

A STUDY OF ANTECEDENTS OF E-RELATIONSHIP  
QUALITY IN HOTEL WEBSITES

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## CHAPTER I

### INTRODUCTION

#### Overview of Internet Usage in the U.S. Market

The Internet is a gathering place for people around the world. Estimates place global Internet users at 1.14 billion in March 2007 (Internetworldstat, 2007), and projections say it will reach 1.8 billion individuals by 2010 (ClickZ Stats, 2005). In March 2007, Internet users in the Americas totaled 329 million, comprised of 233 millions users in North America, 68 million users in South America, 23 million users in Central America, and 5 million users in the Caribbean. The growth rate of users around the world from 2000 to 2007 equaled 208.7%. In North America, that growth rate was 115.7% (Internetworldstat, 2007). Therefore, it has become more and more important for the U.S. and global populations to connect.

Many businesses have moved from the offline to the online world in order to serve the global Internet population. Shopping online in the U.S. has expanded in many product categories. Online sales increased approximately 35% from 2004 to 2005 in selected product categories, including apparel and accessories, computer software, home and garden, and toys and hobbies.

## The Internet and the Lodging Industry

The Internet is a perfect vehicle for the travel industry, as online travel websites give consumers control over their travel planning and provide a quick and easy way to book travel arrangements. According to the Travel Industry Association of America (TIA), approximately 120 million adults, 56% of the 216.1 million in the U.S. used the Internet in 2005. Of these Internet users, approximately 84% were travelers, which translates into a market of 101.3 million "online travelers." In terms of demographics, the percentages of both male and female Internet users increased from 2002 to 2005. Male users increased from 61% to 68%, and female users increased dramatically from 57% to 66% in the three years. The majority of online users were 18-29 years old (86%) in 2005, followed by the age groups 30-49, 50-64, and 65 and up, respectively. People with higher education accounted for 89% of online users. Regarding marital status, married people were online users more often than were unmarried people.

In 2005, consumer Internet spending gained 22% over 2004 (Burns, 2006). This spending consisted of non-travel (retail) and travel spending. Online consumer spending in the travel sector was \$50.7 and \$60.9 billion in 2004 and 2005, respectively, increasing 20% in that one year (see Table 1-1). U.S. online travel sales were projected to reach \$70 billion by the end of 2006 (McGann, 2004). Online booking in the U.S. increased dramatically from 2003 to 2005, from approximately \$46 billion to \$62 billion. It is expected to nearly double by 2009 (see Table 1-2).

Table 1-1

Online Consumer Spending, 2004 and 2005

Sector	2004 (\$B)	2005 (\$B)	Change (%)
Non-travel (retail)	66.5	82.3	24
Travel	50.7	60.9	20
Total	117.2	143.2	22

*Note.* Spending excludes auctions and large corporate purchases. Source is ClickZ Stats (2006).

Table 1-2

Total Online Booking Revenue and Channel Share, 2003 to 2009

Year	U.S. Online Travel Booking Revenue (\$B)	Percentage of Total U.S. Travel Revenue (%)
2003	46	20
2004	54	23
2005	62	26
2006	70	28
2007	77	30
2008	84	31
2009	91	33

*Note.* Source is ClickZ Stats (2004).

In addition to an increase in the number of Internet users and in online spending in the travel sector, online booking revenue has grown. The number of online purchases of hotel accommodations rose from 40% in 2004 to 52% in 2005 (Kerner, 2005). According to HospitalityNet (2006, December 15), the online channel will become the norm for travel purchases. Some consumers prefer to book hotel accommodations through third party online travel websites such as Hotels.com, Hotwire, Orbitz, Priceline, Expedia, and Travelocity rather than through brand hotel sites such as Marriott.com. The third-party online intermediaries (TPIs) have created significant problem on the industry over the past several years. However, the distinct trend for 2007 is that more rooms will be sold directly to consumers via the direct online channel – the hotel’s own website. The

opportunity to conduct business directly with consumers allows hotels to reduce costs with distribution and TPIs. The cost to the hotel of a direct sell to a consumer for a two-night stay in a room that sells for \$100 per night is as low as \$3-5 per transaction. The distribution cost for that same two-night stay could be as high as \$54 if the sale was made by the Global Distribution System or \$50 if the sale was made through a TPI such as Expedia, Travelocity, or Orbitz. (Starkov & Price, 2006). Therefore, hotels expect more revenue to be generated from bookings on their proprietary websites, such as Hilton Hotel Corporation (HotelNewsResource, 2006, October 31). In addition, through their own websites hotels can control pricing, brand identity, promises to guests, relationships with customers, and profitability (Tissera, 2006).

Travelers focus on low prices, so a best rate guarantee is the biggest motivator to book. Consumers tend to avoid the service fees of TPIs and enjoy the perception that hotels will offer better service (HospitalityNet, 2006). Therefore, booking through hotel websites has increased approximately 30% from 2002 to 2006 (HotelNewsResource, 2006, October 31). During this time, hotel websites have concentrated more on customized travel options, website redesign, website optimization, and e-CRM (Starkov & Price, 2006); Best Western Hotels' website is an example of such changes (HotelNewsResource, 2006, August 3).

#### Customer Relationship Marketing on the Internet

Customer relationship management (CRM) is a broad term that refers to managing interactive business with customers. CRM is the philosophy of changing an

organization from product-centric to customer-centric, which is better understanding what customers want and need, the product and service mix to be taken to market, and how to provide the ongoing service and values that provide profitability and expand relationships (Kim, Suh, & Hwang, 2003). CRM begins by developing an Internet presence and by using Web-based tools (Gosney & Boehm, 2000). CRM describes the methodologies, technologies, and e-commerce capabilities used by companies to manage customer relationships (Stone & Woodcock, 2001), and it can be viewed as an application of one-to-one relationship marketing, responding to an individual customer on the basis of what is known about that customer and what that customer says (Peppers, Rogers, & Dorf, 1999). CRM has developed in many ways, from direct mail, loyalty cards, and call centers, to birthday gift cards. It can increase customer retention and loyalty and create value for the customer by customizing products and services (Jutla, Craig, & Bodorik, 2001).

Advances in software have given companies new ways to gain visibility, attract new customers, retain present ones, enhance transaction and service capabilities, and increase customer loyalty. Customer relationship management on the Internet, or electronic customer relationship management (e-CRM), has been introduced as an extension of traditional CRM. More businesses are using e-CRM because good customer relationships are key to business success. According to Shoniregun, Omoegun, Brown-West, and Logvynovskiy (2004), e-CRM is revolutionizing marketing because it must be tailored to each e-business strategy. "Web-based CRM means that the sources of customer-related data are collected from the customer interactions with the Web and Internet-based systems" (Karadostas, Kardaras, & Papathanassiou, 2005, p. 854).

Studies of CRM on the Internet have been conducted on e-retailer and e-banking businesses. The antecedents of customer loyalty in an online business are the 8Cs: customization, contact interactivity, care, community, convenience, cultivation, choice, and character (Srinivasan, Anderson, & Ponnayolu, 2002). According to Lee-Kelly, Gilbert, and Monnicom (2003), CRM can directly increase the loyalty of the Internet customer. However, there is limited research showing that e-CRM can increase customer loyalty in the hotel industry, even though many hotel websites enable customers to make reservations and contact the hotels.

#### Antecedents and Consequences of E-relationship Quality

Relationship quality topics have been popular in marketing research. Relationship quality is a high order concept comprised of satisfaction, trust and commitment. According to Rauyruen (2007), relationship quality can influence customer loyalty. This research examines the antecedents of e-relationship and explores the effects of e-relationship quality on e-loyalty.

First, this study investigated the antecedents of e-relationship quality. In the financial service industry (Bejou, Ennew, & Palmer, 1998), and in the hotel industry (Kim, Han, & Lee, 2001) communication has been shown to be a driver of satisfaction and trust. Therefore, this study proposes that the communication function is an antecedent of e-relationship quality. In addition, website security (Yoon, 2002) and website design (Srinivasan et al., 2002; Szymanski & Hise, 2000) have been studied as drivers for e-satisfaction and e-trust. Therefore, this study proposes that the combination of website security and website design be measured as the transactional function. Finally,

customization, customer orientation, and relational orientation have been proposed as drivers of satisfaction and trust (Bejou et al., 1998; Kim et al., 2001). Therefore, this study proposes customization as a driver of e-relationship quality and named it the relational function.

Second, this research proposes e-relationship quality as a higher-level construct comprised of e-satisfaction and e-trust, both of which influence e-loyalty. Based on offline context, relationship quality consists of trust (Bejou, Wray, & Ingram, 1996; Crosby, Evans, & Cowles, 1990; Dorsch, Swanson, & Kelley, 1998; Dwyer & Oh, 1987; Kumar, Scheer, & Steenkamp, 1995; Moorman & Zaltman, 1992; Wray, Palmer, & Bejou, 1994) and satisfaction (Crosby et al., 1990; Dwyer & Oh, 1987; Hennig-Thurau & Klee, 1997).

Third, the development of loyalty has been investigated by several researchers (Day, 1969; Dick & Basu, 1994; Oliver, 1999). In addition, satisfaction has been identified as the critical element of loyalty (Oliver, 1999). A positive linkage between satisfaction and loyalty was found by Rust and Zahorik (1993). Singh and Sirdeshmukh (2000) proposed that trust as a relational construct has positive influence on customer loyalty. Thus, marketing studies have found that satisfaction and trust have a positive association with loyalty.

The study of satisfaction and trust has expanded to the study of loyalty in the online environment (Taylor & Hunter, 2003; Yang & Peterson, 2004; Rodgers, Negash, & Suk, 2005). Anderson and Srinivasan (2003) stated that a customer who is satisfied with a service provider is more likely to build a closer relationship with that business, emphasizing the direct relationship between e-satisfaction on e-loyalty. Reichheld,

Markey, & Hopton (2000) also emphasized the importance of e-trust in establishing e-loyalty, stating that when customers trust the online retailer, they are willing to give personal information. However, few studies have investigated the relationships among e-satisfaction, e-trust, and e-loyalty.

### Problem Statement

From the statistics, the number of Internet users has increased dramatically worldwide, and the United States has the highest number of users in the world. Current information and communication technologies enable businesses to relate to customers in better and more efficient ways, and the hotel industry has moved forward by using websites to communicate with customers around the world. A website is a good tool by which a hotel can introduce itself to the world and become a part of the international market, and customers can book online using a website that provides an online reservation service. Consumers who have purchased travel products through TPAs have faced unexpected fees, taxes, and hidden conditions regarding cancellations or changes. Therefore, the trend of online travelers will shift from the indirect to the direct online channel (Starkov & Price, 2006). The projected ratio of direct to indirect online channel purchases in 2008 is expected to be 62:38, compared to 56:44 in 2006 and 52:48 in 2002 (Starkov & Price, 2006).

This study, therefore, should be conducted for three reasons. First, based on this trend, travel consumers are changing their behavior from booking via TPAs to booking directly through hotel websites. Because the hotel industry is moving online, e-CRM is becoming important. Second, hotels need to know the best ways to service online



customers. This research identifies the important antecedents of customer satisfaction and trust in the online environment. Third, great deal of research has been conducted on electronic customer relationship management in service industries such as banking and finance. However, few studies have examined online customer relationship management with reference to hotel websites. Therefore, this study investigates how customer relationship management on the Internet enhances e-loyalty via e-relationship quality on hotel websites.

### Objectives of the Study

The following objectives of this study, therefore, have been determined:

1. Identify significant antecedents of e-relationship quality
2. Examine the relationship between the antecedents of e-relationship quality and e-loyalty
3. Investigate whether switching costs or involvement moderate the effects of e-relationship quality on e-loyalty

## CHAPTER II

### REVIEW OF LITERATURE

The purpose of this chapter is to review research on the antecedents of e-relationship quality and a consequence (e-loyalty). Antecedents of e-relationship quality in hotel websites are identified. Three antecedents are discussed: communicational function, transactional function, and relational function. The second section of the literature review examines the role of two moderating variables (switching costs and involvement) on the association between e-relationship quality and e-loyalty.

#### Antecedents of E-Relationship Quality in Hotel Websites

##### Communicational function

Communication is “the human activity that creates and maintains relationships between the different parties involved” (Lages, Lages, & Lages, 2005, p. 1041). In an e-commerce context, communication is the exchange of information between sellers and buyers (Kiang, Raghu, & Shang, 2000). Peterson, Balasubramanian, and Bronnenberg (1997) described communication channel intermediaries as giving information about the availability and features of the seller’s products or services to buyers and prospective buyers.

“Communication[al] function refers to the use of Internet as customer service tool to disseminate information and answer to all enquiries from customers. Examples of this tool include email, chat rooms or bulletin board, and simply Frequently Asked Questions (FAQ)” (Ab Hamid, 2005, p. 54). E-mail and automated response are considered the dominant communication mediums to maintain customer relationships (Ab Hamid, 2005). E-mail is a communicational tool for online consumers as it may reduce customer waiting time for after-sales service responses. Ab Hamid concluded that the successful use of e-mail communication can give an advantage to a company.

Help desks, chat rooms, and FAQs are the common communicational methods available on the web to link customers and companies. Help desks give technical support by e-mail. Chat rooms allow customers to communicate with customer service. FAQs provide answers to common questions customers may have.

In an offline setting, communication is a relationship marketing activity in the hotel industry (Kim et al., 2001); newsletters, direct mailings, telemarketing services, thank-you letters, and birthday cards have been used to measure the communication dimension. In Kim et al.’s (2001) study, communication was treated as an antecedent of relationship quality. Therefore, this study extends the previous empirical support in the offline setting by proving that communication can be used to measure e-relationship quality in online activities.

In this study, communicational function is a tool to provide e-marketing service and to exchange information between buyers and sellers not only in response to a customer’s inquiry, but also to maintain customer relationships. The communicational function may involve the exchange of information through the website, e-marketing,

complaint handling, customer support on the web, and e-promotional activities such as e-newsletters, thank-you and birthday messages, and special promotions.

#### Transactional function

“Transactional function reflects the use of Internet technology as a platform to transact with companies such as place orders, check an order status, and view profile of previous activities” (Ab Hamid, 2005, p. 54). Website design and website security are the primary features that encourage transactions between customer and company. Security is the feature through which online customers may build online trust; consumers who become trusting eventually make additional online transactions. Website designs can expect more transactions between a customer and a company.

#### *Website design*

Website design is a key factor in the transactional function. Srinivasan et al. (2002) focused on the character of websites, which they defined as the overall image or personality that an e-retailer projects to consumers through the use of inputs such as text, style, graphics, colors, logos, and slogans or themes on the website. Other researchers have discussed website characteristics as a driver of online trust. Devaraj, Fan, and Kohli (2006) examined the determinants of consumer satisfaction and preference of the online channel. They defined website design as important in customer satisfaction. Moreover, website design must be informative and enable consumers to locate the information they need to make their purchase decisions. Information from the website affects the quality of consumer decisions and consumer satisfaction with the online channel.

### *Website security*

Security is a concern for both customers and online companies. Customers may hesitate to purchase online because of the security of personal credit cards. Security on the web refers to the safety of the computer and credit information (Bart, Shankar, Sultan, & Urban, 2005). Customers regard seals of approval, for example VeriSign and TRUSTe, as indicators of security by customers and many websites have adopted these seals. The use of seals of approval increases trustworthiness. According to Gritzalis, “TRUSTe is a self-regulation privacy initiative. Its main target is to raise the level of consumers’ trust and confidence in the Internet” (Gritzalis, 2004, p. 261).

Therefore, drawing on many of previous definitions, transactional function refers to the use of Internet technology to engage in a transaction with an online company. This function includes website design that is simple, clear, and convenient for customers to use and website security that involves trust seal signs and payment policies that create customer confidence in online transactions.

### *Relational function*

Several studies have discussed the relational function. Ab Hamid (2005) stated that relational tools include value-adding features such as personalized recommendations, personalized webpages, and customized service. “Personalization is a unique feature of the Internet that requires substantial integration between the front end servers, database applications and intelligent agents” (Ab Hamid, 2005, p. 56). Personalization is the ultimate form of customization and is the final result of understanding and meeting the

unique needs of a customer (Holland & Baker, 2001). According to Devaraj et al. (2006), personalization is a key service dimension in customer satisfaction.

In the e-retailing environment, Srinivasan et al. (2002) defined customization as the ability of an e-retailer to tailor products, services, and the transactional environment to individual customers. Customization can be explained as the extent to which an e-retailer's website can recognize a customer and tailor the choice of products, services, and shopping experiences for that customer.

In this study, relational function is defined as a two-way communication feature in an e-CRM context that creates a personalized relationship between customer and an online company. Tools to facilitate this relationship may include customized products and services, personalized complaints, recommendations, and feedback surveys. Each customer receives a direct response to his/her online request or inquiry. The relational function keeps customer needs and preferences on file for the customer's future inquiries and information.

### E-relationship Quality

The relationship marketing paradigm has been a popular topic in marketing and management research. The principle of this paradigm is how an organization can enhance customer satisfaction through the relationship. Gummesson (1987) was the early academic to introduce the topic of relationship quality, referring to it as the quality of the interaction between a firm and its customers. The term was further defined as "the degree of appropriateness of a relationship to fulfill the needs of the customer associated with the relationship" (Hennig-Thurau & Klee, 1997, p. 751). Many researchers have described

relationship quality as a higher order concept consisting of trust (Bejou et al., 1996; Crosby et al., 1990; Dorsch et al., 1998; Dwyer & Oh, 1987; Kumar et al., 1995; Moorman & Zaltman, 1992; Wray et al., 1994), satisfaction (Crosby et al., 1990; Dwyer & Oh, 1987; Hennig-Thurau & Klee, 1997; Lin & Ding, 2005), commitment (Crosby et al., 1990; Dwyer & Oh, 1987; Kumar et al., 1995), opportunism (Dorsch et al., 1998), and customer orientation (Bejou et al., 1998; Dorsch et al., 1998). Moreover, Kumar et al. (1995), who studied in the manufacturer-reseller context, operationalized relationship quality to include conflict, trust, commitment, willingness to invest, and expectation of continuity. Therefore, relationship quality has been investigated in many contexts by many researchers, including Bejou et al. (1996), who studied relationships between salespeople and customers.

In an offline context, the measurement of relationship quality has been summarized as customer satisfaction and trust (Bejou et al., 1996; Crosby et al., 1990; Dorsch et al., 1998; Dwyer & Oh, 1987; Hennig-Thurau & Klee, 1997; Kumar et al., 1995; Lagace, Dahlstrom, & Gassenheimer, 1991; Moorman & Zaltman, 1992; Wray et al., 1994). Table 2-1 summarizes studies employing relationship quality, as discussed in the previous literature review.

Table 2-1

## Studies Employing Relationship Quality

Researchers	Antecedents of relationship quality	Relationship quality measures	Applications proposed	Setting in which model was tested
Crosby et al. (1990)	Similarity, service domain expertise, relational selling behavior (interaction intensity, agent disclosure, customer disclosure, cooperative intentions)	Customer satisfaction, trust in salesperson	Relationship between salesperson and customer	Insurance industry
Dorsch et al. (1998)	None	Trust, satisfaction, commitment, opportunism, customer orientation, ethical profile	Customer company perceptions of vendors	Purchasing executives
Dwyer & Oh (1987)	Participation, formalization, centralization	Satisfaction, minimal opportunism, trust	Marketing channels	Automobile industry
Hennig-Thurau & Klee (1997)	Customer satisfaction	Trust, commitment, overall quality	Consumers and firms	Only theory was proposed
Kumar et al. (1995)	Distributive fairness, procedural fairness	Affective conflict, manifest conflict, trust, commitment, willingness to invest, expectation of continuity	Large suppliers and small resellers	New car dealers
Lagace et al. (1991)	Ethical behavior, expertise, frequency of interaction, duration of relationship	Trust in salesperson, satisfaction with salesperson	Suppliers and "resellers"	Physicians and pharmaceutical salespeople
Lin & Ding (2005)	Relational selling behavior, network quality, service recovery	Satisfaction, trust	Customers and firms	Telecommunication industry
Moorman & Zaltman (1992)	Trust	Perceived quality of interaction, researcher involvement in research activities, commitment to relationship	Market research users	Market research firms and clients
Wray et al. (1994); Bejou et al. (1996)	Ethics, salesperson expertise, relationship duration, selling orientation, customer orientation	Trust in salesperson, satisfaction with salesperson	Salesperson and consumer	Financial services

*Note.* Adapted from Roberts, Varki, & Brodie (2003).



In a business-to-business context, Rauyruen (2007) proposed relationship quality as a higher order construct comprised of trust, commitment, satisfaction, and service quality that influences customer loyalty. In the literature, a number of authors found that relationship quality consisted of trust and satisfaction (Bejou et al., 1998; Dick & Basu, 1994; Dwyer & Oh, 1987; Rauyruen, 2007). Building on past research, relationship quality in both offline and online contexts is constructed of higher-order components. Therefore, this study proposes that relationship quality in an online context (e-relationship quality) includes two dimensions: online trust (e-trust) and online satisfaction (e-satisfaction).

#### E-satisfaction

Satisfaction is the “consumer’s fulfillment response” (Oliver, 1997, p. 13). Customer satisfaction is defined as “customers’ cognitive and affective evaluation based on their personal experience across all service episodes within the relationship” (Storbacka, Strandvik, & Gronroos, 1994, p. 25). Locklove, Patterson, and Walker (1998) summarized the importance of customer satisfaction. First, satisfaction is linked to customer loyalty and relationship commitment. Second, a very satisfied customer spreads favorable word of mouth by praising the organization and the service with which he or she is very pleased. Finally, very satisfied customers can be forgiving. Dwyer and Oh (1987) suggested that the more satisfied buyers are, the higher quality the relationship with vendors. In contrast, a customer who is unsatisfied with a service provider cannot expect to have a good relationship with that provider. Lages et al. (2005) considered satisfaction with a relationship to be a key dimension of relationship quality.

Satisfaction in an electronic commerce context, e-satisfaction, is the consumers' judgment of their Internet experience as compared to their experiences with traditional offline service providers or retail stores (Evanschitzky, Iyer, Hesse, & Ahlert, 2004; Szymanski & Hise, 2000). Anderson and Srinivasan investigated the impact of satisfaction on loyalty in the context of electronic commerce. They defined e-satisfaction as "the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm" (Anderson & Srinivasan, 2003, p. 125). Szymanski and Hise (2000) conducted a study of e-satisfaction in which the conceptual framework of e-satisfaction was established in an e-retailing environment. The antecedents of e-satisfaction in their study were convenience, merchandising, site design, and financial security. An online survey was administered to online shoppers. Additional work by Evanschitzky et al. (2004) examined the model of e-satisfaction developed by Szymanski and Hise and applied it to the context of German online consumers. Evanschitzky et al. found that the model fit well with German online contexts of Internet shopping and Internet financial services. Convenience and site design were the most important drivers of e-satisfaction for both U.S. and German consumers. Additional researchers have evaluated satisfaction (Bejou et al., 1998; Kim et al., 2001), on-line satisfaction (Bansal, McDougall, Dikolli, & Sedatole, 2004; Kim & Cha, 2002; Kim, Ma, & Kim, 2006; Ribbink, Riel, Liljander, & Steukens, 2004), and overall website satisfaction (Yoon, 2002). Table 2-2 summarizes drivers of e-satisfaction based on the previous literature review.

Table 2-2

## Drivers of E-satisfaction Research

Researchers	Environment	Drivers	Dependent variables
Bansal et al. (2004)	E-retailing	Ease of use, information available, product selection, price, transaction duration, customer service, shipping & handling	E-satisfaction
Bejou et al. (1998)	Off-line: financial service industry	Length of relationship, sales orientation, customer orientation, ethics, expertise	Satisfaction
Kim & Cha (2002)	Off-line: hotel performance	Customer orientation, relational orientation, mutual disclosure, service provider attributes	Satisfaction
Kim et al. (2001)	Off-line: hotel marketing activity	Confidence, contact, communication	Relationship quality (trust and satisfaction)
Szymanski & Hise (2000)	E-retailing	Convenience, site design, financial security, product information	E-satisfaction
Yoon (2002)	E-shopping mall	Transaction security, website properties, navigation functionality, personal variables	Website satisfaction

## E-trust

Trust is a driver of loyalty (Reichheld et al., 2000) and has been studied in business contexts. Trust is important for building long-term relationships (Singh & Sirdeshmukh, 2000) and has been defined by many authors. Moorman and Zaltman (1992, p. 315) defined trust as “the willingness to rely on an exchange partner in whom one has confidence.” Morgan and Hunt (1994) defined it as confidence in the exchange partner’s reliability and integrity. Rousseau, Sitkin, Burt, and Camerer (1998, p. 395) stated that trust is “a psychological state comprising the intention to accept vulnerability

based on positive expectations of the intentions or behaviors of another.” Another definition associated with trust is “confidence in the other’s intentions and motives” (Lewicki, McAllister, & Bies, 1998, p. 439).

This study examines online trust, or e-trust, which has become an important issue because it is associated with online purchasing from online businesses. E-trust has been defined as “the degree of confidence customers have in online exchanges, or in the online exchange channel” (Ribbink et al., 2004, p. 447). Online customers are sensitive about providing personal information through the web, such as identification numbers, to complete an online purchase. Because of this sensitivity, online trust has been studied by numerous researchers in a variety of contexts. Dayal, Landesberg, and Zeisser (1999); Hoffman, Thomas, and Marcos (1999); and Jarvenpaa, Tractinsky, and Vitale (2000) concentrated on consumers’ online trust. Gefen (2000); Gefen (2002); and Warrington, Abgrab, and Caldwell (2000) studied trust in e-commerce. Belanger, Hiller, and Smith (2002) focused on third party trust seals and privacy seals.

Bart et al. (2005) summarized eight characteristics of online trust: privacy, security, navigation and presentation, brand strength, advice, order fulfillment, community feature, and absence of errors. Yoon (2002) suggested that the concept of online trust consists of six factors: security assurance, brand, search, fulfillment, presentation, and technology. He also identified three stages of trust development. The first, the stage of chaos, describes the experience of first-time visitors to websites who are worried about the safety of purchasing online. This stage changes into the second in which customers have an increased desire to protect their personal information. This stage of trust development is related to trust confirmation. Customers can be reassured of

online security of information by sites that have implemented safety measures and subsequently publish trust signs, such as VeriSign, TRUSTe, or Visa, on their sites. The third stage is concerned with the maintenance of trust. In this stage, visitors are more concerned with brand search, fulfillment, presentation, and technology.

The specific characteristics of e-trust (i.e., online trust) examined in this study are related to the customer’s privacy, security, and willingness to purchase online based on security concerns. Table 2-3 summarizes drivers of e-trust based on the previous literature review.

Table 2-3  
Drivers of E-trust Research

<b>Researchers</b>	<b>Environment</b>	<b>Drivers</b>	<b>Dependent variables</b>
Gefen (2000)	Internet vendor	Familiarity, trust disposition	Trust
Jarvenpaa et al. (2000)	Trust on internet store	Perceived size, perceived reputation	Trust in e-commerce
Yoon (2002)	E-shopping mall	Transaction security, website properties, navigation functionality, personal variables	Website trust

### E-loyalty

The majority of early studies described loyalty as the repeat purchase of a product or service (Homburg & Giering, 2001). Oliver (1999, p. 34) defined it as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.” Even

so, brand loyalty is extremely difficult to measure and define. The concept of loyalty is divided into attitudinal and behavioral perspectives (Oliver, 1999; Zeithaml, Parasuraman, & Malhotra, 2002). In the attitudinal perspective, customer loyalty is a specific desire to continue a relationship with a service provider (Czepiel & Gilmore, 1987). To study this aspect, Baloglu (2002) added trust, emotional attachment or commitment, and switching costs. Dick and Basu (1994) explained that attitudes are measured by asking how much people say they like the brand, feel committed to it, like to recommend it to others, and have positive beliefs and feelings about it – relative to competing brands.

In the behavioral perspective, “customer loyalty is the proportion of times a purchaser chooses the same product or service in a specific category compared to the total number of purchases made by the purchaser in the category, under the condition that other acceptable products or services are conveniently available in that category” (Neal, 1999, p. 21).

To measure loyalty, Day (1969) said the use of a pure behavior-based loyalty measurement is not sufficient to distinguish between true loyalty and spurious loyalty. “The key point is that these spuriously loyal buyers lack any attachment to brand attributes, and they can be immediately captured by another brand that offers a better deal...” (Day, 1969, p. 30). According to Lee, Kim, and Kim (2006, p. 247), “‘true’ customer loyalty should be composed of both behavioral loyalty and attitudinal loyalty.” Previous research has adopted a two-dimensional conceptualization of loyalty (Dick & Basu, 1994; Floh & Treiblmaier, 2006; Homburg & Giering, 2001; Oliver, 1997).

Therefore, this study applies both attitudinal and behavioral perspectives to measure e-loyalty.

The concept of e-loyalty extends the traditional brand loyalty concept to online consumer behavior. Customer loyalty is one major driver of success in e-commerce (Floh & Treiblmaier, 2006; Lee-Kelly et al., 2003; Reichheld et al., 2000; Srinivasan et al., 2002). Dunn (2005) found three reasons for cultivating loyalty in online customers. First, the costs of acquiring online customers and losing those customers are both high. Second, loyal customers purchase more than switchers. Many online travel intermediaries can generate a significant income from loyal customers. Finally, loyal customers recommend websites to new customers in the online travel sector.

The study of customer loyalty in the online environment is growing. E-loyalty is “the customer’s favorable attitude toward an electronic business, resulting in repeat purchasing behavior” (Anderson & Srinivasan, 2003, p. 125). E-loyalty parallels the “store loyalty” concept, including building repeat store visit behavior and the purchase of established brand name items in the store (Corstjens & Lal, 2000). Moreover, Reichheld et al. (2000) stated that e-loyalty is related to quality customer support, on-time delivery, compelling product presentation, convenient and reasonably priced shipping and handling, and a clear and trustworthy privacy policy. Gommans, Krishnan, and Scheffeld (2001) have integrated previous research on brand loyalty into research on e-loyalty. They have stated that the drivers of an e-loyalty model consist of value propositions, brand building, trust and security, website and technology, and customer service. They concluded that the drivers of e-loyalty in brand strategy depend on the type of e-business and the type of market situation.

Table 2-4 shows drivers of e-loyalty, or online loyalty, drawing on the literature review.

Table 2-4  
Drivers of E-loyalty Research

Researchers	Environment	Drivers	Dependent variables
Anderson & Srinivasan (2003)	Electronic commerce	E-satisfaction	E-loyalty
Floh & Treiblmaier (2006)	E-banking	Overall satisfaction, trust	Online loyalty
Gommans et al. (2001)	E-business	Website and technology, customer service, value proposition, trust, security, brand building	E-loyalty
Lee-Kelly et al. (2003)	E-retailing	E-CRM effort, customer perceived e-CRM	E-loyalty
Rodgers et al. (2005)	Online shopping	Online satisfaction	Online loyalty
Srinivasan et al. (2002)	Customer loyalty in online business-to-consumer (B2C)	Customization, contact interaction, cultivation, care, community, choice, convenience, character	E-loyalty

## Moderating Variables

### Switching costs

Switching costs are the costs of changing from one supplier to another (Heide & Weiss, 1995) and mean the additional costs required to terminate a current relationship and secure an alternative (Ping, 1993; Sharma & Patterson, 2000; Yanamandram & White, 2006). Switching costs have been recognized as a factor in maintaining a relationship (Morgan & Hunt, 1994). Switching costs occur primarily when a customer is



dissatisfied with a service (Porter, 1980). “Termination costs are, therefore, all expected losses from termination and result from the perceived lack of comparable potential alternative partners, relationship dissolution expenses, and/or substantial switching costs” (Morgan & Hunt, 1994, p. 24).

Switching costs may include the psychological and emotional costs of becoming a customer of a new firm (Kim, Kliger, & Vale, 2003; Sharma & Patterson, 2000; Yanamandram & White, 2006). Moreover, Dick and Basu (1994) said the domain of switching costs is comprised of both monetary and non-monetary costs, such as time spent. This domain includes the loss of loyalty benefits as a result of ending a relationship. Klemperer (1987) classified switching costs into three types: transaction, learning, and artificial or contractual. Transaction costs are the costs of starting a new relationship with a provider. Sometimes, transaction costs include the costs of terminating a relationship. Learning costs are the efforts required by a customer to become as comfortable with the new products as he or she had been with the old products. Artificial switching costs refer to the costs created by a company (e.g., frequent-guest reward programs and discounts to loyal guests). In the hotel industry, artificial switching costs are important because customers are concerned with frequent-guest rewards associated with purchasing room accommodations. A hotel may provide other special benefits as rewards to customers such as room upgrades, executive floor use, a complimentary butler, fruit and chocolate baskets, birthday dinners, and special rates for the spa. Therefore, drawing on previous research, artificial (i.e., contractual) switching costs is the most appropriate concept that can be applied directly to the hotel industry.

The impact of switching costs on customer loyalty has been examined (Chen & Hitt, 2002; Dick & Basu, 1994). Fornell (1992) investigated the influence of customer satisfaction and switching costs on customer loyalty. Recently, the concept of switching costs has been expanded to apply to a marketing strategy context and in the online environment. In a business-to-business (B2B) environment, several studies have examined the role of switching costs. Yanamandram and White (2006) investigated the determinants of behavioral brand loyalty among dissatisfied customers in the B2B services sector. Determinants of loyalty, such as alternative providers, switching costs, inertia, investment in relationships, service recovery, and other factors, were cited as reasons why dissatisfied customers stayed with a service provider. Yang and Peterson (2004) examined the effects of switching costs on the relationship between satisfaction and customer loyalty and on the association between perceived-value and customer loyalty. The study centered on a web-based survey of online service users. In the same vein, Lam, Shankar, Erramilli, and Murthy (2004) developed a conceptual framework linking customer value, satisfaction, loyalty, and switching costs constructs in a B2B service setting. These researchers studied not only the moderation effect of switching costs in the relationship of customer satisfaction and customer loyalty, but also investigated the direct effect between switching costs and customer loyalty. Our study, however, is limited to the moderation effect of switching costs.

### Involvement

Involvement has been considered by academic researchers over the past three decades (Brisoux & Cheron, 1990; Engel, Kollat, & Blackwell, 1978; Rothschild, 1984).

Involvement is a central concept that explains consumer behavior in marketing and retailing (Aldlaigan & Buttle, 2001). Engel, Blackwell, and Miniard (1993) defined involvement as the level of interest in the topic under consideration and its ability to stimulate discussion. A similar definition of involvement is “an ongoing concern for a product class, that is, it is independent of purchase situations and is motivated by the degree to which the product relates to the self and/or hedonic pleasure received from the product” (Richins & Bloch, 1986). Several scholars have defined involvement as an enduring individual trait or as a personality characteristic (Kassarjian, 1981) or a personal consequence of the object to the individual. “It is about the degree to which the customer feels attached to product or brand, and the loyalty felt towards it” (Blythe, 1997, p. 138).

The concept of involvement is described in many forms. Rothschild’s (1984) explanation of involvement includes enduring and situational components. Enduring involvement is a level of care or concern with an issue, product, or activity. It is an individual’s ongoing attachment with the attitude or object. Situational involvement is the heightened involvement prompted by a specific situation. Richins and Bloch (1986) added that situational involvement is a temporary elevation of interest near the time of a purchase decision. In contrast, enduring involvement remains stable. Blythe (1997) explains that involvement has both cognitive and affective elements, meaning involvement of the brain and the emotions. In an online context, Patwardhan (2004, p. 418) stated, “Cognitive involvement is the extent to which individuals attend, think about, focus and exert mental effort while engaged in a particular online activity. Emotional involvement is the extent to which individuals feel emotionally involved or affected by a particular online activity while engaged in it.”

In previous research, the concept of involvement included multiple types of self-involvement, message involvement, ego involvement, media involvement, user involvement, and communication involvement (Dichter, 1966; McColl-Kennedy & Fetter, 2001; Santosa, Wei, & Chan, 2005). Product involvement, the most popular topic, has been studied by various researchers (Dichter, 1966; Elliott & Speck, 2005; Engel et al., 1993; Patwardhan, 2004; Quester & Lim, 2003; Sundaram, Mitra, & Webster, 1998). Product involvement is the situation in which a customer feels so strongly about the product that he or she recommends it to others; this reduces the tension of the consumption experience (Dichter, 1966). Sundaram et al. (1998) defined product involvement as personal interest in the product, excitement resulting from product ownership and use.

Involvement, in this study, refers to the situation in which a customer feels strongly about the product and spends time searching for information that can change the purchase decision.

## Model Development and Hypotheses

### Research model

Based on the literature review, the conceptual model (Figure 1) specifies the antecedents and moderators between e-relationship quality and e-loyalty. The antecedents of e-relationship quality in this model are communicational function, transactional function, and relational function. The moderators that affect the relationship between e-relationship quality and e-loyalty are switching costs and involvement.

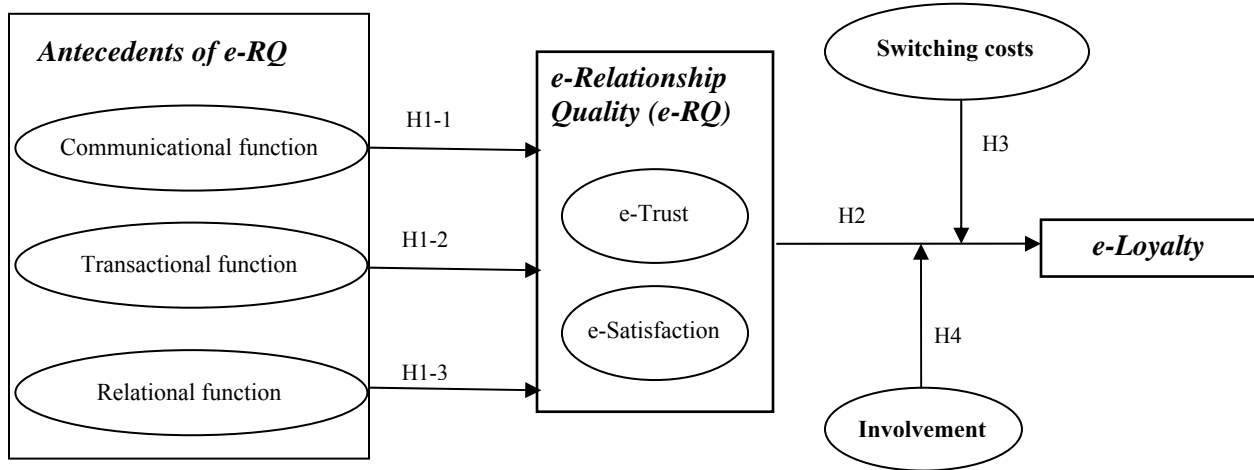


Figure 1. Proposed model of the antecedents of e-relationship quality and e-loyalty.

## Hypotheses

### *Antecedents of e-relationship quality*

Many studies have considered communication as a driver for relationship quality. Holland and Baker (2001) suggested that communication is the heart of relationship marketing and is the basis for understanding and developing customers in an off-line world; communication becomes even more important in the “many-to-many environment” of the Internet. Kim et al. (2001), studying the effects of relationship marketing on repeat purchase and word of mouth, found that communication resulted in higher relationship quality, which led to greater commitment, more repeat purchases, and positive word of mouth.

The literature contains multiple definitions of transactional function. In this study, transactional function combines website design and website security findings from previous literature. Character is one element of website design. Srinivasan et al. (2002, p. 44) used character to refer to “an overall image or personality that the e-retailer projects

to consumers through the use of inputs such as text, style, graphics, colors, logos and slogan or theme on the website.” These scholars found that character has a significant influence on e-loyalty. In addition, Shankar, Urban, and Sultan (2002) examined antecedents of online trust from the perspectives of various stakeholders. These researchers proposed that the website/consumer characteristic has an impact on online trust. This characteristic includes privacy, security, navigation and presentation, brand strength, advice, order fulfillment, community features, entertainment experience, familiarity, online expertise, shopping experience, and absence of errors. The researchers proposed that the website/consumer characteristic is a potential driver of online trust.

Relational function was defined earlier in this study as a two-way communication feature that creates a personalized relationship between customer and online company in the e-CRM context. In the area of e-service quality (e-SQ), customization/personalization is one of the key dimensions of SERVQUAL (service quality). Zeithaml et al. (2002) stated that this dimension of e-SQ seems to be more of a cognitive than an emotional evaluation when compared to general service quality. According to Ansari and Mela (2003), a web master can combine on-site and external customization to manage customer relationships. Both types of customization are helpful in enhancing site loyalty. On-site customization is the designing of the website “to appeal to users or enable the users themselves to customize the content” (Ansari & Mela, 2003). External customization is intended to draw users to a website. It may include e-mails, banner advertisements, affiliate sites, or other communication media. According to Srinivasan et al. (2002), customization has a significant impact on e-loyalty.

In summary, all literature reviews showed the clear linkages between the communicational function and e-relationship quality, the transactional function and e-relationship quality, and the relational function and e-relationship quality. Therefore, this study hypothesizes the following:

Hypothesis 1-1: Communicational function is positively related to e-relationship quality.

Hypothesis 1-2: Transactional function is positively related to e-relationship quality.

Hypothesis 1-3: Relational function is positively related to e-relationship quality.

#### *E-relationship quality and e-loyalty*

The linkage between relationship quality and loyalty has been studied in off-line contexts (Lin & Ding, 2005). A number of studies have separately examined the influence of customer satisfaction and loyalty (Ball, Coelho, & Machas, 2004; Homburg & Giering, 2001) and the influence of trust and loyalty (Ball et al., 2004; Taylor & Hunter, 2003). Based on previous studies, higher satisfaction might be related to higher loyalty (Hallowell, 1996). The significance of trust in explaining loyalty is supported by empirical research (Kim, 2005; Singh & Sirdeshmukh, 2000; Sirdeshmukh, Singh, & Sabol, 2002; Yousafzai, Pallister, & Foxall, 2003).

Recently, research has shifted to examining the same linkages in online contexts (Fassott, 2004). Fassott (2004) confirmed the positive relationship of relationship quality and loyalty in an e-retailing context. Rodgers et al. (2005) found a strong relationship between on-line satisfaction and on-line loyalty, but limited research has been conducted to examine the direct linkage between e-relationship quality and e-loyalty. Thus, the following hypothesis is proposed:

Hypothesis 2: The higher the level of e-relationship quality, the higher the level of e-loyalty.

*Moderating role of switching costs*

Switching costs are a critical issue for customers who prefer to change their service provider. “In a situation of high switching costs, dissatisfied customers are forced to stay with a service provider” (Lam et al., 2004, p. 298). Staying with a provider may discourage the customer from recommending the provider to other customers or encourage the customer to make negative comments to the provider. In contrast, in a situation of low switching costs, a dissatisfied customer may switch to another service provider at any time (Lam et al., 2004).

Researchers have used switching costs as a key moderating variable in the satisfaction-loyalty linkage. Many researchers have proposed that customer satisfaction has a more positive effect on customer loyalty when switching costs are low than when these costs are high (Lam et al., 2004; Yang & Peterson, 2004). The findings on switching costs as a moderating variable between satisfaction and loyalty have been mixed. Several researchers have concluded that switching costs were a significant moderating variable. Lee, Lee, and Feick (2001) tested the effect of switching costs on the relationship between satisfaction and loyalty in the mobile phone industry and found that switching costs did impose a moderating effect between customer satisfaction and loyalty. In a business-to-commerce (B2C) setting, Jones, Mothersbaugh, and Beatty (2000) provided evidence that the effect of customer satisfaction on repurchase intentions was not strong when switching barriers were high.



However, several researchers failed to provide empirical support. Yang and Peterson (2004) found that switching costs did not have a significant moderating effect on the association of customer loyalty with customer satisfaction and perceived value in a study of the Internet market. Lam et al. (2004) found no support for their hypothesis that customer satisfaction has a stronger positive effect on customer loyalty (patronage) when switching costs are low than when switching costs are high. Therefore, based on these mixed results, this study tests the moderating role of switching costs in the context of hotel websites. Thus, the following hypothesis is suggested:

Hypothesis 3: E-relationship quality has a stronger positive effect on e-loyalty when switching costs are low than when switching costs are high.

#### *Moderating role of involvement*

The concept of product involvement is a significant issue for consumer behavior because a consumer's level of product involvement influences his/her decision process and shopping behavior (Laurent & Kapferer, 1985). According to the literature, "high product involvement will come about if the consumer feels that product attributes are strongly-linked to end goals or values; lower levels of involvement occur if the attributes only link to function, and low levels occur if attributes are irrelevant to consequences" (Blythe, 1997, p. 138). Based on previous studies, high involvement products are durable goods such as cars, jewelry, and houses. Low product involvement relates to non-durable commodities that are frequently purchased, such as cigarettes (Zaichkowsky, 1985).

Researchers have examined the linkage between product involvement and brand loyalty (Iwasaki & Havitz, 2004; Park, 1996). Park (1996) used the terms “involvement” and “attitudinal loyalty.” LeClerc and Little (1997), studying consumer behavior in an offline context, found that brand loyalty was tied directly to product involvement. Their results indicated that repeat purchase behavior for a high-involvement product was an indicator of brand loyalty, whereas repeat purchase for a low-involvement product was a habitual purchase behavior. Similarly, Park (1996) found that involvement and attitudinal loyalty were correlated in the study of leisure activities.

In their study of customer loyalty in e-banking, Floh and Treiblmaier (2006) concluded that “highly involved people stay more loyal to an online bank than people with low involvement in banking and finance” (Floh & Treiblmaier, 2006, p. 106). Homburg and Giering (2001) found that involvement was a significant moderator in the satisfaction and loyalty linkage; involvement weakened the association between satisfaction with sales process and repurchase intention. Therefore, this study proposes involvement as the important moderating variable in the online world and posits the following hypothesis:

Hypothesis 4: The relationship between e-relationship quality and e-loyalty is positively moderated by involvement.

In sum, table 2-5 present the summary of the hypothesis testing.

Table 2-5

Summary of the hypothesis testing

<i>Hypothesis</i>	<i>Relationship</i>
Hypothesis 1-1	Communicational function is positively related to e-relationship quality
Hypothesis 1-2	Transactional function is positively related to e-relationship quality
Hypothesis 1-3	Relational function is positively related to e-relationship quality
Hypothesis 2	The higher the level of e-relationship quality, the higher the level of e-loyalty
Hypothesis 3	E-relationship quality has a stronger positive effect on e-loyalty when switching costs are low than when switching costs are high
Hypothesis 4	The relationship between e-relationship quality and e-loyalty is positively moderated by involvement

## CHAPTER III

### METHODOLOGY

This chapter discusses the methodology used to examine the effect of the antecedents (i.e., communicational function, transactional function, and relational function) of e-relationship quality. Additionally, this study investigates the relationship between e-relationship quality and e-loyalty for hotel website customers. Therefore, this chapter includes a discussion of instrument design, sampling design, human subjects, data collection procedures, and analytical methods. The instrument design section includes the scales utilized to measure the antecedents of e-relationship quality, e-relationship quality, and e-loyalty, as well as a discussion of the scales utilized to measure the conceptual model. Data collection procedures include all sequential steps of data collection.

#### Instrument Design

An online survey was administered to collect data. The purpose of this research design was to test six research hypotheses. Eight constructs were included in the study: communicational function, transactional function, relational function, e-satisfaction, e-trust, involvement, switching costs, and e-loyalty.

All measures were taken directly or adapted from previous studies on marketing (Anderson & Srinivasan, 2003; Bart et al., 2005; Lee-Kelly et al., 2003; Kim et al., 2001), retailing (Srinivasan et al., 2002), service quality (Ribbink et al., 2004), and online consumer behavior (Devaraj et al., 2006). Finally, 32 measurement items were developed, as shown in Table 3-1.

Table 3-1  
Items Developed for the Survey Instrument

	<b>Indicators</b>	<b>Source</b>
<b><i>Communicational function</i></b>		
1	This hotel's website provides information about important hotel events	Kim et al. (2001); Srinivasan et al. (2002)
2	This hotel is active in marketing its services through its website	
3	This hotel's website has a customer support icon available as a platform to launch complaints or to obtain technical support by e-mail	
4	This website is responsive to any problems I encounter	
5	My complaints are reviewed and acted on swiftly	
<b><i>Transactional function</i></b>		
6	This website provides me with simple and clear directions	Srinivasan et al. (2002); Bart et al. (2005)
7	I found it easy to navigate on this website	
8	I found this website to be convenient for making room reservations	
9	I feel the information regarding security of payments is clearly stated	
10	I feel secure about making reservations online at this website	
<b><i>Relational function</i></b>		
11	The advertisements and promotions this hotel sends me are tailored to my needs	Srinivasan et al. (2002); Lee-Kelly et al. (2003)
12	This hotel's website gives me the impression that I am a special customer	
13	This hotel's website is customized to my needs	
14	If possible, my needs are reviewed and responded to on an individual basis	
15	This hotel's website enables me to make reservations that are customized for me	
16	My feedback on the quality of products and services is highly valued	
<b><i>E-satisfaction</i></b>		
1	I am generally pleased with this hotel's website service	Ribbink et al. (2004)
2	I am satisfied with this hotel's website services	
3	I am happy with this hotel's website	
<b><i>E-trust</i></b>		
1	I am prepared to give private information at this hotel's website	Ribbink et al. (2004)
2	I am willing to give my credit card number at this hotel's website	
3	I trust what this hotel's website says about its products and services	
4	This hotel's website is reliable	
<b><i>Involvement</i></b>		
1	Often, I am involved personally with making reservations via a hotel's website	Lee (2005)

2	I spend a lot of time searching hotel websites to book a hotel room	
3	Making a reservation via a hotel's website is important to me.	
<b><i>Switching costs</i></b>		
1	The cost in time, money, and effort to change hotel websites is high to me	Anderson & Srinivasan (2003); Yang & Peterson (2004)
2	It takes me a lot of time and effort to get used to another hotel's website	
3	The intangible (i.e., earning points) rewards from joining a hotel reward program are important in my online hotel booking decision	
<b><i>E-loyalty</i></b>		
1	When I need to make a room reservation, this hotel's website is my first choice	Anderson & Srinivasan (2003)
2	I will make reservations via this hotel's website in the future	
3	I seldom consider switching to another hotel's website	

The questionnaire for the study was based on the literature review and consisted of four sections. The first section, which consisted of nine questions, was the screening component. The second section contained the model testing questions. Thirty-two questions covered antecedents of e-relationship quality (communicational, transactional, and relational functions), e-relationship quality (e-satisfaction and e-trust), e-loyalty, and moderating variables (involvement and switching costs). The five questions in the third section solicited demographic information. The fourth section, which consisted of two questions, was for respondents who had not booked via a hotel website in the past six months. In all, the questionnaire had 48 items.

In the first section, the screening questions ensured that respondents possessed sufficient experience to answer questions about their perceptions of hotel website booking. Respondents were asked nine items about hotel website customer behaviors (e.g., How many times have you booked a hotel room directly from a hotel website within the past 6 months? For what reason do you travel most frequently? How many times did you search an online agent site before booking with a hotel website?). Only the respondents who had booked from a hotel website within the past six months were allowed to answer the questions in the second section (related to communicational

function, transactional function, relational function, e-satisfaction, e-trust, involvement, switching costs, and e-loyalty). These respondents also were asked to answer the questions in the third section (demographics). If a respondent had never booked from a hotel website before, he/she was asked to respond to the demographic questions in section three and to the questions in section four (reasons for not booking through a hotel website and selection of a different hotel reservation channel).

In the second section, respondents were asked to evaluate the antecedents of e-relationship quality. A seven-point, Likert-type scale was used to measure all items, with anchors ranging from strongly disagree (1) to strongly agree (7). To measure antecedents of e-relationship quality, 16 items covered communicational, transactional, and relational functions. Five items were adapted from Kim et al. (2001) and Srinivasan et al. (2002) to measure communicational function. Five transactional function items were developed by the researcher based on Srinivasan et al. (2002) and Bart et al. (2005). These five items regarding transactional function included measurement of website design and website security. The website design construct was developed from Srinivasan et al. (2002), and the website security construct was adapted from Bart et al. (2005). Six relational function items were adapted from the studies of Lee-Kelly et al. (2003) and Srinivasan et al. (2002).

Relationship quality, based on previous research, is a higher order dimension comprised of satisfaction and trust. This study adapted the concept of relationship quality into the online environment. To measure e-relationship quality (relationship quality in the online context), three e-satisfaction items and four e-trust items were developed from

Ribbink et al. (2004). These constructs measured the overall satisfaction and trust of the customer in the hotel's website.

The outcome of e-relationship quality in this study was e-loyalty. Therefore, the respondent's level of e-loyalty was also assessed. Three items were adapted from Anderson and Srinivasan (2003) to measure e-loyalty, both in its attitudinal and in its behavioral aspects.

The moderating variables were assessed using the same scale, a seven-point Likert-scale. Three involvement items were adapted from Lee (2005). Three switching costs items were developed by the researcher based on Anderson and Srinivasan (2003) and Yang and Peterson (2004). As stated earlier, 32 measurement items were taken directly or adapted from the literature as shown in Table 3-1.

The third section, the demographic profile of the questionnaire, was constructed and adapted from previous research. The five items in this section were intended to provide background information on each respondent. The questionnaire asked the respondents' age, gender, highest level of education, household income, and occupation.

The final section of the questionnaire contained two items; one asked why the respondent had not booked directly from a hotel website and the other asked him/her to select a hotel reservation channel. Only the respondents who had not booked through a hotel website in the past six months were asked these questions.

### Human Subjects

The study was carried out at the Oklahoma State University main campus in Stillwater, Oklahoma. The appropriate human subjects approval was received from the



Oklahoma State University Institutional Review Board (IRB). Human subjects approval reassured the respondents that the project was safe and would not harm individuals or violate their privacy. A copy of the human subjects approval for this project is included in Appendix A.

### Sampling Design

The purpose of this research was to explore consumers' online behavior in purchasing hotel accommodations from hotel websites. The target population of this research was general customers (age 18 or over) who had purchased hotel rooms directly from hotel websites in the last six months. It is difficult to compile a complete list of people across the United States who purchased hotel rooms directly from hotel websites; therefore, it is reasonable to use convenience sampling in this research.

According to Loehlin (1992), the investigator should plan on collecting at least 100 cases, with 200 being better for this class of model with two to four latent variables. The consequences of using smaller samples include more convergence failures, improper solutions, and lowered accuracy of parameter estimates (Loehlin, 1992). Hair, Anderson, Tatham, and Black (1998) recommended the appropriate sample size for model estimation is a size from 100 to 200. For factor analysis, the minimum sample size is required to be at least five times greater than the observed variables. A total of 32 observed variable items were included in this study: 5 for communicational function, 5 for transactional function, 6 for relational function, 3 for e-satisfaction, 4 for e-trust, 3 for involvement, 3 for switching costs, and 3 for e-loyalty. Therefore, the minimum required

sample size for this study was 160. Thus, the sample size ( $N = 422$ ) for the current study was large enough to estimate parameters.

A web survey instrument was used to conduct the study. This survey was administered via e-mail by [www.zoomerang.com](http://www.zoomerang.com). Market Tools, Inc., which owns [www.zoomerang.com](http://www.zoomerang.com), is a leading full-service provider of market research services. This organization provides professional survey software that can create research instruments via the Zoomerang website and provides a sample called ZoomPanel. Roughly 2.5 million people comprise this panel. The panel consists of approximately 67% males and 33% females, which is representative of the U.S. census. This study selected ZoomPanel members to be the target population because the profile of ZoomPanel members is balanced on census data to ensure accurate population representation. Sixteen major attributes classify the panel profile. The sample for this study was based on the online purchasing of travel services attribute. (See Appendix C for a copy of the detailed attributes.)

#### Data Collection

For the data collection process, this research used a Web survey. An e-mail sent to ZoomPanel members by [www.zoomerang.com](http://www.zoomerang.com) launched the survey by inviting potential respondents to a Web site to complete the survey. E-mail panelists were provided by Market Tools, Inc. at a cost of \$2000. Eligibility criteria for survey participants were as follows:

1. Online shoppers who were 18 years old or over
2. Online shoppers who were able to read and write English

3. Online shoppers who were Zoomerang panel members
4. Online shoppers who had been living in the continental United States for the past six months
5. Online shoppers who purchased online travel services

The procedure of administering this Web survey allowed respondents to remain completely anonymous. First, potential participants, who were Zoomerang panel members, received an e-mail invitation to participate in this survey hosted by the Zoomerang website. The e-mail contained a hyperlink to the survey website. Participants who agreed to participate clicked the hyperlink to go directly to the online survey. The survey was completely voluntary and participants could have withdrawn from the online survey at any time without penalty. Second, no record was kept of the recipients who eventually took the online survey. After participants finished answering the questionnaire, they clicked the “submit” button and the responses were sent directly from the web survey to the Zoomerang website. The researcher had no way of knowing the name, e-mail address, or personal information of any participant. The researcher received only completed data, which classified the participants by date and time of submission from the Zoomerang website.

As stated earlier, a minimum of 160 cases answering antecedents of e-relationship quality, e-relationship quality, and e-loyalty questions was required for this research. Using a convenience sample method, this survey was launched on November 2, 2006 to 2796 panelists; 1,084 surveys were received by November 9, 2006. Of the 1,084 surveys, 389 were incomplete; therefore, 695 usable responses were retained. The response rate was 38.76%.

The 695 respondents were divided into two groups. There were 422 respondents in the first group: those who had booked from a hotel website within the past six months. These individuals were asked to evaluate the antecedents of e-relationship quality, e-relationship quality, and e-loyalty. Thus, these 422 respondents were used to test the e-relationship quality model. There were 273 respondents in the second group: those who had not booked via a hotel website in past six months. This study focused on the respondents of 422 who had booked from a hotel website within the past six months.

Table 3-2 summarizes the demographic profile of the first group of respondents. The sample consists of 260 males (61.6%) and 162 females (38.4%). Approximately 31% of the respondents were between the ages of 55 and 64, 28.0% were 45 to 54 years old, 18.2% were 35 to 44 years old, 12.8% were 65 years old or older, and just under 10% were 34 years of age or under.

The majority of respondents had a graduate degree (Master's or Doctoral), accounting for 35.3% of the respondents. 34.6% of the respondents had a college degree, 17.5% had an associate degree, and 12.6% had a high school education. More than 36% of the respondents had an annual household income of US\$100,000 or greater. Approximately 21% of the respondents earned US\$75,000-\$99,999, 17.8% US\$60,000-\$74,999, 13.5% US\$45,000-\$59,999, 4.7% US\$35,000-\$44,999, 3.3% US\$25,000-\$34,999, just under 1% US\$15,000-\$24,999, and nearly 2% under US\$15,000.

In terms of occupation, 26.1% of respondents were professional, 19.0% were retired, 16.3% were executive/manager, 7.3% were self-employed, 6.2% were housewife, 6.1% were other, 5.7% were teacher/professor, 4.3% were secretary/clerk, 3.3% were

government/military, 2.1% were salesman/buyer, 1.7% were first-line supervisor, 1.7% were travel industry, and 0.2% were student.

Table 3-2

Group 1: Demographic Characteristics of Sample (N = 422)

Characteristic	n	Percentage
<i>Gender</i>		
Male	260	61.6
Female	162	38.4
	422	100
<i>Age</i>		
Under 24	4	0.9
25-34	37	8.8
35-44	77	18.2
45-54	118	28.0
55-64	132	31.3
65-74	49	11.6
75 or over	5	1.2
	422	100
<i>Education background</i>		
High school	53	12.6
Associate degree	74	17.5
College degree	146	34.6
Graduate degree (Master's, Doctoral)	149	35.3
	422	100
<i>Annual household income</i>		
Under \$15,000	8	1.9
\$15,000-\$24,999	4	0.9
\$25,000-\$34,999	14	3.3
\$35,000-\$44,999	20	4.7
\$45,000-\$59,999	57	13.5
\$60,000-\$74,999	75	17.8
\$75,000-\$99,999	90	21.3
\$100,000+	154	36.6
	422	100
<i>Occupation</i>		
Executive/Manager	69	16.3
Professional	110	26.1
Government/Military	14	3.3
Teacher/Professor	24	5.7
Salesman/Buyer	9	2.1
Secretary/Clerk	18	4.3
First-Line Supervisor	7	1.7
Self-Employed	31	7.3
Travel Industry	7	1.7

Housewife	26	6.2
Student	1	0.2
Retired	80	19.0
Other, please specify _____	26	6.1
	422	100

According to the demographic profiles, approximately 49% of the respondents had 9 to 13 years of Internet. Nearly a third (28.6%) had 3-8 years of Internet experience, 17.6% had 14-19 years, and 4.9% had more than 20 years of Internet experience (Table 3-3). Table 3-4 shows that 363 respondents rated e-mail usage as their primary reason for using the Internet. The second most popular reason was searching for information, followed by work, shopping, entertainment, and education, in declining order.

Table 3-3

Group 1: Internet Experience

Characteristic	N	Percentage
<i>Internet Experience</i>		
3 - 8 years	121	28.6
9 - 13 years	206	48.9
14 - 19 years	74	17.6
> 20 years	21	4.9
Total	422	100

Table 3-4

Group 1: Purpose of Internet Usage

Characteristic	n	Percentage
<i>Purpose of Usage</i>		
E-mail	363	86.0
Information	279	66.1
Work	226	53.6
Shopping	197	46.7
Entertain	184	43.6
Education	95	22.5

Note: Respondents were asked to select at least three purposes of Internet Usage. Thus, the accumulated percentage does not equal 100%.

Analytical Methods

The unidimensionality analysis of the data included assessing internal consistency (i.e., reliability) for those variables based upon multiple items and using confirmatory factor analysis to assess the underlying dimensions of the variables. The measures to be assessed were communicational function, transactional function, relational function, e-satisfaction, e-trust, and e-loyalty. A multi-step approach was used to check the convergent and discriminant validity of the measures, to test the hypothesized relationships, and to examine moderation effects. Both exogenous and endogenous measures were evaluated using confirmatory factor analysis (CFA). The measurement model was tested to check that the hypothesized model was supported by the data.

Following the test of the measurement characteristics of the data, hypothesis testing proceeded in two steps. First, a structural equation modeling (SEM) approach was used to test the association between the three dimensions of functions (i.e., communicational, transactional, relational) and e-relationship quality, and the relationship between e-relationship quality and e-loyalty. Using AMOS 5.0 (Arbuckle,

1996), a structural model was analyzed and the path coefficients were estimated. Unlike other statistical methods, SEM tests the model paths and model fit. SEM also allows assessment of complex interrelated dependence relationships and incorporates the effects of measurement error on the structural coefficients (Hair et al., 1998). The structural model is examined in terms of model goodness of fit, overall exploratory power, and postulated causal links. Provided that the data do not violate the model assumptions, the results can be interpreted.

Second, the existence of moderating effects was estimated by a multigroup approach using SEM. A multigroup approach is traditionally used if one or both of the effect variables in a model is discrete or categorical (Rigdon, Schumacker, and Wothke, 1998). To this end, the sample is first divided into low and high levels of moderation. In this model, two moderators, switching costs and involvement, were chosen. The sample was split at the mean of each moderating variable to form two subgroups that represented low and high score groups related to the two moderators.



## CHAPTER IV

### FINDINGS

This chapter explains the results of the analyses. AMOS 5.0 (Arbuckle, 1996) was used in the structural equation modeling of the data. The analysis proceeded in three stages. Unidimensionality analysis involved internal consistency reliability of the measurement items, convergent validity, and discriminant validity. To test the hypothesized model, a structural equations analysis was used. The entire model was assessed and the moderation effect was then examined, followed by the structural model. Finally, the alternative model was sequentially compared with the hypothesized model.

#### Unidimensionality Assessment

To assess the unidimensionality of each scale, internal consistency (i.e., reliability) and confirmatory factor analysis were performed. First, a reliability test was used to purify the measurement scale for each construct. All coefficient alphas of the five constructs reported in Table 4-1 surpassed Nunnally's (1978) .70 criteria for reliability acceptability. One item for communicational function, one item for e-satisfaction, and one item for e-loyalty were dropped due to their weak contributions to coefficient alpha and low item-to-total correlations ( $< .40$ ). In this model, e-relationship quality was viewed as a higher-order construct composed of two dimensions: e-satisfaction and e-trust.

Therefore, the reliability of the e-satisfaction and e-trust construct was tested, and then the reliability of e-relationship quality was tested again using each average value of e-satisfaction and e-trust.

Next, the measurement quality was assessed using confirmatory factor analysis (Anderson & Gerbing, 1992). Figure 2 presents a standardized solution for the measurement model. One item of communicational function with a loading that was less than .50 was removed. The factor loadings of all items were generally of a high magnitude for their corresponding factors. Although measurement quality is sometimes assessed factor by factor, each multiple-item indicator was considered simultaneously to provide for the fullest test of convergent and discriminant validity (see Table 4-1). To examine an acceptable fit of the proposed measurement model, each of the constructs was evaluated by examining the statistical significance of each estimated loading, and the overall model fit indices (i.e., GFI, CFI, RMSEA) were evaluated. Significant factor loadings for a specified construct provided evidence of convergent validity, suggesting that items for valid measures of the same concept are at least moderately correlated among themselves.

All loadings exceeded .50, and each indicator *t* value (one tail t-test) exceeded 9.97 ( $p < .001$ ). The  $\chi^2$  fit statistics showed 279.71 with 120 degrees of freedom ( $p < .01$ ). The Root Mean Square Error of Approximation (RMSEA) was .05, less than the recommended .08 (Newcomb, 1994) and equal to the recommended .05 (Marsh and Hau, 1996). The Comparative Fit Index (CFI=.96) and the Goodness-of-Fit Index (GFI=.93) values exceeded the recommended .90 (Newcomb, 1994; Carlson and Mulaik, 1993). All statistics supported the overall measurement quality given the number of indicators.

Table 4-1

Description of Items Used to Measure the Constructs <sup>a</sup>

Construct and indicator	Standardized Loading	t-value	Error variance ( $\delta$ )	Item-to-total correlation	Item reliability
<b>Communicational function (<math>\alpha = .72</math>)</b>					.72
1. This hotel's website provides information about important hotel events.	.62	Fixed	.60	.50	
2. This hotel is active in marketing its services through its website.	.71	10.44	.51	.58	
3. This hotel's website has a customer support icon available as a platform to launch complaints or to obtain technical support by e-mail. <sup>b</sup>	-	-	-	-	-
4. This website is responsive to any problems I encounter.	.66	9.97	.55	.54	
5. My complaints are reviewed and acted on swiftly. <sup>c</sup>	-	-	-	-	-
<b>Transactional function (<math>\alpha = .88</math>)</b>					.88
1. This website provides me with simple and clear directions.	.81	Fixed	.20	.73	
2. I found it easy to navigate on this website.	.82	18.56	.19	.75	
3. I found this website to be convenient for making room reservations.	.81	17.80	.20	.72	
4. I feel the information regarding security of payments is clearly stated.	.68	14.43	.33	.64	
5. I feel secure about making reservations online at this website.	.78	16.86	.23	.72	
<b>Relational function (<math>\alpha = .89</math>)</b>					.89
1. The advertisements and promotions this hotel sends me are tailored to my needs.	.69	Fixed	.52	.70	-
2. This hotel's website gives me the impression that I am a special customer.	.69	16.31	.52	.78	
3. This hotel's website is customized to my needs.	.76	14.04	.42	.71	
4. If possible, my needs are reviewed and responded to on an individual basis.	.79	14.39	.38	.69	
5. This hotel's website enables me to make reservations that are customized for me.	.75	13.20	.44	.73	
6. My feedback on the quality of products and services is highly valued.	.85	15.23	.28	.69	
<b>e-Relationship quality (<math>\alpha = .93</math>)</b>					.93
<b><u>e-Satisfaction</u> (<math>\alpha = .92</math>)</b>	.92	Fixed	.15	.87	(.92)

1. I am generally pleased with this hotel's website service.				(.85)	
2. I am satisfied with this hotel's website services. <sup>b</sup>				(-)	
3. I am happy with this hotel's website.				(.90)	
<b>e-Trust (<math>\alpha = .93</math>)</b>	.95	32.59	.10	.87	(.93)
1. I am prepared to give private information at this hotel's website.				(.88)	
2. I am willing to give my credit card number at this hotel's website.				(.85)	
3. I trust what this hotel's website says about its products and services.				(.84)	
4. This hotel's website is reliable.				(.80)	
<b>e-Loyalty (<math>\alpha = .80</math>)</b>					.80
1. When I need to make a room reservation, this hotel's website is my first choice.	.75	Fixed	.44	.71	
2. I will make reservations via this hotel's website in the future.	.93	16.58	.14	.75	
3. I seldom consider switching to another hotel's website. <sup>b</sup>	-	-	-	-	-

<sup>a</sup>All *t*-values are significant at  $p < .001$ . Hypothesized model with standardized parameter estimates for the full sample ( $N = 422$ ).  $\chi^2 = 279.71$ ,  $df = 120$  ( $p < .01$ ); Comparative Fit Index (CFI) = .96; Root Mean Square Error of Approximation (RMSEA) = .05; Goodness-of-Fit Index (GFI) = .93.

<sup>b</sup>The item was deleted after reliability test.

<sup>c</sup>The item was deleted after confirmatory factor analysis.

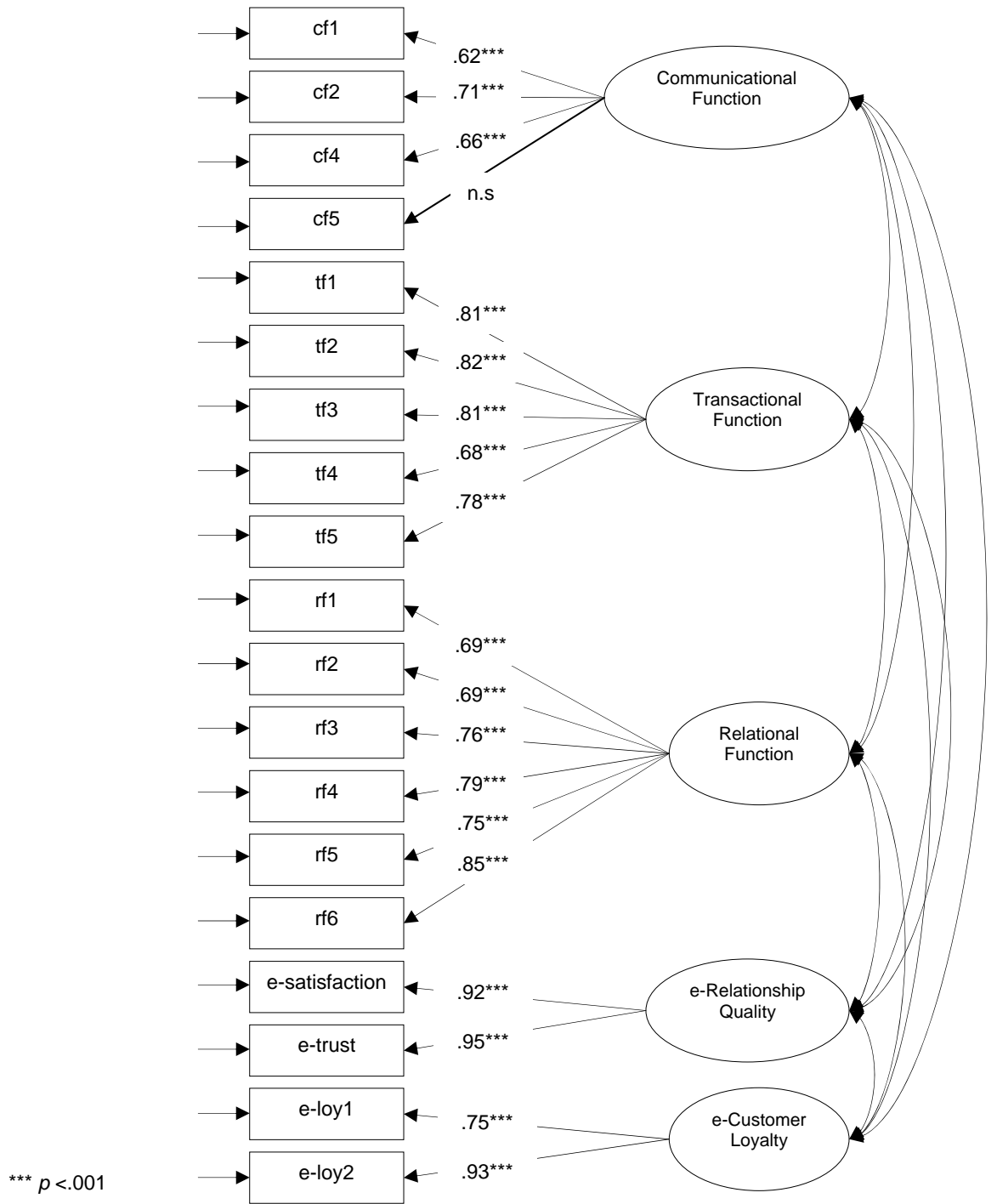


Figure 2. Confirmatory Factor Analysis (CFA) model.

To assess discriminant validity, Fornell and Larcker (1981) suggest using the square root of the average variance (AVE) shared between a construct and its measures. The evidence of discriminant validity exists when the proportion of variance extracted in each construct exceeds the square of the zero-order correlation coefficients representing its correlation with other factors. One pair of scales with a high correlation was e-relationship quality and e-loyalty ( $\Phi = .70$ ,  $\Phi^2 = .49$ ; see Table 4-2). The average extracted estimates were .87 and .71, respectively, indicating adequate discriminant validity. Therefore, according to this assessment, the measures had acceptable levels of validity.

Table 4-2  
Correlation Estimates ( $\Phi$ ), Average Variance Extracted, and Composite Construct Reliability

	1	2	3	4	5	CCR	M	SD
1. communicational function	.45					.72	4.87	1.04
2. transactional function	.39**	.77				.88	5.58	.84
3. relational function	.51**	.32**	.57			.89	4.83	1.08
4. e-relationship quality	.56**	.58**	.63**	.87		.93	5.73	1.01
5. e-loyalty	.41**	.46**	.48**	.70**	.71	.80	5.47	1.17

*Note.* Diagonal elements in the correlation of constructs matrix are the square roots of average variance extracted. For adequate discriminant validity, diagonal elements should be greater than corresponding off-diagonal elements. CCR=composite construct reliability; AVE=average variance extracted.

\*\*  $p < .01$ .

### Overall Model

Using AMOS 5.0, structural equation model was used to test the hypothesized model. As reported in Table 4-3, the hypothesized path model showed a good fit to the data,  $\chi^2 = 241$ ,  $df = 126$  ( $p = .00$ ); GFI = .94; CFI = .97; RMSEA = .047; NFI = .95; TLI

= .97. As expected, all structural path estimates were significant. The signs of all structural paths were consistent with the hypothesized relationships among the latent variables. In addition, the predictors accounted for a substantial proportion of the variance in two endogenous variables. Overall, the proposed model explained 71% of the variance in e-relationship quality (squared multiple correlation [SMC] = .71), and 56% of the variance in e-loyalty ([SMC] = .56).

Within the model, the estimates of the structural coefficients provided the basic tests of the hypothesized relationships. The effects of communicational function, transactional function, and relational function on e-relationship quality and the effect of e-relationship quality on e-loyalty were examined. The set of hypotheses (H1-1, H1-2, H1-3) first described the positive relationships between three proposed factors and e-relationship quality. Communicational function ( $\gamma_1 = .27, p < .001$ ), transactional function ( $\gamma_2 = .39, p < .001$ ), and relational function ( $\gamma_3 = .38, p < .001$ ) all had significant effects on e-relationship quality. Thus, all three hypothesized relationships (H1-1, H1-2, and H1-3) were confirmed by the data. H2 postulated the positive relationship between e-relationship quality and e-loyalty. E-relationship quality ( $\beta_1 = .80, p < .001$ ) had significant effect on e-loyalty. Thus, H2 was supported.

Table 4-3

## Structural Path Estimates

Path To	Path From	H <sub>0</sub>	Unstandardized Estimate	Standardized estimate	t-value
<b>γ paths</b>					
e-relationship quality	Communicational function	H1-1	.33	.27	4.20***
	Transactional function	H1-2	.51	.39	8.38***
	Relational function	H1-3	.40	.38	7.10***
<b>β path</b>					
e-loyalty	e-relationship quality	H2	.80	.75	15.28***

**Model fit indices**

$\chi^2 = 241.36$ ,  $df = 126$ ,  $p < .001$ ; CFI = .97; GFI = .94; AGFI = .92; RMSEA = .047; TLI = .97.

Note.  $R^2$  for e-relationship quality = 71%;  $R^2$  for e-loyalty = 56%.

\*\*\*  $p < .001$



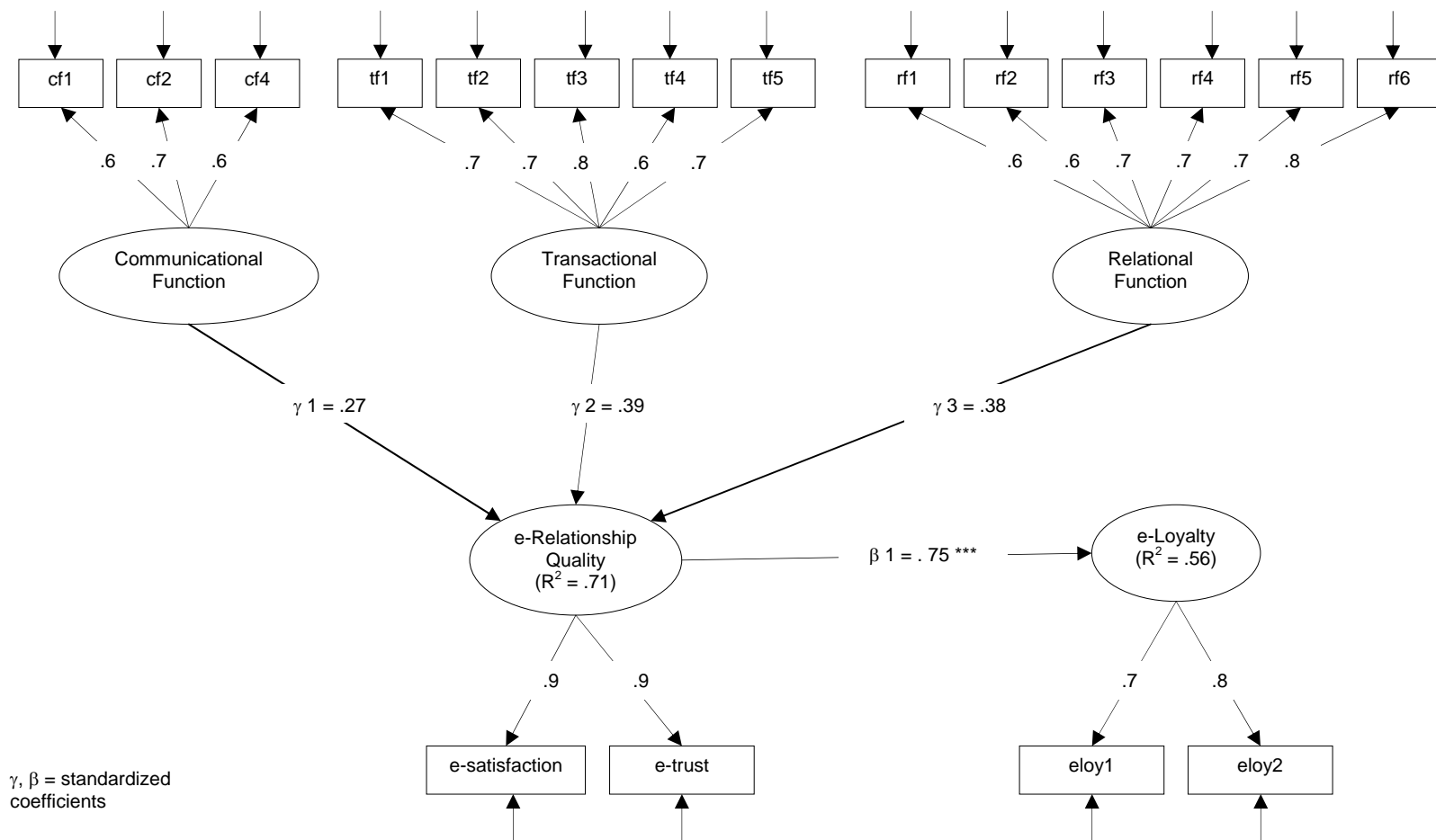


Figure 3. Standardized structural path coefficients.

## Moderation Tests

Abundant opportunities exist for investigating moderation variables in marketing theory in personal selling literature (Walker, Churchill, & Ford, 1977; Weitz, 1981), in consumer behavior literature (Ajzen & Fishbein, 1980; Engel et al., 1978; Howard, 1977; Howard & Sheth, 1969), in channel literature (Dwyer, Schurr, & Oh, 1987; Stern & Reve, 1980), and in advertising literature (Sherif & Hovland, 1961). Researchers have called for the investigation of continuous moderation variables to improve the interpretation of study results (Aiken & West, 1991). Approaches to estimating moderation effects involving latent variables are grouped into three general categories: product term regression analysis, subgroup analysis, and indicant product analysis (Ping, 1995). Product term regression analysis regresses a dependent variable on independent variables comprised of summed indicants and their products. Subgroup analysis divides the study cases using an expected moderation variable, and tests them for significant coefficient differences. Indicant product analysis specifies moderation latent variables in a structural equation model using products of indicants. Recently, however, a multigroup analysis has been used for testing moderating effect (Jöreskog & Sörbom, 1996).

This study adapted a multigroup analysis for investigating moderating (or interaction) effect of two variables (i.e., switching costs and involvement). In a multigroup test, a hypothesized model is simultaneously fit to the data of each group being considered while path coefficients, variance, and error terms are constrained to be equal between groups. This test determines if the data from the different groups exactly fit the same model. If a significant difference is found between the models for a parameter (path coefficient, variance, or error term), this indicates that this constraint

(equality of a parameter) is false and a less constrained model is indicated (Jöreskog & Sörbom, 1996). AMOS was used to conduct a comparison of data sets. In multigroup analyses, equality constraints across groups produce degrees of freedom even when individual models are “just-identified” (i.e., saturated, equal, or baseline), thus allowing for a test of significance. More specifically, this study “freed” each hypothesized path individually and evaluated the improvement in fit relative to the  $M_{\text{equal}}$  model. The  $\chi^2$  difference between the baseline model (i.e.,  $M_{\text{equal}}$  model) and the constrained model (i.e.,  $M_{\text{constrained}}$  model) was performed in order to test the moderation effect of switching costs and involvement. Because the two models were nested, the resulting one degree of freedom  $\chi^2$  difference test provided a statistical test for moderating effect of switching costs and involvement. A significant chi-square difference suggests that the equality constraints are not consistent with the data, and thus a moderating effect exists (Hair et al., 1998; Rigdon et al., 1998). A multigroup approach has been used traditionally if one or both of the effect variables in a model is discrete or categorical.

In order to test the moderation effect of two moderators (i.e., switching costs and involvement) between e-relationship quality and e-loyalty, this study, based on a multigroup approach, divided the entire sample into two subgroups based on whether their perception of switching costs and involvement was above or below the sample mean. In the case of the first moderator, switching costs, the data set was split into 221 cases in the low group and 201 cases in the high group. As indicated earlier, in a moderator of switching costs, we expected the relationship between e-relationship-quality and e-loyalty to be small or negligible under high switching costs because customers stay with a service provider (i.e., hotel website). In contrast, under low switching costs, dissatisfied

customers can switch to another service provider at will. Therefore, we suggested that e-relationship quality has a stronger positive effect on e-loyalty when switching costs are low than when switching costs are high. To test this moderation effect, we split the groups into two subgroups: high and low switching costs. The results of these analyses are presented in Table 4-4.

When examining individual paths in the moderating effects model, we found that switching costs had a significant moderating effect on the association between e-relationship quality and e-loyalty, as expected from H3. The low switching costs group ( $\beta = .77, p < .001$ ) displayed a stronger positive relationship between e-relationship quality and e-loyalty than did the high switching costs group ( $\beta = .49, p < .001$ ). Significant differences were found in the coefficient between the low- and high-switching costs groups. The chi-square difference was higher in the low switching costs group than in the high group ( $\Delta\chi^2 = 10.66, df = 1, p < .001$ ). The  $\chi^2$  difference between the equal (i.e., baseline) model ( $\chi^2 = 583.80, df = 86, p < .001$ ) and the constrained model ( $\chi^2 = 594.46, df = 85, p < .001$ ) is significant. Thus, since the moderation effect of switching costs on e-loyalty differs across the two subgroups, H3 was supported.

Table 4-4  
Results of Moderating Effects of Switching Costs

Path to	Path from	H <sub>0</sub>	Standard estimate (t-value)	
			Low switching costs group (N = 221)	High switching costs group (N = 201)
e-relationship quality	e-loyalty	$\beta$ H3	.77 (11.37) ***	.49 (6.67) ***

\*\*\*  $p < .001$

Next, in relation to the second moderator (involvement), this study split the group into two subgroups – high involvement ( $N = 220$ ) and low involvement ( $N = 202$ ). It is expected that e-relationship quality has a stronger positive effect on e-loyalty when the involvement is high than when it is low. The results showed that involvement had no significant moderating effect on the association between e-relationship quality and e-loyalty, contradicting H4. The moderation effect of involvement was not significantly different between the low involvement and the high involvement group ( $\Delta\chi^2 = .255$ ,  $df = 1$ , n.s.). The  $\chi^2$  difference between the baseline model ( $\chi^2 = 379.91$ ,  $df = 90$ ,  $p < .001$ ) and the constrained model ( $\chi^2 = 380.16$ ,  $df = 89$ ,  $p < .001$ ) was not significant (see Table 4-5). Even though the relationship between e-relationship quality and e-loyalty in the high involvement group is slightly stronger ( $\beta = .72$ ,  $p < .001$ ) than in the low involvement group ( $\beta = .63$ ,  $p < .001$ ), significant differences were not found at the .05 level.

Table 4-5  
Results of Moderating Effects of Involvement

Path to	Path from	H <sub>0</sub>	Standard estimate ( <i>t</i> -value)	
			Low involvement group ( <i>N</i> = 202)	High involvement group ( <i>N</i> = 220)
e-relationship quality	e-loyalty	$\beta$ H4	.63 (7.95) ***	.72 (8.58) ***

\*\*\*  $p < .001$

## Alternative Model

To confirm that the hypothesized model has the better fit than another plausible model, this study tested the alternative path model. If alternative models are theoretically plausible, the researchers must recognize the confusion regarding the theoretical implications of their research. Usually, the alternative model can be developed by adding different paths to the hypothesized model based on previous research (Lee & Hershberger, 1990; MacCallum, Wegener, Uchino, & Gabrigar, 1993). This study portrayed the different patterns of three functions (i.e., communicational, transactional, and relational), e-relationship quality, and e-loyalty in a hypothesized model (see Figure 3). The direct relationships in this model are based on findings from the empirical literature (e.g., Srinivasan et al., 2002). In addition to the model illustrated in Figure 3, an alternative model was tested (see Figure 4).

E-loyalty is a customer's favorable attitude toward the e-retailer (i.e., hotel) that results in repeat buying (or rebooking and revisiting) behavior. Srinivasan et al. (2002) identified eight e-business factors that appeared to impact e-loyalty: customization, contact interactivity, cultivation, care, community, choice, inconvenience, and character. The concepts of six of the factors, excluding community and choice, were included as three dimensions of functions in this study. As noted earlier, communicational function is a tool to provide e-marketing service and to exchange information between buyers and sellers not only in response to a customer's general inquiry, but also to maintain customer relationships. Contact interactivity in Srinivasan et al.'s (2002) study is the availability and effectiveness of customer support tools on a website. From the interactive communication perspective, communicational function and contact interactivity are

similarly defined. According to Alba, Lynch, Weitz, and Janiszewski (1997), communicational function (i.e., interactivity) enables the seller to provide sufficient product information and to answer inquiries via e-mail after only a delay of a day or two. Thus, communicational function is expected to have a direct effect on e-loyalty.

Srinivasan et al. (2002) see customization as the ability of an e-retailer to tailor products, services, and the transactional environment to individual customers (Schrage, 1999, p. 20). Cultivation is the extent to which an e-retailer proactively provides desired information. Therefore, customization and cultivation are essential factors because inviting a customer to come back increases the probability that he/she will find something to buy (Lidsky, 1999) and enables him/her to complete the transaction more efficiently (Kahn, 1998). Relational function in this study also refers to the creation of a personalized and a customized, relationship between the customer and an online company. Therefore, customization and cultivation can be regarded as a relational function. If the hotel can accurately tailor choices for individual customers, it can maximize the probability that a customer will visit the site in the future. Therefore, relational function is expected to have a direct effect on e-loyalty.

Finally, transactional function, which focuses on web design and web security, is reflected in the factors of care, convenience, and character in Srinivasan et al.'s (2002) study. Care, convenience, and character are related to the physical qualities of websites such as web design or breakdown in service. If a customer finds that a website is simple, intuitive, user-friendly, and secure, he/she will be satisfied with the e-services of the e-retailer and visit in the future. Accessibility of information and simplicity of the transaction process are important antecedents to the successful completion of transactions

(Palmer & Griffith, 1998). A convenient, careful, and creative (i.e., characteristic) website provides a short response time, facilitates fast completion of a transaction, minimizes the likelihood that customers make mistakes, and makes the shopping experience more satisfying (Shaffer, 2000). These outcomes will likely increase customer e-loyalty.

In summary, we hypothesized alternatively: The greater the (1) level of communicational function, (2) transactional function, and (3) relational function, the greater the e-loyalty of customers (alternative model). All three variables (communicational, transactional, and relational functions) have a direct influence on e-loyalty. Figure 4 illustrates the alternative model.



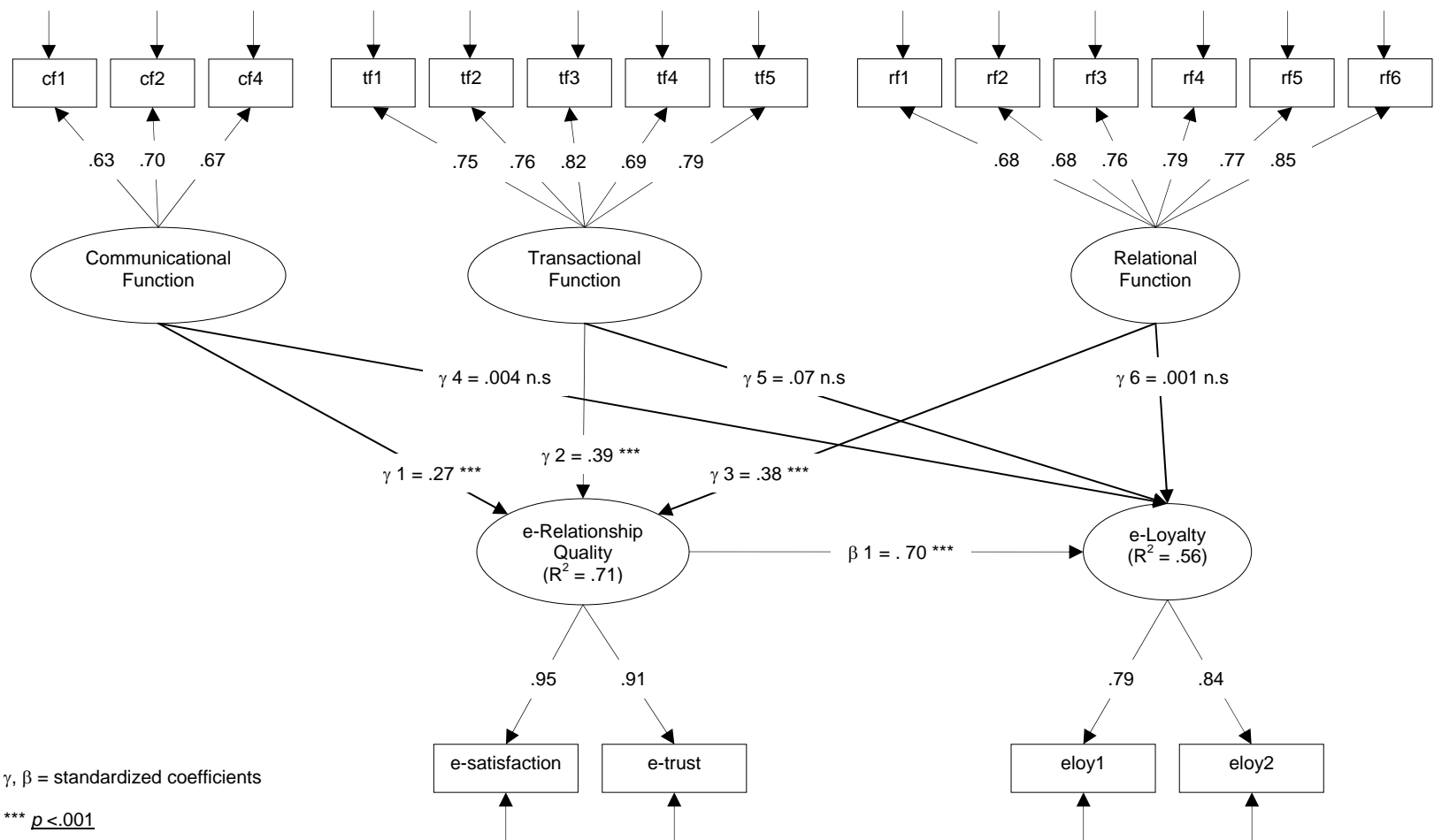


Figure 4. Standardized structural path coefficients (partial mediation model).

The results of this path analysis are displayed in Table 4-6. The same fit indices used to assess the hypothesized model were used to evaluate the goodness-of-fit of the alternative path model. The model comparison should focus on assessing model fit and compare the fit of competing and theoretically plausible models (Kelloway, 1998). Though CFI and RMSEA of the alternative model were slightly lower than in the hypothesized model, the alternative model also achieved a good level of fit:  $\chi^2 = 240.20$ ,  $df = 123$ ,  $p < .001$ ; GFI = .94; CFI = .97; RMSEA = .04. However, the expected cross validation index (ECVI) of the alternative model (ECVI = .809) is higher than the ECVI of the hypothesized model (.787). As the ECVI is a measure of overall discrepancy between a hypothesized model and the true model in the population (Browne & Cudeck, 1993), the model that results in the smallest ECVI value reflects the most stable model in the population (Schumacker & Lomax, 1996). This difference of ECVI indicated that the hypothesized model is more stable than the alternative model. Moreover, the coefficients of the direct effects of the three functions on e-loyalty were not significant.

However, as both the hypothesized and the alternative models fit the data, a chi-square difference test was employed to determine if one of these models performed better than the other (Anderson & Gerbing, 1988). One of the advantages of using SEM is the ability to test competing models to determine which model best fits the data. Therefore, we conducted secondary analyses to assess the direct effects of three functions on e-loyalty. Although the overall fit of this alternative model was adequate,  $\chi^2 = 240.20$ ,  $df = 123$ ,  $p < .001$ ; RMSEA = .046; CFI = .973, a chi-square difference test indicated that the original mediation model (i.e., full mediation model) provided significantly superior fit to the alternative model (i.e., partial mediation model) ( $\Delta\chi^2 = 1.16$ ,  $df = 3$ ). This means that

adding the direct paths from the three functions to e-loyalty does not improve fit, though both models met the fit criteria. Still, all of the measures of the hypothesized model were at least the same as if not better than those of the alternative model. Moreover, no additional explanatory power was gained from the additional direct relationship between the three functions and e-loyalty. The squared multiple coefficients (SMCs) between the hypothesized model and the alternative model were exactly the same:  $R^2 = .71$  for e-relationship quality and  $R^2 = .56$  for e-loyalty. Therefore, the superiority of the hypothesized full mediation relationship of three functions, e-relationship quality, and e-loyalty was also confirmed by the chi-square difference test results.

Table 4-6

Fit Indices for Hypothesized and Alternative Models (N = 422)

Path		Hypothesized Model	Partial mediation model
		Standardized estimates ( <i>t</i> -value)	Standardized estimates ( <i>t</i> -value)
Communicational function	→ e-relationship quality ( $\gamma_1$ )	.27(4.20**)	.27(4.20**)
Transactional function	→ e-relationship quality ( $\gamma_2$ )	.39(8.38**)	.38(8.26**)
Relational function	→ e-relationship quality ( $\gamma_3$ )	.38(7.10**)	.38(7.09**)
e-relationship quality	→ e-loyalty ( $\beta$ )	.75(15.28**)	.70(7.17**)
Communicational function	→ e-loyalty ( $\gamma_4$ )	-	.004 (n.s.)
Transactional function	→ e-loyalty ( $\gamma_5$ )	-	.070 (n.s.)
Relational function	→ e-loyalty ( $\gamma_6$ )	-	.001 (n.s.)
<b>Goodness-of-fit measures</b>			
	$\chi^2$	241.36	240.20
	d.f.	126	123
	CFI	.974	.973
	GFI	.940	.940
	RMSEA	.047	.046
	ECVI	.787	.809
<b>R<sup>2</sup></b>			
	e-relationship quality	.71	.71
	e-loyalty	.56	.56

## CHAPTER V

### CONCLUSION

This paper focused on three central issues to explain customer loyalty in a B2C context. The first was to understand what factors potentially have the most significant influence on e-loyalty. The second was to provide insights into the complex interrelationships among those factors affecting antecedents of e-relationship quality, e-relationship quality, and e-loyalty constructs. The third was to investigate whether or not each of the moderators (i.e., switching costs and involvement) has a significant impact on e-loyalty, along with e-relationship quality. Before these above issues are summarized, Table 5-1 presents the results of the hypothesis testing.

Table 5-1  
 Summary of Hypothesis Testing in Primary Study

<i>Hypothesis</i>	<i>Relationship</i>	<i>Results</i>
Hypothesis 1-1	Communicational function is positively related to e-relationship quality	Supported
Hypothesis 1-2	Transactional function is positively related to e-relationship quality	Supported
Hypothesis 1-3	Relational function is positively related to e-relationship quality	Supported
Hypothesis 2	The higher the level of e-relationship quality, the higher the level of e-loyalty	Supported
Hypothesis 3	E-relationship quality has a stronger positive effect on e-loyalty when switching costs are low than when switching costs are high	Supported
Hypothesis 4	The relationship between e-relationship quality and e-loyalty is positively moderated by involvement	Not Supported

#### Antecedents of E-relationship Quality

Considering the first issue, the determinants of e-relationship quality, CFA results reveal that the antecedents of e-relationship quality have three functions: communicational, transactional, and relational. Although the antecedents of customer satisfaction or trust in the traditional brick-and-mortar marketplace have been studied in detail (Bejou et al., 1998; Kim et al., 2001; Kim & Cha, 2001), few studies have considered the specific e-relationship quality initiatives for online customers to reinforce overall e-loyalty in the click-and-mortar market. The rapid development of online computing technology makes it imperative for businesses to seriously consider the Internet to avoid losing this competitive advantage. A website gives direct contact between the organization and the consumer (Kiang et al., 2000). Therefore, a majority of previous studies on the antecedents of satisfaction or trust have proposed that the antecedents are combinations of traditional communicational function in marketing such

as mailing services and technical function such as Internet security (Bart et al., 2005; Devaraj et al., 2006; Kim et al., 2001).

The finding shows that the most influential dimension affecting e-loyalty was transactional function, followed by relational function and communicational function. First, considering the relative importance in CFA's standardized loading of the transactional function (see Table 4.1), the dominant factor of transactional function was website design related to the transaction complexity and convenience, followed by website security.

The second important function was the relational function of customization of products and services. Customized hotel website features can allow hotel guests to report personalized complaints and recommendations. Third, the traditional communicational function in marketing focuses on general interaction between a firm and its customers. This study acknowledged that this traditional communicational function continues to play an important role in the online context because an online provider is in a better position to take advantage of the Internet for disseminating information and answering all inquiries from customers.

Therefore, in order to have a competitive advantage over other online hotel providers and online third-party intermediaries, a hotel provider should offer products and services via a website with high customization, low transaction complexity, and active communicational interaction. Our findings on the three functions (communicational, transactional, and relational) have both managerial and research implications.

From a managerial perspective, an online provider can build early online systems based on the three functions meeting the prerequisite requirements of customers, and then continuously evaluate customers' perceptions for future functions. This repetitive process leads to enhanced e-relationship quality, which consists of satisfaction and trust. Furthermore, an online provider can use the proposed measurement items of the three functions in this study as a benchmark its own strengths and weaknesses compared to its primary competitors. The war between third party intermediaries and hotel websites has continued for the past five years. Online travel agencies have been one of the dominant channels of distribution for hotel companies. Recently, hotel companies have gained control from online travel agencies. Sales from direct hotel website have increased dramatically over the past few years and hotel companies have now regained control of their hotel room inventories. In order to sustain competitive advantage over online travel agencies, hotel companies should enhance their CRM functions such as transactional, relational, and communicational function. Those CRM functions will enhance e-loyalty of hotel guests. This study will provide valuable information to CRM managers and hotel marketers to increase sales from websites and improve relationships between customers and hotels by focusing on three functions.

From a research perspective, this analysis identified the antecedents of customer e-loyalty as three online functions derived from the offline marketing literature. Despite this early conceptualization of the relevant antecedents in the online environment, this analysis can be used as a framework for further study on the relationship between online antecedents and e-relationship quality.



## Relationships Among Functions, E-relationship Quality, and E-loyalty Constructs

This paper discusses the relationships among e-relationship quality, and customer loyalty in a single framework. Prior studies have highlighted the linkage between customer satisfaction and loyalty (Oliver, 1997; Kahneman & Tversky, 1979; Geyskens, Steenkamp, & Kumar, 1999; Homburg & Giering, 2001), between web functions and customer satisfaction (Szymanski & Hise, 2000; Bansal et al., 2004; Yoon, 2000), and between web functions and customer loyalty (Srinivasan, Anderson, & Ponnavaolu, 2002). Previous studies, however, have either ignored or failed to show the holistic model with antecedents and consequences of e-relationship quality. This study, therefore, provided an incorporated theoretical model by justifying each relationship. Moreover, prior research studies on satisfaction, trust, and loyalty have primarily been conducted in the offline environment (Bejou et al., 1998; Oliver, 1999; Fornell, 1992). In addition, customer satisfaction, trust, and technical functions have been separately analyzed as antecedents of customer loyalty in the B2C context (Lam et al., 2004).

In contrast to previous research, this study examined the combined impacts on e-loyalty in a single model in the B2C context. The results show that e-relationship quality, consisting of e-trust and e-satisfaction, is positively related to e-loyalty. This positive relationship can be reinforced by developing the three functions. Shankar et al. (2002), a hotel offering rewards based on the number of hotel stays could (1) provide additional reward points for booking online, (2) prominently feature these rewards on its website, (3) enable customers to keep track of their reward positions, and (4) remind or encourage customers to act when they get close to their reward milestones. Thus, an online hotel provider can increase its customers' e-loyalty by satisfying the communicational,

transactional, and relational functions and consequently building e-relationship quality. The structural model analysis in this study also indicates that online functions, such as transactional and relational, are more positively related to e-relationship quality than is the traditional communicational function. The degree of website complexity and security, as well as that of customization at the website, increases service encounter satisfaction, which has a mutually reinforcing relationship with e-loyalty. Hotel firms have recognized the importance of personalization as the new service strategy. Hotel guests like to customize what they buy, and 38% of guests are willing to pay 20% more for customized products and services (HospitalityNet, 2007).

Furthermore, this study examined the partial mediating role of e-relationship quality in the impact of the three functions on e-loyalty by testing an alternative model. This relationship is based on the assumption that promoting three web functions by an online provider can improve customer loyalty. However, the direct relationship between each of the three functions and e-loyalty was found to be insignificant. Since the power of hypothesis testing is positively related to sample size, this study used a sufficient sample ( $N = 422$ ). Therefore, the insignificant findings may not be attributed to sample size problems. The findings cautiously suggest that the full mediating model of e-relationship quality in the hotel website predicts more accurately than the partial mediating model.

#### Moderation Effect of Switching Costs and Involvement

The third issue was whether either switching costs or involvement had a moderating effect on the relationship between e-relationship quality and e-loyalty. The results showed that switching costs had a moderating effect on the link: the effect of e-

relationship quality on e-loyalty in customers is high when switching costs are perceived to be low rather than high. In other words, switching costs reduce customers' sensitivity to the level of e-relationship quality. Although the moderating effect of switching costs is found to be higher in customers who perceived switching costs to be low, the total effects of e-relationship quality on e-loyalty are respectively .77 ( $p < .001$ ) and .49 ( $p < .001$ ) in a low and a high switching costs group. Therefore, we can suggest that switching costs is one of the main antecedents of customer loyalty in the online context.

Given the findings above, hotel e-CRM managers should note that customer loyalty cannot be derived entirely from satisfaction with services or trust in the online provider. If a customer perceives switching costs to be high, exit barriers will be high, and the result will be apparent loyalty even in the absence of satisfaction or trust (Aydin, Özer, & Arasil, 2005). Due to this potential power of switching costs, decision-makers should understand the ripple effect of switching costs and establish a strategy to apply it in practical terms for customer acquisition or retention. Thus, enhancing both e-relationship quality (i.e., e-satisfaction and e-trust) and switching costs can be important antecedents for promoting customer loyalty. Switching costs tend to rise with hotel guests' repatronage frequency. Switching costs indirectly reinforce the association between e-relationship quality and e-loyalty. However, as switching costs reach a level that precludes switching, the switching barrier takes effect: a frequent-guest program can be implemented to enhance membership benefits, which results in loyalty inertia (Lee et al., 2001).

However, this study did not find evidence for the moderation effect of involvement between e-relationship quality and e-loyalty. We expected e-relationship

quality to play a different role in the creation of customer commitment (or loyalty) in the case of high involvement. One reason for this negative finding may lie in defining the involvement construct. Although involvement has been defined generally as “a motivational state of mind (arousal) that is goal directed” (Zaltman & Wallendorf, 1983, p. 550), a few studies have suggested that involvement is a multidisciplinary construct and requires different types of research to study it (Houston & Rothschild, 1978; Laurent & Kapferer, 1985; Foxall & Pallister, 1998).

According to Laurent and Kapferer (1985), involvement named “consumer involvement profile” was measured by five dimensions: interest, pleasure, sign value, importance risk, and risk probability. The interest dimension refers to the interest that a person has in a product/service, in other words, meaning or importance to that person. The following measurement items of involvement in this study focused on interest: (1) Often, I am involved personally with making reservations via a hotel’s website, (2) I spend a lot of time searching hotel websites to book a hotel room, and (3) Making a reservation via a hotel’s website is important to me.

However, this study’s measurement items failed to reflect Laurent and Kapferer’s (1985) other characteristics of involvement. Though online customers have personal interests in online services, they seem to have greater overall loyalty when they perceive hedonic value of the services (pleasure), lack of negative consequences (importance risk), or low subjective probability of making poor purchases (risk probability). These other dimensions of involvement could affect the relationship between e-relationship quality and e-loyalty. For example, customers could overcome perceived risk by trusting an online provider. Hence, if a website could appeal to customers emotionally by

reinforcing pleasure, it could lead to increased loyalty. Thus, our insignificant findings may be due to this narrow conceptualization of the involvement construct.

#### Limitations and Future Research Directions

The limitations of our study offer opportunities for future research. First, although the best efforts were made to select the most representative sample, the closest sample available from Zoomerang panel was the general online purchase consumer group. A group of online hotel customers could be different in their demographic and socio-economic profile from a group of general online purchasers. Thus, interpretation of the result of demographic information should be cautiously made while generalizing the result of this study.

Second, we investigated the moderating effect of switching costs in order to clarify the mixed results found in previous research. Though we examined the moderating effect, we did not consider the direct effect of switching costs. These issues merit further investigation. Moreover, the moderating effect of involvement and e-relationship quality was not significant in our data, but we did not formally examine the various dimensions of involvement in our framework. Future researchers might expand the base of the data, measure the sub-dimensions of involvement, and re-examine its moderating effects.

Finally, an exploration of whether loyalty to a service provider extends to brand loyalty would be particularly relevant to service providers with multiple brands. Due to the scattered locations of hotels, it is usually difficult for customers who booked an online hotel accommodation to exhibit brand loyalty. However, it is possible that an

online hotel could boost customer brand loyalty by building an efficient website and raising switching costs and involvement. Therefore, future studies may examine the moderating effects of switching costs and involvement variables on brand loyalty, and test the applicability of the proposed hypotheses and models in other sectors (i.e., restaurant, casino, time share, convention) of the hospitality industry.

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## APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

Oklahoma State University Institutional Review Board

Date Friday, October 27, 2006 Protocol Expires: 5/9/2007  
IRB Application HE0664  
Proposal Title: A Study of Antecedents of E-relationship Quality in Hotel Websites

Reviewed and Exempt  
Processed as: **Modification**

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s) :

Nitta Rachjaibun	Woody Kim
85 S. Univ. Place #7	210 HES West
Stillwater, OK 74075	Stillwater, OK 74078

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The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

Signature :



Sue C. Jacobs, Chair, OSU Institutional Review Board

Friday, October 27, 2006

Date

## APPENDIX B

### ONLINE SURVEY QUESTIONNAIRE

PRINT

CLOSE

### Online Hotel Reservations

1 How many years have you used the Internet?

2 What are your top three purposes for using the Internet?

- Work/business
- Entertainment
- Education
- Email communication
- Shopping
- Gather information

3 Have you visited a hotel website within the past 6 months?

YES  NO



Survey Page 1

### Online Hotel Reservations

4 Have you booked directly from a hotel website within the past 6 months?

YES  NO



Survey Page 2

### Online Hotel Reservations

5 How many times have you booked a hotel room directly from a hotel website within the past 6 months?

6 For what reason do you travel most frequently? (Please check only one of the choices below)

- Business
- Pleasure
- Meeting/Convention
- Other, please specify

7 Have you used online travel agents (e.g., Hotels.com, Expedia.com, Travelocity.com, etc.) to search before making your final decision?

YES  NO



### Online Hotel Reservations

8

How many times did you search an online travel agent site before booking with a hotel website?

- 2 times
- 3 times
- 4 times
- 5 times or more



### Online Hotel Reservations

9

Please select the hotel website that you most often use to make hotel room bookings (Please only consider hotel websites and not other sources such as online travel agents [e.g., Hotels.com, Expedia.com, Travelocity.com, etc.]



- Hilton Hotels (i.e., Hilton or Doubletree)
- Intercontinental Hotels (i.e., Holiday Inn or Crown Plaza)
- Accor Hotel (i.e., Novotel)
- Days Inn
- Nikko Hotels International
- Pan Pacific Hotels and Resorts
- Cendant Hotel (i.e., Ramada Hotels)
- Marriott Hotels (i.e., Marriott or Renaissance)
- Starwood Hotels (i.e., Westin or Sheraton)
- Best Western
- Banyan Tree Hotels & Resorts
- Marco Polo Hotel
- Choice International (i.e., Quality Inns, Hotels and Suites)
- Hyatt Hotels
- Carlson Hotels (i.e., Radisson Hotels, Regent International Hotels, or Park Inn Hotels)
- Intercontinental Hotels and Resorts
- Super 8
- La Quinta Inns
- Le Meridien
- Other, please specify



## Online Hotel Reservations

Based on the hotel website you most often use to make hotel bookings (selected in No.9), indicate the degree to which you agree or disagree with each of the following statements using the scale indicated below:

10

### Communicational function

1 Strongly Disagree      2      3      4      5      6      7 Strongly Agree

1.This hotel's website provides information about important hotel events

1     2     3     4     5     6     7

2.This hotel is active in marketing its services through its website

1     2     3     4     5     6     7

3.This hotel's website has a customer support icon available as a platform to launch complaints or to obtain technical support by e-mail

1     2     3     4     5     6     7

4.This website is responsive to any problems I encounter

1     2     3     4     5     6     7

5.My complaints are reviewed and acted on swiftly.

1     2     3     4     5     6     7



### Online Hotel Reservations



11

Transactional function

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

1.This website provides me with simple and clear directions

1     2     3     4     5     6     7

2.I found it easy to navigate on this website

1     2     3     4     5     6     7

3.I found this website to be convenient for making room reservations

1     2     3     4     5     6     7

4.I feel the information regarding security of payments is clearly stated

1     2     3     4     5     6     7

5.I feel secure about making reservations online at this website

1     2     3     4     5     6     7



## Online Hotel Reservations

12

Relational function

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

1. The advertisements and promotions this hotel sends me are tailored to my needs

1     2     3     4     5     6     7

2. This hotel's website gives me the impression that I am a special customer

1     2     3     4     5     6     7

3. This hotel's website is customized to my needs

1     2     3     4     5     6     7

4. If possible, my needs are reviewed and responded to on an individual basis

1     2     3     4     5     6     7

5. This hotel's website enables me to make reservations that are customized for me

1     2     3     4     5     6     7

6. My feedback on the quality of products and services is highly valued

1     2     3     4     5     6     7



### Online Hotel Reservations

13

E-satisfaction

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

---

1. I am generally pleased with this hotel's website service.

1     2     3     4     5     6     7

---

2. I am satisfied with this hotel's website services.

1     2     3     4     5     6     7

---

3. I am happy with this hotel's website.

1     2     3     4     5     6     7

14

E-trust

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

---

1. I am prepared to give private information at this hotel's website.

1     2     3     4     5     6     7

---

2. I am willing to give my credit card number at this hotel's website.

1     2     3     4     5     6     7

3. I trust what this hotel's website says about its products and services.

1  2  3  4  5  6  7

4. This hotel's website is reliable.

1  2  3  4  5  6  7



### Online Hotel Reservations

15
Involvement
1      2      3      4      5      6      7
1. Often, I am involved personally with making reservations via a hotel's website.
<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7
2. I spend a lot of time searching hotel websites to book a hotel room.
<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7
3. Making a reservation via a hotel's website is important to me.
<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7

16

Switching cost

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

1. The cost in time, money, and effort to change hotel websites is high to me.

1     2     3     4     5     6     7

2. It takes me a lot of time and effort to get used to another hotel's website.

1     2     3     4     5     6     7

3. The intangible (i.e., earning points) rewards from joining a hotel reward program are important in my online hotel booking decision.

1     2     3     4     5     6     7



Survey Page 10

Online Hotel Reservations



17

E-loyalty

1 Strongly Disagree    2    3    4    5    6    7 Strongly Agree

---

1. When I need to make a room reservation, this hotel's website is my first choice.

1     2     3     4     5     6     7

---

2. I will make reservations via this hotel's website in the future.

1     2     3     4     5     6     7

---

4. I seldom consider switching to another hotel's website.

1     2     3     4     5     6     7



---

### Online Hotel Reservations

18

Why didn't you book directly from the hotel website?

- Security concern (credit fraud)
- Never tried
- No customer service
- The amount of time required to search
- Did not like it from previous experience
- Difficult to judge quality of a product/service
- Never needed
- Other, please specify



19

What is your major hotel reservation channel?

- Called the hotel directly
- Central reservation
- Travel agency
- Online travel agency (e.g., Hotels.com, Expedia.com, Travelocity.com, etc.)
- Other, please specify



Survey Page 12

### Online Hotel Reservations

20

Are you ...?

- Male
- Female

21

Age

22

Education background

- High school
- Associate degree
- College degree
- Graduate degree (Master's, Doctoral)



Survey Page 13

### Online Hotel Reservations

23

Annual household income

24

Occupation

- Executive/Manager
- Professional
- Government/Military
- Teacher/Professor
- Salesman/Buyer
- Secretary/Clerk
- First-Line Supervisor
- Self-Employed

- Travel Industry
- Housewife
- Student
- Retired
- Other, please specify



May 2006

Dear Panel Member:

I am a Ph.D. student at Oklahoma State University in the College of Human Environmental Sciences, majoring in Hospitality Administration. In order to complete the requirements of my study, I am conducting a research project entitled "*A Study Of Antecedents Of E-Relationship Quality On Hotel Websites.*" This survey questionnaire is designed to evaluate the experiences of people making reservations through hotel websites. This study will enable the researcher to make suggestions to the hotel industry for the purposes of improving hotel websites to better meet customer expectations and to increase web bookings and enhance customer loyalty. Finally, the results of this study will provide valuable insights to any hotel association that wishes to share the information with its members in order to help them develop successful strategies for their hotel websites.

Your participation and opinion will be of great value to the researcher and hotel industry. Your participation is voluntary and all information you provide will be kept confidential. To ensure your anonymity, no name or other means of identification are requested in this survey. Your completed survey will only be accessed by the researchers of this study.

The instrument has been approved by the Institutional Review Board (IRB - <http://compliance.vpr.okstate.edu/>) at Oklahoma State University and has met all the human subjects and ethical requirements. Please contact me or the IRB office if you have any questions or concerns about this research. My contact information, along with that of Oklahoma State University's Research Compliance Office, is provided below.

Thank you for your time, cooperation, and participation in this research project.

Sincerely,

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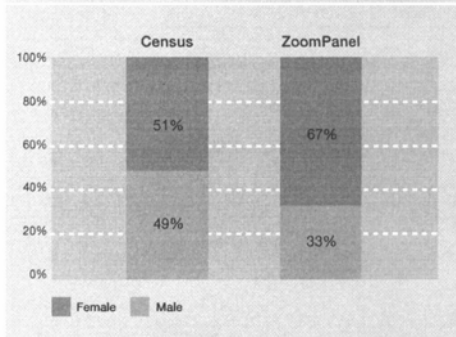
## APPENDIX C

### THE ZOOMERANG PANEL PROFILE

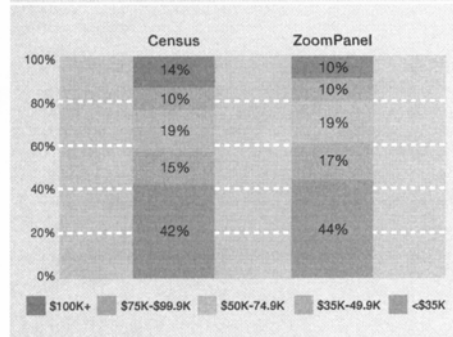
# United States

## Basic Demographics

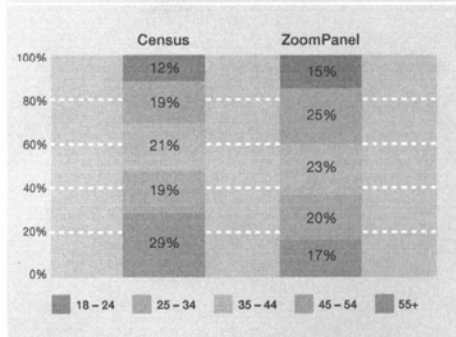
### → Gender



### → Household Income (annual)



### → Age



- Date of birth
- Marital status
- Children in household
- Children date of birth
- Expecting baby
- Ethnicity
- Hispanic
- Hispanic acculturation level
- Language
- Occupation
- Education
- State
- Zip code
- Geographic region
- Internet connection
- Home ownership
- Pet ownership

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 United States / Basic Demographics / 1

# United States

## Detailed Attributes

### → Business & Occupation

- Area of business responsibility
- Profession/functional work area
- Occupation title
- Business ownership
- Employment tenure
- Employment status
- Level of involvement in making business decisions
- Company annual revenues
- Company type (e.g. government, Fortune 500, etc)
- Company private/public
- Number of employees
- Industry
- Business travel
- Business credit card
- Number of computers
- Number of servers

### → Information Technology

- IT Related Roles
  - Computer networking
  - Computer, IT and management
  - Database/data management
  - ERP implementation
  - Information systems, IT
  - Software development
  - Software quality assurance
  - System security
  - Technical client service specialist
  - Telecommunications
  - Web development

### • IT Roles

- IT position reporting into formal IT department
- IT position not reporting into a formal IT department
- Does not report into but has decision authority in IT department
- Makes recommendations to but no authority over IT department
- Manages hardware or software installation and support
- Performs software, web or computer coding
- Performs software, web or computer coding and reports into IT department
- Software application designer or architect
- Develops software for broad commercial distribution
- Customer software developer, reseller or web consultant
- Performs IT function in non-technical company
- Writes or manages technical documentation

### → Health Care Professionals

- Biotech
- Chiropractor
- Dietician/nutritionist
- Dental hygienist
- Dentist
- EMT/paramedic
- Healthcare administration
- Nurse, nurse practitioner, RN, LPN
- Optometrist
- Physician
- Physician assistant
- Pharmacist
- Pharmacist technician
- Podiatrist
- Psychologist
- Veterinarian

### Go in-depth with our Specialty Panels

- Business to Business
- Hispanic
- Health

Contact us for more information to see how these panels can benefit you.

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2 / United States / Detailed Attributes

→ **Medical Ailments**

- Allergies
- Alzheimer's
- Anxiety
- Arthritis
- Asthma
- Athlete's foot
- Attention deficit disorder (ADD)
- Baldness/hair loss
- Bladder ailments
- Cancer (several types)
- Chronic back pain
- Depression
- Diabetes types 1 and 2
- Eating disorders
- Female associated ailments
- Headaches
- Hearing loss
- Heartburn
- Heart disease or angina
- Herpes
- High blood pressure
- High cholesterol
- Impotence/ED
- Incontinence
- Leukemia
- Migraines
- Obesity
- Obsessive compulsive disorder (OCD)
- Osteoporosis
- Physical handicap
- Restless leg
- Seizures
- Sleep difficulty
- Ulcers
- Vision problems

→ **Diet & Lifestyle**

- Diet Type
  - Vegan
  - Ovo-lacto vegetarian
  - Non red meat eater
  - Red meat eater
- Diet Restrictions
  - Calories
  - Carbohydrates
  - Fat
  - Meat
  - Sodium
  - Sugar
- Adventurous eater
- Believe exercise is over rated
- Enjoys ethnic food
- Frequency of exercise
- Try to live healthier
- Try to lose weight
- Watch diet

→ **Leisure & Entertainment**

- Cable TV
- Gambling, casino and online
- Game console
- Internet radio
- Music enthusiast
- Network TV
- Newspaper weekly reader
- Newspaper type
- Online movie rental service
- Public radio
- Satellite radio
- Satellite TV
- Sports fan
- Video game player
- Aerobics
- Biking
- Boating
- Bowling
- Fishing
- Gardening
- Hiking
- Running
- Skiing or snowboarding
- Swimming
- Tennis
- Walking
- Yoga

→ **Travel**

- Travel activity
- Business/leisure
- Domestic/international
- Airline
- Cruise
- Hotel
- Rental car
- Frequent flyer member



# United States

## Detailed Attributes

### → Food & Beverage

- Baby food/formula
- Bread/bagels
- Breakfast foods
- Brownie/cookie mixes
- Candy
- Cereal
- Cheese puffs
- Chicken
- Coffee
- Desserts
- Dinner mixes
- Energy and cereal bars
- Fresh baked goods
- Frozen fruit
- Frozen meals
- Hotdogs/corndogs
- Lunch/deli meat
- Meal kits
- Organic foods
- Refrigerated or frozen foods
- Salsa
- Salty snacks
- Side dish mixes
- Soy based products
- Yogurt
- Beverage - Purchases
  - Beer
  - Cocktail mixers
  - Distilled spirits
  - Energy drinks
  - Flavored beverages
  - Hard cider
  - Instant tea mixes
  - Soymilk
  - Tea
  - Vitamin-enhanced waters
  - Wine

### • Beverage - Consumption

- Beer
- Champagne
- Mixed drinks
- Wine

### → Household Products

- Air fresheners
- Batteries
- Battery operated toothbrush
- Candles
- Charcoal
- Cigarettes
- Contraceptives
- Cough syrup
- Dental care products
- Diapers
- Eye/contact lens care products
- Feminine care products (pads, panty liners)
- Foot care products
- Incontinence pads/garments
- Laxatives
- Motor oil
- Teeth whitening products
- Tobacco (regular and smokeless)
- Vitamins and supplements
- Water filters
- Beauty
  - Acne products
  - Anti-aging products
  - Cosmetics
  - Facial products
  - Fragrances
  - Hair coloring products
  - Hand/body moisturizer
  - Lipstick and lip treatment
  - Makeup remover
  - Suntan and self tanner products

### • Electronics & Media

- Blackberry wireless device
- Cable TV
- CD player
- Cellular phone
- Computer
- Digital cable
- Digital camera
- DVD player (portable, automobile)
- DVD/VCR combo player
- DVR (e.g. Tivo)
- HDTV
- Home security system
- MP3 player
- PDA
- Photo printer
- Plasma screen TV
- Satellite dish
- Stand-alone DVD player
- Standard TV
- TV with a built-in DVD player
- Video camera
- Video game console that plays DVDs
- Video on demand
- Videocassette player/recorder or VCR
- WiFi

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4 / United States / Detailed Attributes

→ **Home**

- Sold or purchased
- Own/rent
- Purchases
  - Bathroom faucets
  - Bathroom sinks
  - Bathtubs
  - Central heating and/or air conditioning systems
  - Hand-held shower head/nozzles
  - Indoor whirlpool bathtubs
  - Kitchen faucets
  - Kitchen sinks
  - Toilet seats
  - Toilets
  - Wall-mounted shower head/nozzles
- Improvements
  - Carpet/flooring
  - Exterior painting
  - Home theater
  - Interior painting
  - Interior parking
  - Locks replacement
  - New addition
  - New appliances
  - New bath
  - New countertops
  - New deck
  - New kitchen
  - Windows replacement

→ **Automobile**

- Driving habits and preferences
- DVD player installed in an automobile
- Model
  - New/used
  - Number in household
  - Purchase intent (plan to acquire/model)
  - Purchased/leased
  - Segment (e.g. economy, SUV, etc)
- Motorcycle
  - Model
  - New/used
  - Number in household
  - Purchased/leased
  - Segment (type)
- Other Vehicles in Household
  - All terrain
  - Boats
  - Motorcycles
  - Snowmobiles
- Vehicle Purchasing Information Sources
  - Friends
  - Internet
  - Magazines
  - Newspaper
  - Radio
  - Television

→ **Internet & Household Technology**

- Internet Access
  - Business location
  - Home
  - Internet café
  - Library
  - School

• **Telecommunications**

- Primary telephone usage (home or cell phone)
- Cellular phone carrier
- Mobile data/internet plan
- Cellular phone length of ownership
- Cellular phone activities (e.g. internet, email, text, etc)
- Cellular phone accessories
- Cellular phone technical features (e.g. Bluetooth, text message, etc)
- Cellular phone usage (e.g. video games, contact manager, etc)
- Online Behavior
  - Internet connection speed
  - Online purchase frequency
  - Surf internet frequency
  - Wireless data function interest level
- Online Purchasing
  - Apparel
  - Audio video equipment
  - Beauty supplies
  - Books
  - Computer equipment
  - Computer software
  - Flowers
  - Food
  - Furniture
  - Jewelry
  - Movies
  - Music
  - Pet supplies
  - Photo
  - Prescription
  - Rentals
  - Stocks
  - Tickets
  - Travel services
  - Video game software
  - Video game systems
  - Vitamins

# United States

## Detailed Attributes

### → Retail

- Clothes specialty
- Club
- Convenience
- Department
- Dollar/drug
- Grocery
- Specialty
- Convenience store product purchases
- Retail outlets where salty snacks are purchased
- Type of retail outlets where fresh baked goods are purchased
- Fashion
  - Purchase denim jeans
  - Purchase designer labels
  - Shop at high end department stores

### → Restaurants

- Casual dining
- Quick serve

### → Financial

- Financial Services
  - 401K
  - Brokerage account
  - Car lease
  - Car loan
  - CD
  - Checking account that does not earn interest
  - Checking account that earns interests
  - Credit card
  - Debit card
  - Financial consultant
  - Home equity loan or line of credit
  - Investment Account (excluding 401K and other retirement accounts)
  - Money market account
  - Mortgage
  - Mutual fund
  - Saving account
- Household savings and investments

### → Insurance

- Healthcare (self or company provided)
- Healthcare Provider
  - Aetna
  - Blue Cross
  - Blue Shield
  - Kaiser
  - PHCS
  - United Healthcare
- Other insurance
  - AAA Insurance

VITA

Nitta Rachjaibun

Candidate for the Degree of

Doctor of Philosophy

Thesis: A STUDY OF ANTECEDENTS OF E-RELATIONSHIP QUALITY IN  
HOTEL WEBSITES

Major Field: Human Environmental Sciences

Biographical:

Education: Received Bachelor of Arts degree in Travel Industry Management from Mahidol University, Bangkok, Thailand, in 1994; Received Master of Business Administration in Hospitality Administration from Golden Gate University, San Francisco, CA, in 1997.

Experience: Sales Executive, Bay International Travel, San Francisco, CA, USA, 1997-1998; Marketing Assistant, Dhon Sirm Company Limited, Bangkok, Thailand, 1999; Managing Director, Seefah Lumpini Restaurant Group, Bangkok, Thailand, 2000-present.

Professional Memberships: Royal Bangkok Sport Club, Bangkok, Thailand, 1993.

Name: Nitta Rachjaibun

Date of Degree: May, 2007

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: A STUDY OF ANTECEDENTS OF E-RELATIONSHIP QUALITY IN HOTEL WEBSITES

Pages in Study: 123

Candidate for the Degree of Doctor of Philosophy

Major Field: Human Environmental Sciences

Scope and Method of Study: The objectives of this study are (1) Identify significant antecedents of e-relationship quality; (2) Examine the relationship between the antecedents of e-relationship quality and e-loyalty; and (3) Investigate whether switching costs and involvement moderate the effects of e-relationship quality on e-loyalty. The questionnaire was posted and collected on the Internet via a web survey company. The questionnaire was electronically delivered to randomly selected panel members targeting both leisure and business travelers. A total of 695 completed questionnaires were collected. The findings will provide useful insights for the key functional features that hotel webmasters should concentrate on when designing and revamping hotel websites.

Findings and Conclusions: First, considering the determinants of e-relationship quality, CFA results disclose that the antecedents of e-relationship quality have three dimensions, namely, communicational, traditional, and relational functions. Therefore, from the managerial perspective, an online provider can build early online systems based on the three functions meeting the prerequisite requirements of customers, and then continuously evaluate customers' perceptions for future functions. Second, the results show that e-relationship quality, consisting of e-trust and e-satisfaction, is positively related to e-loyalty. Thus, an online hotel provider can enhance customer e-loyalty by satisfying three functions and consequently building e-relationship quality. The third issue was whether switching costs or involvement had a moderator effect on the relationships between e-relationship quality and e-loyalty. The results showed that switching costs had a moderator effect on the link: the effect of e-relationship quality on e-loyalty in customers is high when switching costs are perceived to be low rather than high. Therefore, switching costs is one of the main antecedents of customer loyalty in the online context. However, we do not find evidence for the moderation effect of involvement between e-relationship quality and e-loyalty.

ADVISER'S APPROVAL: Dr. Woo Gon Kim

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