3.480</td>
<td>.017</td>
</tr>
<tr>
<td>H2-3: SSM has a positive effect on customer satisfaction.</td>
<td>.091</td>
<td>7.964</td>
<td>.000</td>
</tr>
<tr>
<td>H2-4: SSM has a positive effect on customer satisfaction.</td>
<td>.164</td>
<td>11.661</td>
<td>.000</td>
</tr>
<tr>
<td>H2-5: SSM has a positive effect on customer satisfaction.</td>
<td>.158</td>
<td>11.106</td>
<td>.000</td>
</tr>
<tr>
<td>H3-1: SSM has a positive effect on customer satisfaction.</td>
<td>.089</td>
<td>7.764</td>
<td>.000</td>
</tr>
<tr>
<td>H3-2: SSM has a positive effect on customer satisfaction.</td>
<td>.315</td>
<td>16.425</td>
<td>.000</td>
</tr>
<tr>
<td>H3-3: SSM has a positive effect on customer satisfaction.</td>
<td>.317</td>
<td>16.872</td>
<td>.000</td>
</tr>
<tr>
<td>H3-4: SSM has a positive effect on customer satisfaction.</td>
<td>.149</td>
<td>21.000</td>
<td>.000</td>
</tr>
<tr>
<td>H4-1: SSM has a positive effect on customer satisfaction.</td>
<td>.049</td>
<td>2.407</td>
<td>.037</td>
</tr>
<tr>
<td>H4-2: SSM has a positive effect on customer satisfaction.</td>
<td>.045</td>
<td>3.721</td>
<td>.012</td>
</tr>
<tr>
<td>H4-3: SSM has a positive effect on customer satisfaction.</td>
<td>.344</td>
<td>41.562</td>
<td>.000</td>
</tr>
<tr>
<td>H4-4: SSM has a positive effect on customer satisfaction.</td>
<td>.283</td>
<td>23.329</td>
<td>.000</td>
</tr>
<tr>
<td>H4-5: SSM has a positive effect on customer satisfaction.</td>
<td>.280</td>
<td>23.079</td>
<td>.000</td>
</tr>
<tr>
<td>H5: SSM has a positive effect on customer satisfaction.</td>
<td>.164</td>
<td>11.600</td>
<td>.000</td>
</tr>
</tbody>
</table>
The results of this study must be interpreted in view of certain limitations. Results of this study are generated from people in their 20s~30s mainly. Furthermore, findings are based on relatively high educated people. However, given the exploratory nature of the present study, we emphasize the need for more rigorous investigation into the issues addressed here.

6 CONCLUSIONS AND IMPLICATION

To increase customer satisfaction and customer loyalty in internet shopping mall is the primary purpose of this study. This emphasizes the importance of customer satisfaction through customer value and the environment of internet shopping malls. The result suggests that customer value is an antecedent of customer satisfaction and that customer exerts a strong influence on repurchase intention.

Retaining customer is only to as manage their customers’ satisfaction levels. In the long run, more usage increases switching costs but, at the same time, increases the degree of feeling locked-in that can be a major source of dissatisfaction and offset of customer value. If not satisfied with the services of internet shopping malls, even customers with high switching costs are more likely to consider changing service providers, so that they can have a better long-term deal. This may be particularly critical for marketing to customer because altering business between customers is less noticeable by incumbent vendors.

Customers must strive to develop customer loyal programs that concretely compensate customers. Therefore, we believe that only high quality based customer programs accompanied by well designed loyalty programs can be effective in increasing customer retention.

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