

The Relationship Between Site Characteristics, Relationship Quality, and Word of Mouth

Ki-Han Chung

*Department of Business Administration
Gyeongsang National University
900 Gajwa-Dong, Jinju
Gyeongnam, Korea 660-701
E-mail: khchung@gnu.ac.kr*

Jae-Ik Shin

*Department of Business Administration
Gyeongsang National University
900 Gajwa-Dong, Jinju
Gyeongnam, Korea 660-701*

ABSTRACT

The purpose of this study is to identify the relationship between site characteristics, relationship quality, and word of mouth in online retailing. Based on the analysis of 279 questionnaires, the following research findings were obtained. First, all characteristics of online retailing positively affect customer satisfaction, and security has more of a positive effect on satisfaction than the other characteristics do. Second, customer satisfaction positively affects e-trust, e-commitment, and word of mouth. Third, e-trust positively affects e-commitment, and e-commitment has a positive effect on word of mouth. It was found, however, that e-trust does not positively affect word of mouth. Fourth, all characteristics of online retailing indirectly affect e-trust, e-commitment, and word of mouth, and it does this by moderating customer satisfaction. Fifth, customer satisfaction indirectly affects e-commitment and word of mouth by moderating e-trust. Sixth, e-trust indirectly affects word of mouth by moderating e-commitment.

Keywords: Site characteristics, relationship quality, word of mouth, online retailing

1. INTRODUCTION

The emerging digital economy has opened up new paradigms for retailing, and, as a result, consumers around the world face new opportunities and challenges. The Internet – the driving engine of the new economy – has given rise to online retailing, a new and increasingly popular way of selling products for most organizations in the 21st century [Mukherjee and Nath, 2007]. According to the Korea National Statistical Office [2008], e-commerce sales for 2007 were \$516.5 billion; B2B sales were \$464.5 billion, an increase of 26.8%; B2G sales were \$36.8 billion, an increase of 6.9%; and B2C sales were \$10.2 billion, an increase of 12%.

The most important aspect of online retailing from the customer's perspective is the increase in access and choice, especially with regard to information on products and services. In the age of the Internet, one can choose from scores of online retailers located anywhere in the world, leading to a breakdown of borders and to growth in the number of competitive alternatives. In addition, there is also tremendous growth in the number of online retailers that can potentially provide consumers with a vast array of alternatives and new sources of information. It is precisely this potential increase in consumer sovereignty that would also lead to an increased role of e-trust and e-commitment in online retailing [Balto, 2000; Mukherjee and Nath, 2007].

In recent years, customer relationships have received considerable attention from both academics and practitioners [Palmer, 2002; Reynolds and Beatty, 1999]. The popularity of relationship marketing stems, in part, from the assumption that building customer relationships will lead to increased benefits for the organization in the form of customer satisfaction, loyalty, word-of-mouth, and increased purchases [Wong and Sohal, 2006]. One strategy that has gained considerable attention is relationship marketing in which firms invest in developing long-term bonds with individual customers. A key feature of this strategy is that not only does it result in increased customer retention, but it also provides a sustainable competitive advantage to the firm, since the intangible aspects of a relationship are not easily duplicated by competitors [Roberts et al., 2003].

According to Kotler and Keller [2009], the Internet is a nearly perfect market because information is instantaneous and buyers can compare the offerings of sellers worldwide. The result is fierce price competition and vanishing brand loyalty. Given the reduction in information asymmetries between sellers and buyers, there is a growing interest in understanding the bases of customer loyalty in online environments [Srinivasan et al., 2002].

The purpose of this study, therefore, is to identify the antecedents and consequences of relationship quality in online retailing after a review of the previous studies and to identify the marketing implications for online retailers.

2. LITERATURE REVIEW

The following review presents information on the site characteristics of online retailing (2.1), relationship quality (2.2), and word of mouth (2.3).

2.1. Site Characteristics of Online Retailing

The issue of what online consumers want has captured the attention of research firms as well as scholars. Several research firms have developed methodologies that attempt to measure customer satisfaction and/or overall Web site quality. Bizrate includes an overall score for online retailers, and ratings on the attributes of ease of ordering, product selection, product information, price, on-time delivery, product representation, customer support, privacy policies, shipping, and handling [Tam, 2002]. Other online researchers have attempted to measure quality as well. Forrester Research, comScore Networks, and Jupiter Communications/Media Metrix regularly publish research suggesting various attributes that relate to consumers' ratings of online experiences [Wolfenbarger and Gilly, 2003].

Researchers have developed attributes to predict intention to return to the Web site [Rice, 2002], customer satisfaction with a Web site [Alpar, 2001], and intentions to buy from the Web site [Loiacono et al., 2002]. Some researchers focus only on online retailing sites and on consumers, whereas others include other types of sites (e.g., news and entertainment) and B2B [Liu and Arnett, 2000]. Thus, the list of attributes found to be important is long and varied.

Interviewing both consumers and Web site designers and using undergraduates to rate e-commerce sites, Loiacono et al. [2002] identify 12 dimensions of Web site quality that they state have sufficient discriminative validity: informational fit-to-task, interactivity, e-trust, response time, ease of understanding, intuitive operations, visual appeal, innovativeness, flow/emotional appeal, consistent image, online completeness, and better than alternative channels. Another scale that measures the Web site interface is SITEQUAL [Yoo and Donthu, 2001]. They find a mere four rather than 12 dimensions; i.e., ease of use, aesthetic design (site creativity with multi-media and color graphics), processing speed (promptness of online processing and interactive responsiveness to consumer requests), and security of personal and financial information. Chen and Wells [1999] suggest five attributes, including Web site relationship building, intentions to revisit, customer satisfaction with service, comfort in surfing, and the judgment that surfing the Web site is a good way to spend time as a measure of Web site success.

A customer's online buying experience consists of everything, including information search, product evaluation, decision making, making the transaction, delivery, returns, and customer service. Yet, the focus of the majority of researchers studying online retailing has been only on the customer's interface with the Web site. Consumers have different motivations for interacting with news and entertainment Web sites, for instance, than they do for shopping online [Wolfenbarger and Gilly, 2003]. Wolfenbarger and Gilly [2001] found that most

online shoppers are goal-directed rather than experiential. Novak et al. [2000] acknowledge that task-oriented and experiential navigation behavior may differ, and Zeithaml et al. [2002] suggest that the entertainment criteria identified in the studies of more general Web sites are not relevant in the online purchase context.

A few studies have examined the consumers' entire online buying experience. Szymanski and Hise [2000] suggest that four factors are important in e-satisfaction; namely, consumer perceptions of convenience, merchandising (including product offerings and product information), site design, and financial security. Novak et al. [2000] measured the customer experience in online environments. For their online shopping sub-sample, they offered a checklist of features for respondents to rate: ease of contact, ordering, payment returns, ease of cancellation, customer support, cutting edge, variety, quality information, reliability, security, and low prices. Their focus was on better understanding what online attributes were associated with a compelling online experience. Srinivasan et al. [2002] identify eight factors (customization, contact interactivity, care, community, convenience, cultivation, choice, and character) that potentially impact e-loyalty, and they develop a scale to measure these factors. Francis and White [2002] suggest six factors (Web store functionality, product attribute description, ownership conditions, delivered products, customer service, and security) as the antecedents of behavior intentions.

In summary, online attributes investigated by various researchers are divided into the customers' interface with a Web site and/or online retail site. The findings of researchers have differed quite widely. These differences arise in part from the fact that investigators have had somewhat different foci. Moreover, the methodological approaches have varied greatly, often with limited attention given to generating items carefully and balancing coverage of different concepts likely to be important to consumers [Wolfenbarger and Gilly, 2003]. Our research reviews the previous studies and identifies attributes important to consumers as follows: shopping convenience, site design, informativeness, security, and communication.

2.2. Relationship Quality

Although the indicators vary depending on each study's specific context, researchers typically conceptualize relationship quality as a higher-order construct composed of customer satisfaction, trust, and commitment. For example, Dorsch et al. [1998] and Ulaga and Eggert [2006] conceptualize relationship quality as being indicated by customer satisfaction, trust, and commitment on the part of the buyers. Similarly, Crosby et al. [1990] identify customer satisfaction and trust as key constituents of relationship quality. Finally, more recently, relationship quality has been described as a higher-order construct with trust and commitment as first-order constructs [Hewett et al., 2002; Hibbard et al., 2001]. In line with these previous studies, this study focuses on customer satisfaction, e-trust, and e-commitment as key characteristics of relationship quality.

2.2.1. Customer Satisfaction

The role of customer satisfaction as a measure of relationship quality is best articulated in Storbacka et al.'s [1994] definition of customer satisfaction. They suggest that customer satisfaction is the customers' cognitive and affective evaluation based on their personal experience across all service episodes within the relationship. It stands to reason that a customer who is not satisfied with the service received by a service provider cannot be expected to have a good relationship with the firm, as the satisfaction of customer needs is at the core of the exchange relationship [Roberts et al., 2003]. Note that, in this context, customer satisfaction is used in the sense of cumulative satisfaction (as opposed to transactional or episodic satisfaction). Crosby et al. [1990] suggest that customer satisfaction is the summary measure that provides an evaluation of the quality of all past interactions with the service provider and, in doing so, shapes expectations about the quality of future interactions. In a study of business-to-business relationship, Dorsch et al. [1998] found that more satisfied buyers have higher quality relationships with their vendors. In addition, the more satisfied buyers were more knowledgeable about the roles assumed and performed by the vendors, and they were more discriminating about the quality of their relationships with the vendors.

Studies on the relationship between online attributes and customer satisfaction progressed over several years. They were as follows. There was the effect of shopping convenience on customer satisfaction [Balasubramanian and Mahajan, 2001; Schaffer, 2000; Cameron, 1999; Srinivasn et al., 2002]. There was the effect of site design on customer satisfaction [Page and Lepkowska-Whitc, 2002; Ranganathan and Ganapathy, 2002; Szyminski and Hise, 2000; Loshe and Spiller, 1998]. There was the effect of informativeness on customer satisfaction [Jun and Chung, 2006; Girard et al., 2002; Chen and Wells, 1999]. There was the effect of security on customer satisfaction [Udo, 2001; Hoffman and Novak, 2000; Reichheld and Schefter, 2000]. There was the effect of communication on customer satisfaction [Barlow et al., 2004; Swaminathan et al., 1999; Joines et al., 2003].

Thus, the positive relationships between five factors (shopping convenience, site design, informativeness, security, and communication) and customer satisfaction are captured in the following hypotheses.

- H1:** The shopping convenience of online retailing will have a positive effect on customer satisfaction.
- H2:** The site design of online retailing will have a positive effect on customer satisfaction.
- H3:** The informativeness of online retailing will have a positive effect on customer satisfaction.

H4: The security of online retailing will have a positive effect on customer satisfaction.

H5: The communication of online retailing will have a positive effect on customer satisfaction.

2.2.2. E-Trust

Trust has been defined in a variety of ways in the relationship marketing literature; e.g., “as a willingness to rely on an exchange partner in whom one has confidence” [Moorman et al., 1992], and as the belief that a partner’s word or promise is reliable and a party will fulfill his or her obligations in the relationship [Wong and Sohal, 2006]. E-trust, according to Mukherjee and Nath [2007], is so important to relational exchange that it is “the cornerstone of the strategic partnership” between the seller and the buyer. It is difficult to imagine that consumers would transact with online retailing without having put their basic trust in a specific vendor [Pang et al., 2007]. Trust (i.e., confidence in the reliability and integrity of an exchange partner) is considered central to B2B relationships. Recently, the role of e-trust in B2C exchanges has received more attention [Eastlick et al., 2006; Jin et al., 2008; Horppu et al., 2008].

Focusing on the retail industry, contact employees can deliver high levels of trust by continually demonstrating that they have the customers’ best interest at heart, that they have the skills required to meet customer needs, and that they have the ability to solve customer problems honestly and skillfully [Beatty et al., 1996]. In addition, propensity to trust is important in economic transactions as it reduces perceived risk [Humphrey and Schmitz, 1998]. This is particularly important in the case of online retailing, where the buyer and seller are physically separate, contingencies are difficult to predict and incorporate into contracts, relationships are difficult to monitor, and cyber-laws are not well defined. A high level of customer satisfaction with services received in previous online transactions is likely to increase the propensity to e-trust [Pavlou and Chellappa, 2000]. Moreover, Morgan and Hunt [1994] suggest trust as a key-mediating variable that is central to relational exchanges. Ulaga and Eggert [2006] underline the importance of trust-building activities within a relationship marketing approach and suggest that customer satisfaction with the supplier will translate into commitment only if the purchasing relationship is characterized as trust. Horppu et al. [2008] suggest that Web site satisfaction has a positive effect on Web site trust.

Thus, the positive relationship between customer satisfaction and e-trust are captured in the following hypothesis.

H6: Customer satisfaction with five factors of online retailing will have a positive effect on e-trust.

2.2.3. E-commitment

Moorman et al. [1992] define commitment as an enduring desire to maintain a valued relationship. The term “valued relationship” emphasizes the belief that commitment exists only when the relationship is considered important. This implies a higher level of obligation to make a relationship succeed and to make it mutually satisfying and beneficial [Gundlach et al., 1995; Morgan and Hunt, 1994]. Given the higher level of commitment among individuals who believe that they receive more value from a relationship, highly committed customers should be willing to reciprocate effort on behalf of a firm because of past benefits received [Wong and Sohal, 2006].

According to Morgan and Hunt [1994], a critical complement of trust in exchange relationships is commitment. Trust influences relationship commitment. Partners in business value trust-based relationships very highly and commit themselves to such relationships [Mukherjee and Nath, 2007]. They suggest that e-trust positively affects e-commitment and that e-commitment has a positive effect on behavioral intentions (word of mouth, purchase intention, and continued interaction). Eastlick et al. [2006] also suggest that trust positively affects commitment and that commitment positively affects purchase intent in online B2C. These studies have focused on the relationship among e-trust, e-commitment, and behavioral intention. Achrol [1991], Moorman et al. [1992], and Morgan and Hunt [1994] have also demonstrated the trust-commitment interaction.

Web site satisfaction has a positive effect on Web site trust [Horppu et al., 2008]. Hence, customer satisfaction with site characteristics of Internet shopping will affect e-commitment because e-trust and e-commitment are interactive

Thus, we hypothesize that, as customer satisfaction increases, e-commitment also increases and that, as e-trust increases, e-commitment also increases.

H7: Customer satisfaction with five factors of online retailing will have a positive effect on e-commitment.

H8: E-trust will have a positive effect on e-commitment.

2.3. Word of Mouth

Word-of-mouth (WOM) communication is defined as the willingness to engage in informal conversations about the product between people who are independent of the company providing the product, and in a medium independent of the company [Silverman, 1997].

Repeatedly, research has shown the importance of consumer word of mouth (WOM) in the formation of attitudes [Bone, 1995], in a purchase decision-making context [Bansal and Voyer, 2000], and in the reduction of risk associated with buying decisions [Murray, 1991]. Scholars agree that WOM is especially critical for the success of service providers [Berry and Parasuraman, 1991]. Word

of mouth has long been recognized as a powerful force affecting consumer choice, loyalty, and switching [von Wangenheim and Bayon, 2004]. Customer satisfaction is widely accepted among researchers as a strong predictor for behavioral variables such as repurchase intentions, word of mouth, or loyalty [Ulaga and Eggert, 2006].

Park and Lee [2009] suggest that e-WOM effect is greater for negative e-WOM than for positive e-WOM, greater for an established Web site than for an unestablished Web site, and greater for experience goods than for search goods. For consumers who are more motivated to process information, e-WOM recommendations lead, overall, to more time spent on the choice task [Gupta and Harris, 2009].

Consumers often depend on word of mouth to reduce perceived risk and uncertainty related to decision-making regarding service [Mangold et al., 1999]. In particular, this fact can be applied to online retailing, where the buyer and the seller are physically separated, contingencies are difficult to predict and incorporate into contracts, relationships are difficult to monitor, and cyber-laws are not well defined. If e-trust and e-commitment are high, positive word-of-mouth communication is more likely in online retailing [Mukherjee and Nath, 2007; Rauyruen and Miller, 2007; Cater and Zabkar, 2008].

Thus, we hypothesize that customer satisfaction, e-trust, and e-commitment positively affect word of mouth.

H9: Customer satisfaction with five factors of online retailing will have a positive effect on word of mouth.

H10: E-trust will have a positive effect on word of mouth.

H11: E-commitment will have a positive effect on word of mouth.

3. PROPOSED MODEL AND METHODOLOGY

The model shown in Figure 1 is proposed to test empirically the key conceptual ideas embedded in online retailing. Major interest is in understanding the key linkages between site characteristics of online retailing (shopping convenience, site design, informativeness, security, and communication), relationship quality (customer satisfaction, e-trust, and e-commitment), and word of mouth.

The survey sample of 300 university students includes customers in South Gyeongsang Province who have experienced online transactions. For data collection purposes, the personal interview technique was used in the Province from November 12, 2008, to November 28, 2008. Of the 300 questionnaires, 21 were eliminated because of excessive missing data, resulting in a final sample of 279 students.

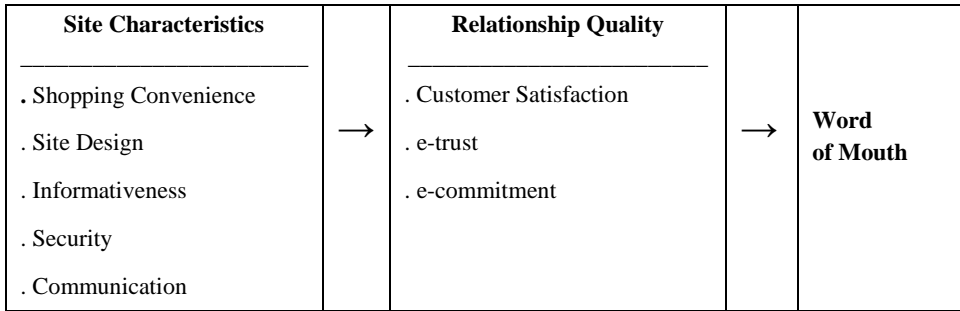


Figure 1. Proposed Model Showing Relationship Between Site Characteristics, Relationship Quality, and Word of Mouth

Of the respondents, 50.2% were female; 53.0% were first-year students; 29.7% were students who have experienced more than seven online transactions; and 51.3% were students who have had four years of Internet use. In terms of items purchased, 76.7% of the purchases made were clothing. A total of 65.9% of the respondents used a general online shopping mall; and 50.0% used online and off-line transactions simultaneously. In all, 24.4% of their yearly Internet trade was below \$100; 34.4% was from \$100 to \$200; 22.2% was from \$200 to \$300; and 18.6% was above \$400.

3.1. Measures

The model that we test here has nine constructs, each having multiple items that are measured using a seven-point Likert scale (1 = “strongly disagree” and 7 = “strongly agree”). To enhance the content validity of the measures, a number of steps were taken. Wherever possible, existing measures were adopted. To assist with translation, the measures were first discussed with a panel of 10 managers of an online retailing operation. Managers were interviewed individually and were asked to review the questionnaire and assess its suitability, readability, and ambiguity. The questionnaire was iteratively revised based on feedback received from the managers.

The revised questionnaire was then pilot tested. Questionnaires were sent to 30 randomly selected university students, and 20 usable responses were received. The questionnaire was further revised according to the preliminary analysis based on the pilot data. The final version of the questionnaire is discussed below.

In online transactions, consumers may perceive the level of site characteristics compared with other online retailing. Site characteristics were operationalized as the overall consumer’s impression of online retailing’s ability, and included five factors as the antecedents of customer satisfaction. Shopping convenience was measured using seven items developed by Balsubramanian [1997] and Schaffer [2000]. Site design was measured using seven items

developed by Szyminski and Hise [2000] and Page and Lepkowska-Whitc [2002]. Informativeness was measured using six items developed by Peterson et al. [1997]. Security was measured using seven items developed by Udo [2001]. Communication was measured using five items developed by Ha [2002] and Liang and Huang [1998].

Customer satisfaction was operationalized as the overall perception of online retailing offerings, shopping environment, and purchase. It was measured using four items developed by Szymanski and Hise [2000] and Anderson [1994]. E-trust was operationalized as the overall perception of information, promise, and product provided by online retailing. It was measured using five items developed by Mukherjee and Nath [2007] and Wong and Sohal [2006]. E-commitment was operationalized as the overall perception of friendliness, bond, and good feeling for an online retailing operation. It was measured using seven items developed by Mukherjee and Nath [2007] and Wong and Sohal [2006]. Word of mouth was operationalized as the overall perception of recommendation and statement of positive things about an online retailing operation, and measured using three items developed by Srinivasan et al. [2002]. See Table 1.

Table 1
Scale Items

| Scale | Items |
|----------------------|--|
| Shopping Convenience | sc1. This online retailing is very convenient to use. sc2. It takes a short time to shop at this online retailing. sc3. This online retailing provides easy procedures for ordering. sc4. A first-time buyer can make a purchase without much help. sc5. It is easy to learn the use of this online retailing. sc6. It is concise to use this online retailing. sc7. It is easy to purchase in this online retailing. |
| Site Design | sd1. The online retailing is visually appealing. sd2. This online retailing has a good selection. sd3. The online retailing's appearance is professional. sd4. It is quick and easy to complete a transaction at this online retailing. sd5. It is easy to understand the design of this online retailing. sd6. This online retailing shows a vivid display of products. sd7. The design of this online retailing is consistent. |
| Informativeness | iu1. This online retailing provides rich information on features and quality of the products. iu2. This online retailing provides accurate information on features and quality of the products. iu3. This online retailing provides various kinds of peripheral information (payment, delivery, and return). iu4. This online retailing provides good information on products. iu5. This online retailing tries to provide useful information. iu6. This online retailing tries to provide helpful information. |

Table 1 (Cont'd)

| | |
|-----------------------|---|
| Security | ss1. I feel safe in my transactions with this online retailing. ss2. I feel like my privacy is protected at this online retailing. ss3. I trust this online retailing will not misuse my personal information. ss4. I trust that this online retailing will not give my information to other sites without my permission. ss5. This online retailing prevents information leak regarding credit cards. ss6. This online retailing prevents the leak of personal e-mail. ss7. This online retailing does not make a mistake regarding payment. |
| Communication | cc1. Consumers are free to talk about an idea/or complaint at this online retailing. cc2. This online retailing has a good FAQ system. cc3. Customers can actively review products of this online retailing. cc4. This online retailing provides freedom to exchange opinions between customers. cc5. This online retailing provides e-mail and a contact address. |
| Customer Satisfaction | cs1. I am satisfied with the offerings at this online retailing. cs2. I am satisfied with the purchases at this online retailing. cs3. I am satisfied with the products at this online retailing. cs4. I am satisfied with the shopping environment of this online retailing. |
| E-trust | tr1. I trust the information that this online retailing provides. tr2. I trust the promise that this online retailing makes. tr3. I trust the products that this online retailing provides. tr4. I trust the delivery of products that this online retailing makes. tr5. I will continue to transact with this online retailing. |
| E-commitment | co1. I feel this online retailing is a friend. co2. I feel this online retailing is a part of living. co3. I am attached to this online retailing. co4. I feel a sense of belonging to this online retailing. co5. I have a good feeling for this online retailing. co6. This online retailing provides me an important channel of purchasing. co7. I would like to make a commitment to this online retailing. |
| Word of Mouth | wom1. I say positive things about this online retailing to other people. wom2. I recommend this online retailing to anyone who seeks my advice. wom3. I say positive things about products of this online retailing. |

3.2 Validity and Reliability of Measures

Before testing the hypothesized relationship, we examined the scales used to operationalize the constructs through the estimation of the measurement model [Anderson and Gerbing, 1988]. Confirmatory factor analysis (CFA) was used to assess the unidimensionality and validity of the constructs. The results of fit index for the measurement model are as follows. The GFI was 0.887, the RMR was 0.064, the RMSEA was 0.055, the TLI was 0.936, and the CFI was 0.949 (Table 2)

Table 2. Confirmatory Factor Analysis

| Variables | Items | Estimates | S.E. | Standardized Estimates | C.R. | Composite Reliability | AVE |
|-----------------------|-------|-----------|-------|------------------------|--------|-----------------------|-------|
| Shopping Convenience | sc1 | 0.857 | 0.062 | 0.773 | 13.776 | 0.920 | 0.822 |
| | sc2 | 0.872 | 0.065 | 0.752 | 13.352 | | |
| | sc4 | 1.000* | | 0.843 | | | |
| | sc6 | 0.945 | 0.077 | 0.703 | 12.292 | | |
| Site Design | sd1 | 1.000* | | 0.814 | | 0.959 | 0.922 |
| | sd2 | 0.949 | 0.105 | 0.768 | 9.032 | | |
| Informativeness | im4 | 0.972 | 0.078 | 0.845 | 12.434 | 0.974 | 0.949 |
| | im5 | 1.000* | | 0.876 | | | |
| Security | ss5 | 0.927 | 0.053 | 0.836 | 17.559 | 0.984 | 0.956 |
| | ss6 | 0.986 | 0.051 | 0.900 | 19.299 | | |
| | ss7 | 1.000* | | 0.872 | | | |
| Communication | cc1 | 1.000* | | 0.887 | | 0.956 | 0.919 |
| | cc2 | 0.745 | 0.107 | 0.654 | 6.980 | | |
| Customer Satisfaction | cs2 | 0.762 | 0.058 | 0.715 | 13.100 | 0.902 | 0.943 |
| | cs3 | 0.882 | 0.056 | 0.820 | 15.712 | | |
| | cs4 | 1.000* | | 0.856 | | | |
| e-Trust | tr1 | 0.902 | 0.055 | 0.834 | 16.492 | 0.983 | 0.950 |
| | tr2 | 1.000* | | 0.866 | | | |
| | tr3 | 0.867 | 0.054 | 0.816 | 16.039 | | |
| e-Commitment | co2 | 0.921 | 0.067 | 0.816 | 13.799 | 0.982 | 0.931 |
| | co3 | 0.951 | 0.064 | 0.870 | 14.747 | | |
| | co4 | 0.867 | 0.063 | 0.813 | 13.745 | | |
| | co7 | 1.000* | | 0.755 | | | |
| Word of mouth | wom1 | 0.781 | 0.074 | 0.697 | 10.595 | 0.975 | 0.952 |
| | wom2 | 1.000* | | 1.002 | | | |

χ^2/df : 441.054(239), p : 0.000, CMIN/DF: 1.845, RMR: 0.064 GFI: 0.887, AGFI: 0.846, NFI: 0.897, IFI: 0.950 TLI: 0.936, CFI: 0.949, RMSEA: 0.055

*: To standardize estimates, 1 was designated.

The measurement model was generally satisfied. To determine reliability, we used Cronbach's coefficient alpha to separately assess the reliability of scales adopted in this study. All reliabilities for the multi-item scales were above 0.815: shopping convenience (0.864), site design (0.849), informativeness (0.822), security (0.903), communication (0.815), customer satisfaction (0.837), e-trust (0.876), e-commitment (0.902), and word of mouth (0.819). In addition, all composite reliabilities for multi-item scales were above 0.902. All of the loadings in the model were significant.

Discriminant validity was evaluated by testing whether pairs of constructs were correlated less than unity. The chi-square differences test with one degree of freedom was used to test for unity between the constructs. This indicates a satisfactory level of discriminant validity. An examination of the pair-wise correlations among the variables provides preliminary support for the hypotheses (Table 3).

Table 3
Correlation Matrix

| | Means | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| 1 | 5.64 | 0.860 | 1.000 | | | | | | | | |
| 2 | 4.48 | 0.954 | 0.407** | 1.000 | | | | | | | |
| 3 | 4.22 | 0.874 | 0.340** | 0.551** | 1.000 | | | | | | |
| 4 | 3.83 | 1.17 | 0.153** | 0.184** | 0.283** | 1.000 | | | | | |
| 5 | 4.40 | 0.946 | 0.294** | 0.284** | 0.455** | 0.332** | 1.000 | | | | |
| 6 | 4.59 | 0.883 | 0.487** | 0.505** | 0.539** | 0.454** | 0.450** | 1.000 | | | |
| 7 | 4.13 | 1.06 | 0.355** | 0.324** | 0.541** | 0.380** | 0.443** | 0.591** | 1.000 | | |
| 8 | 4.03 | 1.17 | 0.338** | 0.410** | 0.438** | 0.264** | 0.319** | 0.500** | 0.471** | 1.000 | |
| 9 | 3.75 | 1.18 | 0.231** | 0.346** | 0.357** | 0.266** | 0.280** | 0.414** | 0.331** | 0.603** | 1.000 |

- 1=Shopping convenience 5 = Communication
- 2=Site design 6 = Customer satisfaction
- 3=Informativeness 7 = e-trust
- 4=Security 8 = e-commitment
- 9 = Word of mouth

Note: Significance levels of correlation are denoted as **p<0.01.

4. PATH ANALYSIS AND HYPOTHESIS TESTING

After measurement purification, the path relationships within the research model were analyzed by structural equation modeling (SEM) using AMOS 7.0. We used AMOS 7.0 for data analysis since the proposed research model consists of a simultaneous system of equations having latent constructs and multiple indicators. The fit indices of the research model shown in Figure 2 are acceptable ($\chi^2/df=481.864(254)$, $P=0.000$, $CMIN/DF=1.897$, $GFI=0.875$, $RMR=0.077$, $IFI=0.949$, $TLI=0.932$, $CFI=0.943$, $RMSEA=0.057$).

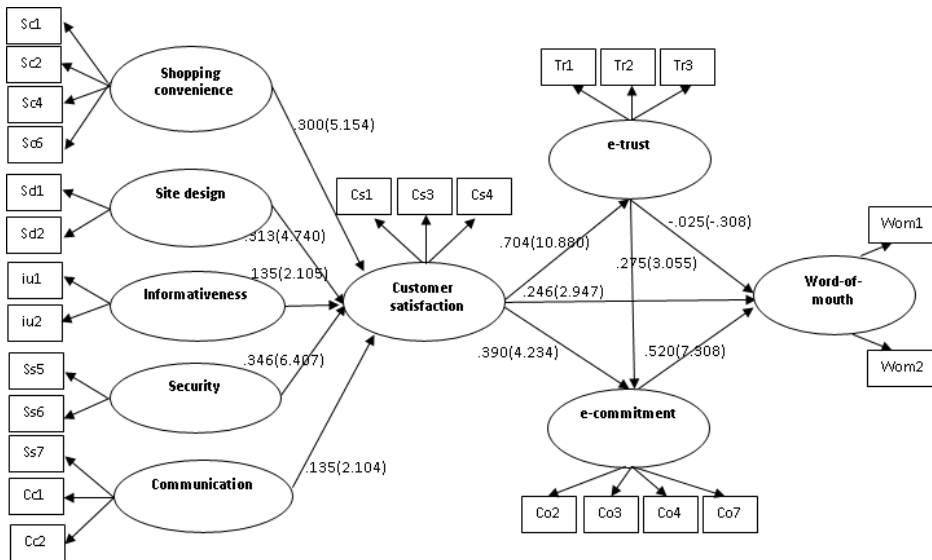


Figure 2. Structural Model

The results of the SEM shown in Table 4 provide support for all of the hypotheses except H10. Shopping convenience, site design, informativeness, security, and communication have a positive effect on customer satisfaction ($H1=0.300$ and $t=5.154$, $H2=0.313$ and $t=4.740$, $H3=0.135$ and $t=2.105$, $H4=0.346$ and $t=6.407$, $H5=0.135$ and $t=2.104$). Customer satisfaction has a positive effect on e-trust and e-commitment ($H6=0.704$ and $t=10.880$, $H7=0.390$ and $t=4.234$). E-trust has a positive effect on e-commitment ($H8=0.275$ and $t=3.055$). Customer satisfaction, e-trust, and e-commitment have a positive effect on word of mouth ($H9=0.246$ and $t=2.947$, $H10=-0.025$ and $t=-0.308$, $H11=0.520$ and $t=7.308$).

Table 4
Parameter Estimates for Research Model

| Parameter | Description | Standardized Estimate | S.E. | t-value | Result |
|-----------|--|-----------------------|-------|----------|----------|
| H1 | Convenience → Customer satisfaction | 0.300 | 0.059 | 5.154** | accepted |
| H2 | Design → Customer satisfaction | 0.313 | 0.057 | 4.740** | accepted |
| H3 | Informativeness → Customer satisfaction | 0.135 | 0.060 | 2.105* | accepted |
| H4 | Security → Customer satisfaction | 0.346 | 0.041 | 6.407** | accepted |
| H5 | Communication → Customer satisfaction | 0.135 | 0.057 | 2.104* | accepted |
| H6 | Customer satisfaction → e-Trust | 0.704 | 0.077 | 10.880** | accepted |
| H7 | Customer satisfaction → e-Commitment | 0.390 | 0.129 | 4.234** | accepted |
| H8 | e-Trust → e-Commitment | 0.275 | 0.105 | 3.055** | accepted |
| H9 | Customer satisfaction → Word of mouth | 0.246 | 0.112 | 2.947** | accepted |
| H10 | e-Trust → Word of mouth | -0.025 | 0.089 | -0.308 | rejected |
| H11 | e-Commitment → Word of mouth | 0.520 | 0.068 | 7.308** | accepted |

Note: Significance levels are denoted as ** $p < 0.01$, * $p < 0.05$.

Shopping convenience, site design, informativeness, security, and communication have indirect impacts on e-trust and e-commitment by moderating customer satisfaction and, further, have indirect impacts on word of mouth by moderating e-trust and e-commitment. Customer satisfaction has an indirect impact on e-commitment and word of mouth by moderating e-trust. E-trust does not have a direct impact on word of mouth, but indirectly affects it by moderating e-commitment (Table 5).

5. DISCUSSION AND CONCLUSION

The major objective of this study is to identify the relationship between site characteristics, relationship quality, and word of mouth in online retailing. The results offer empirical support for the model tested. Customers' perceptions of site characteristics were positively related to customer satisfaction and were indirectly related to e-trust, e-commitment, and word of mouth. This finding reiterates the importance of online retailing's ability that can provide site characteristics based on customers' needs. In addition, it shows that security of site characteristics is the most significant factor affecting customer satisfaction.

Table 5
Direct and Indirect Effect Among Variables

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------|---|--------|--------|--------|---------|--------|--------|---------|-------|
| Customer Satisfaction | d | 0.300* | 0.313* | 0.135* | 0.346** | 0.135* | | | |
| | i | | | | | | | | |
| e-trust | d | | | | | | 0.704* | | |
| | i | 0.211* | 0.221* | 0.095* | 0.243** | 0.095* | | | |
| e-commitment | d | | | | | | 0.390* | 0.275** | |
| | i | 0.175* | 0.183* | 0.079* | 0.202** | 0.079* | 0.194* | | |
| Word of mouth | d | | | | | | 0.246* | -0.025 | 0.520 |
| | i | 0.160* | 0.167* | 0.072* | 0.184** | 0.072* | 0.286* | 0.143** | |

1= Convenience; 2 =Design; 3=Informativeness; 4=Security; 5=Communication; 6=Satisfaction; 7=e-trust; 8=e-commitment. d = direct effect; i = indirect effect.

Note: Significance levels are denoted as ** $p < 0.01$, * $p < 0.05$.

When Korean consumers transact with online retailing, they tend to be very concerned about financial security, compared with Western consumers. Site design is the second factor and shopping convenience is the third factor that affects customer satisfaction. In the study by Szymanski and Hise [2000], shopping convenience had the most significant impact on e-satisfaction. On the other hand, informativeness and communication have lower impacts on customer satisfaction. This means that consumers may feel dissatisfaction with the information quality and communication system of online retailing. Customers today perceive fewer real product differences and show less brand loyalty, and they are becoming more price and quality sensitive in their search for value. In fact, because informativeness and communication of online retailing can be important factors in increasing online transactions, marketers need to enhance them for customer satisfaction.

The ultimate goal of relationship quality is to strengthen already strong relationships and to convert indifferent customers into loyal ones. Online transactions and exchange relationships are characterized not only by uncertainty, but also by anonymity, lack of control, and potential opportunism, making risk and trust crucial elements of e-commerce. Hence, it is difficult to imagine that consumers would transact with online retailing without having put their basic trust in a specific vendor.

The concept of relationship quality is a higher order construct consisting of several distinct but related components or dimensions (e.g., opportunism, customer orientation, conflict, trust, satisfaction, commitment, and perceived

quality). Customer satisfaction has a stronger positive impact on e-trust than e-commitment. This finding may be consistent with the suggestion that a critical complement of e-trust in exchange relationships is e-commitment [Mukherjee and Nath, 2007]. E-trust has a positive impact on e-commitment. This is consistent with the results of previous studies [Hewett et al., 2002; Ulaga and Eggert, 2006]. Customer satisfaction has a positive impact on word of mouth. This is consistent with previous studies [Ulaga and Eggert, 2006].

The indirect effect of customer satisfaction on word of mouth is more than the direct effect. E-commitment has a positive impact on word of mouth, but e-trust does not. It shows that customers' perceptions of trust in online retailing are lower than e-commitment. In an online environment, commitment is referred to as the nature of association and sense of belonging. However, e-trust has an indirect impact on word of mouth by moderating e-commitment. Therefore, relationship quality is positively related to word of mouth for online retailers.

Word of mouth has long been recognized as a powerful force affecting consumer choice, loyalty, and switching. Positive word of mouth for online retailers has been one of the most effective formats of advertising. It is reasonable to expect that consumers who have greater search intention for product information via the online store are likely to have greater intention to recommend the online store to others, compared with ones who have lower search intention for product information via the online store.

In addition, site characteristics have indirect impacts on e-trust, e-commitment, and word of mouth through moderator variables. Therefore, the relationship among site characteristics, relationship quality, and word of mouth is good circulation. Positive word of mouth can start with customer satisfaction of site characteristics in online retailing.

From a managerial point of view, there are several major implications. First, the security of site characteristics is the most significant factor directly affecting customer satisfaction and indirectly affecting e-trust, e-commitment, and word of mouth. Financial security prevents the information leak of credit card information and personal e-mail and prevents payment mistakes, and plays a crucial role in improving relationship quality and word of mouth.

Site design is the second factor directly affecting customer satisfaction and indirectly affecting e-trust, e-commitment, and word of mouth. Visual appeal and good selection of site design are also important to customers because of the increase in access and choice, especially in regard to information on products and services.

Shopping convenience is the third factor directly affecting customer satisfaction and indirectly affecting e-trust, e-commitment, and word of mouth. Customers value convenience of use, time saving, and ease of purchase in using online retailing because they are often pressed for time. Informativeness and communication are the lower factors directly affecting customer satisfaction and indirectly affecting e-trust, e-commitment, and word of mouth. Customers today perceive fewer real product differences and show less brand loyalty, and they are

becoming more price and quality sensitive in their search for value. In fact, because informativeness and communication of online retailing can be important factors in increasing online transactions, marketers need to enhance them for customer satisfaction.

As stated above, managers of online retailers should improve site characteristics in order to maintain the higher level of relationship quality and positive word of mouth. Managers should remember that when consumers purchase some products by online retailing, they could compare the site characteristics of that site with the characteristics of others. Hence, site characteristics can play a key role in online transactions. It is important to develop and manage the site characteristics of online retailing because the environment is continually changing and the level of customers' requirement for online shopping is increasing.

Second, customer satisfaction positively affects e-trust, e-commitment, and word of mouth. E-trust positively affects e-commitment and indirectly affects word of mouth. E-commitment positively affects word of mouth. Customer satisfaction regarding an online environment may also be driven by consumer benefits in using self-service technologies. This implies that the drivers of Web satisfaction may include Web site characteristics, the specific Web site's value, and its relative value. Hence, managers of online retailing should focus on building long-term relationships with consumers by satisfying their needs. E-trust is considered one of the most important prerequisites for e-commerce success. Online transactions and exchange relationships are characterized not only by uncertainty, but also by anonymity, lack of control, and potential opportunism, making risk and trust crucial elements of e-commerce. Commitment is the key component of establishing and maintaining long-term relationships between business partners. The success of online retailing depends on building positive e-trust and e-commitment.

Third, consumers often depend on word of mouth to reduce perceived risk and uncertainty related to decision making regarding online shopping. Word of mouth can be especially critical for the success of online retailing. The e-WOM effect is greater for negative e-WOM than for positive e-WOM, greater for an established Web site than for an unestablished one, and greater for experience goods than for search goods. Hence, managers of online retailing should take steps to prevent negative word of mouth and to enhance positive word of mouth.

The results of this paper show that site characteristics can be the antecedents of relationship quality and word of mouth because of the direct and indirect effect of site characteristics on customer satisfaction, e-trust, e-commitment, and word of mouth. According to Ulaga and Eggert [2006], the concept of relationship quality is a higher order construct consisting of several distinct but related components or dimensions (e.g., opportunism, customer orientation, conflict, trust, satisfaction, commitment, and perceived quality). This paper shows that the relationship quality of an online environment is a higher order construct consisting of customer satisfaction, e-trust, and e-commitment

because customers positively affect e-trust and e-commitment, and e-trust positively affects e-commitment. Hence, these three constructs have cause-effect relationships.

There are some limitations of this study that should be considered when interpreting its findings. Our model does not take into account other independent variables that may affect relationship quality and other dependent variables that relationship quality may affect. Based on our findings, a more comprehensive model of relationship quality in online retailing can be developed and tested. In addition, the suitability of online retailing depends largely on the characteristics of the products and services being marketed [Peterson et al., 1997]. This study does not control for such differences across product and service categories. Researchers can develop richer models that capture and explain these differences. When applying the results to other countries, it is necessary to consider the level of e-commerce in each country. In addition, because the rapid growth of e-commerce can promote demand homogeneity among young generations all over the world, it is necessary to make a comparative study.

REFERENCES

- Achrol, R. 1991. Evolution of the marketing organization: New forms for turbulent environments, *Journal of Marketing* 55(4), 77-93.
- Alpar, P. 2001. Satisfaction with a Web site: Its measurement, factors and correlates, Working Paper 99(1), Philipps-University Marburg Institution Wirtschaftsinformatik.
- Anderson, E.W. 1994. Cross-category variation in customer satisfaction and retention, *Marketing Letters* 15, 18-19.
- Anderson, J.C., and Gerbing, D.W. 1988. Structural equation modeling in practice: A review and recommended two-step approach, *Psychological Bulletin* 103(3), 411-423.
- Balasubramanian, S. 1997. Two Essays in Direct Marketing, Ph.D. Dissertation, Yale University, New Haven, CT.
- Balasubramanian, S., and Mahajan, V. 2001. The economic leverage of the virtual community, *International Journal of Electronic Commerce* 5(Spring), 103-110.
- Bansal, H.S., and Voyer, P.A. 2000. Word of mouth processes within a services purchase decision context, *Journal of Service Research* 3(2), 166-77.
- Balto, D. 2000. Emerging antitrust issues in electronic commerce, *Journal of Public Policy and Marketing* 19(2), 277-86.
- Barlow, A.K.; Noreen, Q.S.; and Mannion, M. 2004. Developments in information and communication technologies for retail marketing channels, *International Journal of Retail and Distribution Management* 32(3), 157-163.
- Bart, Y.; Shankar, V.; Sultan, F.; and Urban, G. 2005. Are the drivers and role of online trust the same for all Web sites and consumers? A large-scale exploratory empirical study, *Journal of Marketing* 69, 133-152.

- Bhattacharya, C.B., and Sen, S. 2003. Consumer-company identification: A framework for understanding consumers' relationships with companies, *Journal of Marketing* 67(April), 76-88.
- Beatty, S.E.; Mayer, M.; Coleman, J.E.; Reynolds, K.E.; and Lee, J. 1996. Customer-sales associate retail relationships, *Journal of Retailing* 72(3), 223-47.
- Berry, L.L., and Parasuraman, A. 1991. *Marketing Services*, New York: Free Press.
- Bone, P.F. 1995. Word of mouth effects on short-term and long-term product judgments, *Journal of Business Research* 32(3), 213-23.
- Burnham, T.A.; Frels, J.K.; and Mahajan, V. 2003. Consumer switching costs: A typology, antecedents, and consequences, *Journal of Academy of Marketing Science* 31(Spring), 109-126.
- Cater, B., and Zabkar, V. 2008. Antecedents and consequences of commitment in marketing research services: The client's perspective, *Industrial Marketing Management*, available online 3 June.
- Chen, Q., and Wells, W.D. 1999. Attitude toward the site, *Journal of Advertising Research* 39(Sept/Oct), 27-47.
- Connolly, R., and Bannister, F. 2008. Factors influencing Irish consumers' trust in internet shopping, *Management Research News* 31(5), 339-358.
- Crosby, L.A.; Evans, K.A.; and Cowles, D. 1990. Relationship quality in services selling: An interpersonal influence perspective, *Journal of Marketing* 54(3), 68-81.
- Delgado-Ballester, E., and Munuera-Aleman, J.L. 2001. Brand trust in the context of consumer loyalty, *European Journal of Marketing* 35(11/12), 1238-1258.
- Dorsch, M.J.; Swanson, S.R.; and Kelley, S.W. 1998. The role of relationship quality in the stratification of vendors as perceived by customers, *Journal of the Academy of Marketing Science* 26(2), 128-42.
- Eastlick, M.A.; Lotz, S.L.; and Warrington, P. 2006. Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment, *Journal of Business Research* 59, 877-886.
- Egger, F.N. 2000. Towards a model of trust for e-commerce system design, Working Paper, Center for User-System Interaction, Eindhoven University of Technology, Eindhoven.
- Emergence Marketing. 2007. Online word of mouth is much more powerful (or dangerous) than offline word of mouth, January, available at: www.emergencemarketing.com/archives/2007/01/Online_word_of_mouth_is_m.php (accessed February 13, 2007).
- Enos, L. 2001. Can word of mouth save e-commerce? *E-Commerce Times*, May, available at: www.ecommercetimes.com/story/9442.html (accessed January 15, 2003).
- Francis, J.E., and White, L. 2002. PIRQUAL: A scale for measuring customer expectations and perceptions of quality in Internet retailing. In K. Evans and Scheer (eds), *Marketing Educators Conference: Marketing Theory and Applications* 13, 263-70.
- Fullerton, G. 2003. When does commitment lead to loyalty? *Journal of Service Research* 5(May), 333-344.

- Girard, T.; Silverblatt, R.; and Korgaonkar, P. 2002. Influence of product class on preference for shopping on the Internet, *Journal of Computer-Mediated Communication* 8(1), <http://www.ascusc.org/jcmc/vol8/issue1/girared.html>.
- Gundlach, G.T.; Achrol, R.S.; and Mentzer, J.T. 1995. The structure of commitment in exchange, *Journal of Marketing* 59, 78-92.
- Gupta, P., and Harris, J. 2009. How e-WOM recommendations influence product consideration and quality of choice: A motivation to process information perspective, *Journal of Business Research*, available online 3 September.
- Ha, H.Y. 2002. The effects of consumer risk perception on pre-purchase information in online auctions: Brand, word-of-mouth, and customized information, *Journal of Computer Mediated Communication* 8, <http://jcmc.indiana.edu/vol18/issue1/ha.html>.
- Hahn, K.H., and Kim, J. 2009. The effect of offline brand trust and perceived Internet confidence on online shopping intention in the integrated multi-channel context, *International Journal of Retail and Distribution Management* 37(2), 126-141.
- Hess, J., and Story, J. 2005. Trust-based commitment: Multi-dimensional consumer-brand relationships, *Journal of Consumer Marketing* 22(6), 313-322.
- Hewett, K.; Money, R.B.; and Sharma, S. 2002. An exploration of the moderating role of buyer corporate culture in industrial buyer-seller relationships, *Journal of the Academy of Marketing Science* 30(3), 229-39.
- Hibbard, J. D.; Kumar, N.; and Stern, L.W. 2001. Examining the impact of destructive acts in marketing channel relationships, *Journal of Marketing Research* 38(1), 45-61.
- Hoffman, D.L., and Novak, T.P. 2000. How to acquire customers on the Web, *Harvard Business Review* May-June, 179-188.
- Holloway, B.B.; Wang, S.; and Parish, J.T. 2005. The role of cumulative online purchasing experience in service recovery management, *Journal of Interactive Marketing* 19(3), 54-66.
- Horppu, M.; Kuivalainen, O.; Tarkiainen; and Ellonen, H.K. 2008. Online satisfaction, trust and loyalty, and the impact of the offline parent brand, *Journal of Product and Brand Management* 17(6), 403-413.
- Humphrey, J., and Schmitz, H. 1998. Trust and inter-firm relations in developing and transition economies, *Journal of Development Studies* 34(4), 32-61.
- Jin, B.; Park, J.Y.; and Kim, J. 2008. Cross-culture examination of the relationships among firm reputation, e-satisfaction, e-trust, and e-loyalty, *International Marketing Review* 25(3), 324-337.
- Joines, L.J.; Scherer, C.W.; and Sheufele, D.A. 2003. Exploring motivations for consumer Web use and their implications for e-commerce, *Journal of Consumer Marketing* 20(2), 90-108.
- Jun, S.E., and Chung, K.H. 2006. A study on the factors of Internet shopping site affecting customer's e-satisfaction, e-loyalty, and repurchasing intention, *Journal of Internet Electronic Research* 6(2), 133-158.
- Korea National Statistical Office 2008. E-commerce trade in 2007, <http://www.nso.go.kr/>.
- Kotler, P., and Keller, K.L. 2009. *Marketing Management* (13th ed.), New Jersey: Pearson Prentice Hall.

- Liang, T.P., and Huang, J.S. 1998. An empirical study on consumer acceptance of products in electronic markets: A transaction cost model, *Decision Support Systems* 24(1), 29-43.
- Liu, C., and Arnett, K.P. 2000. Exploring the factors associated with Web site success in the context of electronic commerce, <http://www.elsevier.com/locate/dsw>.
- Lohse, G.L., and Spiller, P. 1998. Electronic shipping, *Communications of the ACM* 41(7), 81-87.
- Loiacono, E.T.; Watson, R.T.; and Goodhue, D.L. 2002. WEBQUAL: A measure of Web site quality. *In* K. Evans and L. Scheer (eds.), *Marketing Educators Conference: Marketing Theory and Application* 13, 432-37.
- Mangold, W.G.; Miller, F.; and Brockway, G.R. 1999. Word of mouth communication in the service marketplace, *Journal of Service Marketing* 13, 73-87.
- Moorman, C.; Zaltman, G.; and Deshpande, R. 1992. Relationships between providers and users of marketing research: The dynamics of trust within and between organizations, *Journal of Marketing Research* 29(3), 314-29.
- Morgan, R.M., and Hunt, S.D. 1994. The commitment-trust theory of relationship marketing, *Journal of Marketing* 58(3), 20-38.
- Morgan, R.M., and Hunt, S.D. 1999. Relationship-based competitive advantage: The role of relationship marketing in marketing strategy, *Journal of Business Research* 46, 281-290.
- Mukherjee, A., and Nath, P. 2007. Role of electronic trust in online retailing: A re-examination of the commitment-trust theory, *European Journal of Marketing* 41(9/10), 1173-1202.
- Murray, K.B. 1991. A test of services marketing theory: Consumer information acquisition activities, *Journal of Marketing* 55(January), 10-25.
- Novak, T.P.; Hoffman, D.L.; and Yung, Y.F. 2000. Measuring the customer experience in online environments: A structural modeling approach, *Marketing Science* 19(1), 22-42.
- Page, C., and Lepkowska-White, E. 2002. Web equity: A framework for building consumer value in online companies, *Journal of Consumer Marketing* 19(3), 231-248.
- Pang, C.; Yen, D.C.; and Tarn, J.M. 2007. Exploring online shoppers' e-trust in China, *Human Systems Management* 26, 193-198.
- Park, C., and Lee, T.M. 2009. Information direction, Web site reputation and e-WOM effect: A moderating role of product type, *Journal of Business Research* 62, 61-67.
- Parvatiyar, A., and Sheth, J.N. 2001. Customer relationship management: Emerging practice, process, and discipline, *Journal of Economic and Social Research* 3(2), 1-34.
- Pavlou, P.A., and Chellappa, R. 2001. The role of perceived privacy and perceived security in the development of trust in electronic commerce, Working Paper, Marshall School of Business, University of Southern California, Los Angeles.
- Peterson, R.; Balasubramanian, S.; and Bronnenbert, B. 1997. Exploring the implication of the Internet for consumer marketing, *Journal of the Academy of Marketing Science* 25(4), 329-346.

- Ranganathan, C., and Ganapathy, S. 2002. Key dimensions of business-to-consumer Web sites, *Information and Management* 39, 457-456.
- Rauyruen, P., and Miller, K.E. 2007. Relationship quality as a predictor of B2B customer loyalty, *Journal of Business Research* 60, 21-31.
- Reichheld, F.F., and Schefter, P. 2000. e-Loyalty: Your secret weapon on the Web, *Harvard Business Review*, July-August, 105-113.
- Rice, M. 2002. What makes users revisit a Web site? *Marketing News* 31(6), 12.
- Roberts, K.; Varki, S.; and Brodie, R. 2003. Measuring the quality of relationships in consumer services: An empirical study, *European Journal of Marketing* 37(1/2), 169-196.
- Schaffer, Eric. 2000. A better way for Web design, *Information Week* 784(May1), 194.
- Silverman, G. 1997. How to harness the awesome power of word of mouth, *Direct Marketing*, November, 32-7.
- Sirdeshmukh, D.; Singh, J.; and Sabol, B. 2002. Consumer trust, value, and loyalty in relational exchange, *Journal of Marketing* 66(January), 15-37.
- Srinivansan, S.S.; Anderson, R.; and Ponnnavolu, K. 2002. Customer loyalty in e-commerce: An exploration if its antecedents and consequence, *Journal of Retailing* 78, 41-50.
- Storbacka, K.; Strandvik, T.; and Gronroos, C. 1994. Managing customer relationships for profit: The dynamics of relationship quality, *International Journal of Service Industry Management* 5(5), 21-38.
- Swaminathan, V.; Lepkowska-White, E.; and Rao, B.P. 1999. Browsers or buyers in cyberspace? An investigation of factors influencing electronic exchange, *Journal of Computer-Mediated Communication* 5(2), <http://jcms.indiana.edu/vol5/issue2/swaminathan.htm>.
- Szymanski, D.M., and Hise, R.T. 2000. e-satisfaction: An initial examination, *Journal of Retailing Marketing* 76(3), 309-322.
- Tam, Pui-Wing. 2002. Grading the grader, *Wall Street Journal* online, <http://online.wsj.com/article/>
- Udo, G.J. 2001. Privacy and security e-commerce: A survey study, *Information Management and Computer Security* 9(4), 165-174.
- Ulaga, W., and Eggert A. 2006. Relationship value and relationship quality: Broadening the nomological network of business-to-business relationships, *European Journal of Marketing* 40(3/4), 311-327.
- von Wangenheim, F., and Bayon, T. 2004. The effect of word of mouth on services switching: Measurement and moderating variables, *European Journal of Marketing* 38(9/10), 1173-1185.
- Winch, G., and Joyce, P. 2006. Exploring the dynamics of building and losing consumer trust in B2C e-business, *International Journal of Retail and Distribution Management* 34(7), 541-555.
- Wolfinger, M., and Gilly, M.C. 2001. Shopping online for freedom, control, and fun, *California Management Review* 43(2), 34-55.
- Wolfinger, M., and Gilly, M.C. 2003. eTailQ: Dimensionalizing, measuring, and predicting e-tail quality, *Journal of Retailing* 79, 183-198.

- Wong, A., and Sohal, A.S. 2006. Understanding the quality of relationships in consumer services: A study in a retail environment, *International Journal of Quality and Reliability Management* 23(3), 244-264.
- Yang, O., and Jo, M.J. 2000. The effect of word of mouth communication on consumer's changing attitude, *Advertising Research* 11(3), 7-34.
- Yoo, B., and Donthu, N. 2001. Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL), *Quarterly Journal of Electronic Commerce* 2(1), 31-36.
- Zeithaml, V.A.; Parasuraman, A.; and Malhotra, A. 2002. Service quality delivery through Web site: A critical review of extent knowledge, *Journal of the Academy of Marketing Science* 30(Fall), 362-82.

ABOUT THE AUTHORS

Ki-Han Chung is a professor in the Department of Business Administration at Gyeongsang National University in Korea. He received his MBA (Seoul National University) and Ph.D. (Busan National University) in marketing. His interests include market orientation, Internet marketing, service marketing, and marketing channels. He has published several articles in scholarly Korean journals and has presented papers at conferences on topics in these domains. He has been president of the Korea International Electronic Commerce Association since March 1, 2009. He received the Best Paper Award at the 2007 International Conference on e-CASE in Hong Kong and the Honorable Chou Wen-Hsien Memorial Award at the 2009 International Conference on e-CASE and e-Technology in Singapore.

Jae-Ik Shin is a research professor of Brain Korea 21 in the Department of Business Administration at Gyeongsang National University in Korea. He received his MBA (Busan National University) and Ph.D. (Gyeongsang National University) in marketing. His interests include tourism marketing, Internet marketing, marketing of corporate social responsibility, and services marketing. He received the Best Paper Award at the 2007 International Conference on e-CASE in Hong Kong and the Honorable Chou Wen-Hsien Memorial Award at the 2009 International Conference on e-CASE and e-Technology in Singapore.