A Study of Influencing Factors for Repurchase Intention in Internet Shopping Malls

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Abstract

This research studied the effect of 15 variables on the consumers' overall satisfaction and repurchase intention in Internet shopping malls. As the value of loyal customers is incomparably high in Electronic Commerce, winning customers' loyalty is vital to success of shopping malls. In this study, a customer is defined as one who has purchased goods or services at least once from Internet shopping malls. The research variables are demographic factors, product perceptions, customer service, perceived ease of use, site image, promotion, perceived consumer risk, personal characteristics and Internet communications environments. The outcome of the research is as follows: Perceived consumer risk shows a negative relationship with the repurchase intention, and all the other variables - product perceptions, customer service, perceived ease of use, site image, promotion, communications environments are positively related with the repurchase intention. Also, the overall satisfaction level of customers for the Internet shopping malls positively influences repurchase intention.

KEY WORDS : Electronic Commerce, Internet Shopping Malls, Repurchase Intention.

1. Introduction

The Internet is one of the main driving forces for industrial development in the 21st century and a medium, which rapidly extends its coverage to most industrial sectors. Electronic Commerce (EC) exists in the core of this diffusion and its scale is showing a steep growth curve each year. In Korea, the volume of EC is expected to reach up to 400 billion won(roughly $330 million) in 2002 (Korea National Statistical Office, 2002), and according to Anderson Consulting (2001), it will reach up to $300 billion in 2003 in the U.S. Even though research results vary depending on the research institutes, it is obvious that the impact of EC on consumers' behavior will be getting bigger in the future.

EC can take a different form such as the internal transactions of a company, inter-corporation transactions, and transactions between corporations and consumers. As the number of Internet shopping malls increases, several studies have been conducted for the business-to-consumer (B2C) transactions, but these studies were not comprehensive and did not follow a strict research methodology. Furthermore, as some of those studies were conducted in the early developmental period of Internet shopping malls, they did not fully represent the current situations, and also the selection of research variables was very limited. However, the proliferation of Internet shopping malls(which is estimated to be around 2,500 in Korea) and the increase in sales volumes indicate that B2C is passing the initial introductory phase and moving into a full-scale developmental phase. So it seems to be proper time to initiate a study to understand this phenomenon and to contribute to the research in the area of EC, because there was no comprehensive research carried out in Korea. Furthermore, it would be problematic to directly apply the results of U.S. studies to the Korean environment because the situational characteristics of each country may be quite different. Thus, to overcome some of these limitations of previous studies, a comprehensive research model is developed and the research has been conducted as rigorously as possible in terms of definition of variables, manipulation of the data, measurement of the variables and selection of criteria.

This research studied the factors influencing repurchase intention in Internet shopping malls. In normal commercial transactions, the value from the loyal customers is far greater than the disloyal ones. Therefore, it is very important to make a first time visitor to become a regular customer so that customers could purchase regularly. An effective customer-retention strategy can be developed based on the
understanding of the factors that influence customers' repurchase. This study, thus, focuses on customers who bought products and services more than once from Internet shopping malls to understand their repurchasing behavior.

2. Research Model and Hypotheses

2.1 Prior research

Jarvenpaa and Todd (1997) surveyed reasons why consumers make purchases from the Internet shopping malls. They used open-ended survey using factors such as perception of products, shopping experience and perceived consumer risk, etc. They attempted to bring to light the correlation between these factors and consumers' attitudes and intention in purchasing activities on the Internet. The result shows that perception of products, shopping experience and customer service were turned out to have statistically significant correlations with purchase intention. Customers perceived the potential merit of Internet shopping in saving costs and time compared to traditional offline shopping. However, more non-purchasers were represented than the purchasers in this study, and the level of risk might have been observed relatively too high. Also because the sample includes more women in high-income families, the general Internet shoppers might have not been represented properly. Although the number of female Internet shoppers is increasing, the number of male Internet users still exceeds female users.

Kim, S. Y, Cho, N. J., Kim, J. D., and Kim, C. N(1998) investigate the differences in consumer attitudes between purchase group who had purchased a product or service and no purchase group who had not among the users of the Internet/Commercial On-Line (COL) services in Korea. This research studied consumer attitudes and some issues in the Electronic Market(EM) such as the advantages and drawbacks of the Internet/COL shopping, advertising, buying intention and buying likelihood. This research provides some insights for electronic marketers with the following implications. 1) No purchase group does not have the positive attitude toward the advantages of using EM as purchase group does. Thus, in order to attract the Internet/COL users to shopping in EM, marketers need to emphasize the advantages of EM especially to those who did not make any purchase in EM. 2) For the EM uncertainties with respect to product, purchase, service, and payment, the purchase group has more positive attitude than no purchase group. In addition, Korean customers do not seem to concern much about the potential post-purchase problems such as return, exchange, refund, and releasing personal information. This perhaps indicates that marketers did successfully position or differentiate their EM with an emphasis on these issues. 3) Prior to purchase, consumers who saw the advertisement at the Internet/COL have more positive attitude toward the advertisement than those with no advertisement exposure. 4) Purchase intention is affected by both the attitude toward buying action and the subjective norm. In particular, they find that the subjective norm has greater effect on the buying intention for no purchase group than the purchase group. This implies that emphasizing the approval (of shopping at the Internet/COL) from close friends and family is a desirable marketing strategy, especially to no purchase group.

Studies on consumer behavior under the Internet environment adopt such variables as vividness (see [29]), interactivity (see [25]) and telepresence (see [29]). These studies suggest that the more consumers concentrate on virtual environment and the longer they stay, the more likely they would come again. Some studies argue that purchase process should be easy to use in order to assure the increase of regular visits and purchase intention (see [14]).

As the amount of available information continues to increase at a rapid rate, the search for and identification of relevant and useful information is becoming time consuming and difficult for the consumer. Thus, there has been a growing consumer preference for channels that automatically customize information to meet their wants and needs (see [21]).

Online marketers usually ask consumers to sign up in order for them to receive information via email about products and services that are of particular interest to the consumer. For example, in business to individual transactions, if a consumer is interested in a certain technology, once the consumer provides the company with an email address, the company can periodically email the consumer information about this technology. In business to business transactions, businesses may also reach agreements so that the seller emails all relevant information to the buyer. Finally, marketers are taking advantage of new forms of technology that assist in informing consumers about products and services. One of the latest push technologies on the Internet is webcasting. Webcasting enables online marketers to push and deliver advertisements and information to subscribers without the subscriber ever making a request (e.g.,[20, 23]).

In a study by Donthu and Garcia (1999) on people exposed to infomercial, demographic characteristics such as sex, race, level of education, and the level of income did not show any difference in purchasing frequency, but there were significant differences in the perception of risks and benefits. And the Internet shoppers were seen more progressive than non-shoppers. Consumer progressivism means the extent to which consumers accept new life styles, products and spending patterns in comparison to other people (see [13]).

A firm must define its channel strategy and understand that the Internet has a great potential to complement rather than to cannibalize its business ([24]). Direct selling could improve margins, whereas selling through new Internet mediation services could mean new market opportunities. Corporations can establish long-term relationships with
consumers by increasing communication frequency and quality using global marketing system in the context of relationship marketing strategy (see [12]).

Swaminathan, Fox and Reddy (2001) studied the impact of a new brand extension introduction on choice in behavioral context using national household scanner data involving multiple brand extensions. Particularly, the authors investigate the reciprocal impacts of trial of successful and unsuccessful brand extensions on parent brand choice. The study showed that experience with the parent brand has a significant impact on extension trial, but not on extension repeat.

2.2 Research Models

Research on the purchase intention were conducted by many researchers (e.g., [17, 19, 21, 7, 27, 11]) with various independent variables. In this research, a comprehensive research model was developed to study the influence of independent variables such as demographic factors, product perception, customer service, perceived ease of use, shopping site image, promotion, perceived consumer risk, personal characteristics, and Internet communication environment on the level of overall satisfaction and repurchase intention.

2.2.1 Demographic factors

Forrest Research (1998) reported that most Internet users are young, progressive and very interested in new ideas, and have high level of education and income in comparison to non-users.

As the number of home Internet users increase, there have been big changes in demographic factors among Internet users. The Korea Network Information Center reports that domestic Internet users exceeded 25 million as of June 2002 and according to nua.com, the number of Internet users worldwide was more than 500 million and the U.S. Department of Commerce predicts that the number will reach more than 1 billion in 2005. Thus, demographic variables are still important factors not only in terms of business perspectives but also of policy perspectives. The demographic factors selected to measure the individual characteristics are age and income level (e.g., [7, 11]).

2.2.2 Product perception

One of the main factors for consumers to perceive products in the Internet shopping malls is that their expectation of buying things at relatively low prices in comparison to offline purchase is satisfied through bargain sales and special events ( [21])

Jarvenpaa and Todd also said that product perception directly affects purchase from the Internet shopping malls. Consumers feel upset when they find that the products they purchased are different from what they saw on the screen. As electronic commerce is rapidly growing, consumers' complaints are also growing. The Korea Consumer Protection Board reports that e-commerce related complaints increased 3.6 times in 2001 compared to the previous year. The types of complaints were no or late delivery for prepaid merchandises (31.4%), double billing or billing for unused services (16.6%), and defective products delivered (12.9%), etc. According to an analysis of claim cases in the first half of 2000 conducted by major shopping malls like Samsung Mall, Hansol CS Club and Interpark, a large portion was related to the product such as insufficient explanations about products, deficiency in diversity of products and poor product quality. Therefore, it is reasonably assumed that product perception influences overall level of consumers’ satisfactions and their repurchase intention. Price, quality and variety of products are selected as factors to explain product perception.

2.2.3 Customer service

Customer service is a very crucial factor in selecting shops in traditional offline commercial transactions (e.g., [2, 4, 28, 31]). Consumers indicate several problems including long hours of delivery (see [9]), difficulty in returning goods and after sales service, etc. These customer service related problems begin to surface as the scale and scope of Internet commerce expands recently. To take a closer look at the aspect of customer service, variables such as responsiveness, assurance, reliability, empathy and tangibility were selected.

2.2.4 Perceived ease of use

Perceived ease of use is a category indicating the extent to which users feel easy to handle a certain system without much difficulty and efforts(see [6]). If other things are equal, users will choose a more convenient system.

Related to the issue of perceived ease of use, Internet users complained about difficulty of searching for what they want (see [9]), difficulty in canceling orders and returning goods, difficulty of searching sites and gaining access, and deficiency of interesting information (see [19]). According to the World Research in 1999, consumers feel that the Internet is too complicated to commercially transact on.

To measure factors related to the perceived ease of use, the concept of perceived ease of use was transcribed from parts of ‘purchase experiences’ used by Jarvenpaa and Todd (1997) and redefined to help consumers easily understand it.

2.2.5 Site image

Internet shopping malls correspond to traditional off-line stores in terms of site image (see [27]). Although there is no proven evidence that indicates site image influences the level of overall satisfaction and repurchase intention, it was
defined as a major factor of Internet shopping malls by Spiller and Lohse (1998). A site image that is intimate with consumers and easy to use will make consumers frequently visit the site and eventually purchase goods again.

2.2.6 Promotion

Lindquist (1974) classified promotion activities into sales promotion, advertisement and way of display, etc. Spiller and Lohse (1998) enumerated diverse ways of promotion in their study such as purchaser plan, stimulator like lottery and links to other sites. In this study, customer incentive, stimulators (lottery, free gifts etc.), and advertisement (banners, etc.) were selected as appropriate promotion methods for Internet shopping malls.

2.2.7 Consumer risk

In studies by Jarvenpaa and Todd (1997) and Swaminathan, Fox and Reddy (2001), consumer risk had little statistically significant correlation with purchase activities of consumers. But the 4th Internet Hankyoreh Survey conducted by the Hankyoreh Daily in February 1999, the research by Information and Culture Center in September 1999, and the research by the Korea Consumer Protection Board in 2002 indicated that one of the worst obstacles in purchasing goods on the Internet was the possible leakage of private information. So the findings of Jarvenpaa and Todd (1997) and Swaminathan, Fox and Reddy (2001) should be reevaluated.

2.2.8 Personal characteristics

Gehrt and Shim (1998) found that shopping activity, the level of interest, and opinions vary depending on the consumers’ life styles, and Darden and Howell (1987) concluded that purchasing propensity of consumers vary according to personal characteristics of consumers. These personal characteristics of consumers seem to influence the level of overall satisfaction and repurchase intention of consumers. Innovativeness, social interaction orientation, and preference of credit card use were selected to measure personal characteristics.

2.2.9 Internet communication environment

The 4th Internet Hankyoreh Survey unveiled that most Internet users were connected on line in their workplaces and schools where LAN systems are installed. Internet shopping malls will be more successful in environment with better infrastructure. Internet access speed and terms of Internet use were selected as the variables to measure Internet communication environment.

2.2.10 Level of overall satisfaction

Level of overall satisfaction is a comprehensive evaluation measure which customers accumulate through purchase experiences of goods and services (e.g., [3, 8]). The level of overall satisfaction is related with the various aspects of shopping malls including satisfaction on the products and services, and the physical conditions, etc.

2.2.11 Repurchase Intention

Repurchase intention means the status of consumers’ (ones who purchased at least once from the shopping malls) desire to purchase again. Repurchase intention of customers is an indispensable factor for successful operation of Internet shopping malls. The value provided by steady and loyal customers has direct influence on the success of a company, and it is largely determined by customers’ repurchase intention.

2.3 Research Hypotheses

In this section, whether there are correlations between independent and dependent variables will be verified to demonstrate the validity of research models introduced above. The following are hypothesized.

H1-a: The younger the customer is, the higher the repurchase intention.
H1-b: The higher the income level is, the higher the repurchase intention.
H2-a: The lower the product price is, the higher the repurchase intention.
H2-b: The lower the product price is, the higher the level of overall satisfaction.
H2-c: The better the product quality is, the higher the repurchase intention.
H2-d: The better the product quality is, the higher the level of overall satisfaction.
H2-e: The more the variety of products is, the higher the repurchase intention.
H2-f: The more the variety of products is, the higher the level of overall satisfaction.
H3-a: The higher the level of responsiveness is, the higher the repurchase intention.
H3-b: The higher the level of responsiveness is, the higher the level of overall satisfaction.
H3-c: The higher the level of assurance is, the higher the repurchase intention.
H3-d: The higher the level of assurance is, the higher the level of overall satisfaction.
H3-e: The higher the level of reliability is, the higher the repurchase intention.
H3-f: The higher the reliability is, the higher the level of overall satisfaction.
H3-g: The higher the level of empathy is, the higher the repurchase intention.
repurchase intention.

H3-h: The higher the level of empathy is, the higher the level of overall satisfaction.

H3-i: The higher the level of tangibility is, the higher the repurchase intention.

H3-j: The higher the level of tangibility is, the higher the level of overall satisfaction.

H4-a: The higher the level of perceived ease of use is, the higher the repurchase intention.

H4-b: The higher the level of perceived ease of use is, the higher the level of overall satisfaction.

H5-a: The more positive a site image is, the higher the repurchase intention.

H5-b: The more positive a site image is, the higher the level of overall satisfaction.

H6-a: The more diverse methods for promotion are used, the higher the level of overall satisfaction.

H6-b: The more diverse methods for promotion are used, the higher the level of overall satisfaction.

H7-a: The higher the consumer risk is, the lower the repurchase intention.

H7-b: The higher the consumer risk is, the lower the level of overall satisfaction.

H8-a: The higher the level of innovativeness is, the higher the repurchase intention.

H8-b: The higher the level of innovativeness is, the higher the level of overall satisfaction.

H8-c: The higher the level of social interaction orientation is, the lower the repurchase intention.

H8-d: The higher the level of social interaction orientation is, the lower the level of overall satisfaction.

H8-e: The higher the level of preference of credit card use is, the higher the repurchase intention.

H8-f: The higher the level of preference of credit card use is, the higher the level of overall satisfaction.

H9-a: The higher the Internet access speed is, the higher the repurchase intention.

H9-b: The longer the terms of Internet use is, the higher the repurchase intention.

H10: The higher the level of overall satisfaction is, the higher the repurchase intention.

3. Analyses

A questionnaire was developed based on the factors explained above. Each question is based on the Likert type scale of five. Additional questions were added to collect demographic information and the Internet communication environment. The questionnaires were distributed using email through Internet. About 5,200 questionnaires were distributed and 742 were obtained. 700 were used for analyses after removing 42, in which the responses were not satisfactory.

3.1 Hypotheses for the independent variables and the level of overall satisfaction

A factor analysis indicates, as it was expected, that 15 factors - product price, product quality, product variety, responsiveness, assurance, reliability, empathy, tangibility, perceived ease of use, site image, promotion, consumer risk, innovativeness, social interaction orientation and preference of credit card use - are found to be statistically significant.

H2, H3, H4, H5, H6, H7, and H8 were tested using regression analysis. The independent variables are the significant 15 factors and the dependent variable is the level of overall satisfaction. Table 1 shows the result of the regression analysis. The independent variables are the significant 15 factors and the dependent variable is the level of overall satisfaction. Table 1 shows the result of the regression analysis. As R² is 0.6438, the model is considered statistically significant because it passes the level of 0.4, which is generally accepted as a minimum value in social science research, and F value is significant at the level of 0.0000.

Product price, product quality, product variety, responsiveness, assurance, reliability, tangibility, perceived ease of use, site image, promotion, innovativeness and preference of credit card use have positive effect on the level of overall satisfaction, while empathy, consumer risk and social interaction orientation have negative effect.

Table 1. Regression analysis. (the level of overall satisfaction as a dependent variable)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Sig T</th>
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<tbody>
<tr>
<td>product price</td>
<td>.325</td>
<td>.000</td>
</tr>
<tr>
<td>product quality</td>
<td>.677</td>
<td>.000</td>
</tr>
<tr>
<td>product variety</td>
<td>.111</td>
<td>.001</td>
</tr>
<tr>
<td>responsiveness</td>
<td>.190</td>
<td>.001</td>
</tr>
<tr>
<td>assurance</td>
<td>.079</td>
<td>.006</td>
</tr>
<tr>
<td>reliability</td>
<td>.365</td>
<td>.001</td>
</tr>
<tr>
<td>empathy</td>
<td>-.318</td>
<td>.000</td>
</tr>
<tr>
<td>tangibility</td>
<td>.211</td>
<td>.001</td>
</tr>
<tr>
<td>perceived ease of use</td>
<td>.577</td>
<td>.009</td>
</tr>
<tr>
<td>site image</td>
<td>.177</td>
<td>.007</td>
</tr>
<tr>
<td>promotion</td>
<td>.035</td>
<td>.017</td>
</tr>
<tr>
<td>consumer risk</td>
<td>-.117</td>
<td>.001</td>
</tr>
<tr>
<td>innovativeness</td>
<td>.201</td>
<td>.000</td>
</tr>
<tr>
<td>Social interaction orientation</td>
<td>-.225</td>
<td>.000</td>
</tr>
<tr>
<td>preference of credit card use</td>
<td>.156</td>
<td>.001</td>
</tr>
</tbody>
</table>

R²=0.6438  F=66.956  Sig F=0.0000
3.3 Hypotheses for the independent variables and the repurchase intention

A regression analysis was conducted for the 15 factors mentioned above as independent variables and the repurchase intention as a dependent variable. The F value is 57.956 with significance level of 0.0000, and R² is 0.5430, which is considered statistically significant. The analysis shows that product price, product quality, product variety, responsiveness, assurance, reliability, empathy, tangibility, perceived ease of use, site image, promotion, innovativeness and preference of credit card use have positive effect on the repurchase intention, whereas consumer risk and social interaction orientation have negative effect.

3.4 Hypotheses for the level of overall satisfaction and repurchase intention

A regression analysis was performed for the level of overall satisfaction as an independent variable and repurchase intention as a dependent variable. The F value is 42.222 with significance level of 0.0000, and R² is 0.460, which is considered statistically significant because it passes the level of 0.4. Thus, H10 was verified.

3.5 Age and income levels and repurchase decisions

Table 2 shows that Pearson χ² is 31.170 with a significance level of 0.000(< 0.01) indicating that there is a statistically significant difference at the level of at least 99%.

It is not sufficient, however, to verify the hypothesis only with whether or not there is a meaningful difference. So the standard deviations and the mean values of repurchase intention by age group are presented in Table 3 to understand the age effect. While the highest repurchase intention was found among the teenage group with an average repurchase intention of 4.0833, the lowest repurchase intention was found in the age group of 40s. Accordingly, 'H1-a; the younger a customer is, the higher the repurchase intention’ has been verified.

χ² test by income group showed that there is a statistically significant difference at the level of at least 99%. The group whose average income is less than 500,000 won($416) a month showed 2.9600, while the group whose average income is 2-4 million won ($ 1,600-$3,200) showed 4.2703 of repurchase intention. Thus, 'H1-b; the higher the income level is, the higher the repurchase intention’ has been verified.

4. Conclusions

Results of analyses verified that product price, product quality, product variety, responsiveness, assurance, reliability, tangibility, empathy, perceived ease of use, site image, promotion, innovativeness and preference of credit card use have positive impact on repurchase intention while consumer risk and social interaction orientation have negative influence.

In addition, the young and progressive group composed of students and young urban employees who have long used the Internet with fast access speed are the main customers of Internet shopping malls.

Implications are given below for those who would like to open and successfully manage Internet shopping malls.

First, consumer risk should be handled properly so as not to be an obstacle to a successful business. Purchasers showed very sensitive reactions to the possible leakage of their personal information. It is because a majority of purchasers place their orders on the Internet and use credit cards for payment. Therefore, Internet shopping malls should adopt a safer payment system and give consumers enough information about the payment system to enhance its reliability. Diverse payment systems should also be set up for consumers to broaden the width of choice and promote repurchase intention on online retail shops. There must be also some indirect channels to enhance reliability such as face-to-face interactions with consumers and brand managing activities.

Second, user interface should be uplifted. Simplified and convenient user interface is needed, i.e., attractive and convenient display, convenient search tools, friendly graphic user interface systems, and differentiated product-related information.

Third, the diversity of products is very important.
Consumers complained about the lack of diverse products in the shopping malls. This indicates that Internet shopping malls must consider various means to provide their customers with diverse products. If a shopping mall has a limited capacity, they should develop strategies to utilize databases of retailer groups or unify retailers to extend the width and depth of choices for their customers.

Fourth, generally speaking, the main target of Internet shopping malls should be young and innovative ones such as young professionals and urban employees. Because these groups have higher probability of repurchase, it is necessary to differentiate these groups from general consumer groups and develop a more focused marketing strategy.

Fifth, characteristics of products should be taken into account. In the case of standardized daily necessities, price will be a decisive factor in attracting consumers and for the discriminated products, superiority of products should be emphasized.

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